

Volume 2

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Chapter 4The Population of Middlesbrough1) General Accountsa) Shortcomings in the mid-Nineteenth Century Sources

Regarding the printed census material for Middlesbrough down to 1871, two aspects are important. From 1801 to 1831, Middlesbrough appears as part of the Liberty of West Langbaugh in the North Riding: the information obtainable is limited, as is the general case, until after 1841, and the only complication is the separation of the township of Middlesbrough from the township of Linthorpe, both of which constitute the parish of Middlesbrough. Yet in all these early censuses the population of both townships was very small, and it is only in the year before the 1831 census was taken that the industrialisation of Middlesbrough began.

From 1841 to 1871 Middlesbrough township was enumerated as part of Yarm sub-district, which was in the Registration District of Stockton, in the Registration County of Durham. As such, the town of Middlesbrough was not given the attention it may have received if it had remained part of the North Riding area. Some confusion arises because although most of the information on Middlesbrough appears with the Durham information, some crops up nevertheless under the North Riding auspices. Yet in spite of the fact that two areas present information on Middlesbrough, there are gaps in the presentations. This is especially annoying because in these years Middlesbrough experienced its 'mushroom' growth: population more than doubled between 1851 and 1861, and also between 1861 and 1871. These gaps can be illustrated by looking at specific questions.

There is information for each census regarding the number of people in the town, their sex, and houses occupied and building.

Conversely information would not be expected on family size, household structure, and actual families and streets. Yet between these two sets of information there remains data on ages, birthplaces, and occupations. Normally one would expect to find this information for a growing industrial town, for as W.A. Armstrong has remarked 'one can easily obtain birthplace, occupational, and age-sex distributions for a given Victorian town from the printed volumes'¹. Armstrong notes that the problem is to obtain relationships within these variables, and it is here of course that sampling from the enumerators' books comes in. Yet in respect of Middlesbrough even the variables are not easily obtainable.

In 1841 two of these three variables are obtainable. In the North Riding information in the Enumeration Abstracts, part I, there is included a break-down into parishes and townships of ages by sex, under and above 20 years.² Also in the Age Abstracts, part I, there is North Riding information of the principal towns in the county for ages by sex, for every quinquennium:³ and the chapelry of Middlesbrough is included as a principal town.⁴ Available also is information on birth places. On the same page of the Enumeration Abstracts as shows Ages above and below 20 years, there is a table showing how many of the total population were born in 'this county', and how many 'elsewhere'. For an indication of occupation, the information is less helpful.

- 1) W.A. Armstrong - The Interpretation of the Census Enumerators Books for Victorian Towns (in The Study of Urban History, 1968), p 67.
- 2) Enumeration Abstract, Part I, 1843 (496) p 376.
- 3) Age Abstract, Part I, 1843 (497) pp 334 - 5.
- 4) The term 'chapelry' used only in this census, is synonymous with the term 'township' as used in all the other censuses.

The preface of the Occupation Abstract notes that 'there are separate returns (distinguishing the sex, and whether above or under 20 years of age) for every county in Great Britain and for all the larger towns ...'¹ Yet for neither the native county nor the registration county is Middlesbrough classed as a 'larger town'. The North Riding limits itself to Richmond, Scarborough and Whitby;² whilst Durham limits itself to Bishops Wearmouth, Darlington, Durham City and Gateshead.³ Thus, whilst in one volume of the 1841 census, Middlesbrough is included as a 'principal town' within the traditional county, it is not included in another volume as a 'larger town' in either the traditional or the registration county. The consequence is that the information regarding occupation is very much inferior to that of the 1831 census.

In 1851 the situation deteriorated even further. Data on none of these three variables is available for the town. For the Ages of the population, the only available information is at district and sub-district levels, thus the nearest one can get to a break-down of the Middlesbrough data is as part of the sub-district of Yarm, where quinquennial groups are given for a total population of 12,611.⁴ For birth places the break-down of information is even more remote. Middlesbrough is included in the Stockton district figures, which show birth places with an analysis of under and over 20 years. A footnote merely records that 'part

1) Occupational Abstract, Part I, 1844 (587) p 7.

2) " " " " p 218.

3) " " " " p 34.

4) Population Tables II, vol II, 1854 [1691 - II] p 744.

of the Stockton District containing 12,681 inhabitants, extends¹ into the North Riding of York': nearly half this number were of course in the township of Middlesbrough. Occupations are listed² according to age and sex but only for the registration county. Thus for all three variables there is no information specifically for Middlesbrough. Sometimes details regarding age, birth place, and occupations are given for the 'principal' towns, but Middlesbrough is not so classed in the appropriate volume; however in the volume dealing with the Number of Inhabitants, Middlesbrough does appear in the index as a 'principal' town³, which in this case refers to 'towns of 2000 inhabitants and upwards'⁴, but the information given in this volume refers only to population totals and houses, which information⁵ is available in more detailed form elsewhere in the census publications.

The published data for 1861 is equally unhelpful for the town. Middlesbrough does not appear in the population tables volume under a list of 'principal cities, boroughs, and towns',⁶ although by now the population of the township was 18,714. In connection with this particular census, and the birth places of the inhabitants of

- 1) Population Tables II, vol II, 1854 [1691 - II] p 804.
- 2) " " " " pp 756 - 61.
- 3) " I, vol II, 1852 [1632] p 674.
- 4) " " " " p 102.
- 5) " " " " Div X, pp 12 - 13.
- 6) " vol II, 1863 [3221] Div X, p 937.

Middlesbrough, Ravenstein provides an interesting example of how he attempted to use Middlesbrough as one of his main examples, whilst lacking the sort of information I have mentioned. In making his comparison between the 1861 and 1871 birth place information he showed that between these two censuses, the 'native' county element dropped from 73.2% to 50.1%¹; yet one must ask where his information for 1861 came from. In a footnote² he shows that he took 'the superintendent-registrar's district of Guisborough (22,128 inhabitants) as representing the Middlesbrough (18,992 inhabitants) of 1861', as 'no other details of the birthplaces for that year (were) obtainable'. He suggests in this way that the major part of the Guisborough area was made up of the population of Middlesbrough³, but that was not the case: Guisborough was a registration district within the North Riding part of the Yorkshire registration county, whilst Middlesbrough was part of the Yarm sub-district within the Stockton registration district, as part of the Durham registration county. There was no demographic overlap between the two areas. Ravenstein's method dictated that he take the information of the Yarm sub-district as the basis of his calculation: here the total population was 25,079, of whom 18,714 (75.6%) were in the township of Middlesbrough. Yet even here,⁴ information was once more not obtainable.

With the publication of the data for 1871 the Middlesbrough information became adequate, and comparable with places of a similar size. All three variables are available for the town although not without some slight inconsistency. Age, birthplace and occupation

1) See next section p 276.

2) E.G.Ravenstein - The Laws of Migration (Journal of the Statistical Society, vol 6, 1885) p 215.

3) See Ravenstein's asterisked footnote in above article, p 216.

4) See appendices for an illustration of the limited use of the data available.

data for Middlesbrough are available within the Yorkshire Division, yet although the Durham Division data gives the Middlesbrough statistics for age and occupation, it omits birthplaces. The long-term pattern is thus that Middlesbrough data was comparatively adequate up to 1831 and from 1871, but in the gap between, the data was less adequate for 1841 and absent for 1851 and 1861, and even in 1871 the information is fuller in the Yorkshire pages than in those of Durham, although Middlesbrough was still part of the registration county of Durham. One gets the impression that the town is less well served, even in this statistical sense, because of its lack of status in the pre-census period, and because of its mid-way position between Durham and the North Riding, that caused it to become part of Durham for demographic purposes whilst remaining in most senses as part of the North Riding.

This poverty of source material however has not inhibited a great amount of detailed comment on the town's population, as I shall demonstrate in my next section.

1) General Accountsb) Established Comment

The absolute figures for population for the census return of 1831, 1841 and 1851 are 154, 5463 and 7631.¹ For comparison the figures for the three earlier censuses are 25, 35 and 40. Thus as expected the most dramatic population increase takes place with the increase of industrial activity in Middlesbrough.² One of the main aspects of Middlesbrough which has excited observers and historians has been the great population upsurge in the nineteenth century. This amazing change comes, however, with the rise of the iron industry in the second half of the nineteenth century but, notwithstanding, some comment has been made even at the speed of what can be seen in retrospect as the start of this great increase in the population of the town.

Writing in 1868 Thomas Richmond noted that (with regard to the purchase of the Middlesbrough Estate in 1829) 'Building sites at 5s per square yard and upwards were rapidly sold; and the place which then contained about 40 inhabitants, was, in 1841, a town with a population of 5709.'³ The writer chose to put the two underlined phrases in italics in order to express his amazement at first the price obtained for the building sites and second at the speed of the population increase. As with Brewster before him, Richmond came in for criticism from Dyos,⁴ for his 'narrowly municipal approach' where all events were recorded and equated.

1) These refer to the township not the parish.

2) All these figures given in the Appendices.

3) Thos. Richmond - The Local Records of Stockton and the Neighbourhood (1868, reprinted 1972). This population figure of 5709 refers to the parish.

4) H.J.Dyos - op cit p 21.

References are made to this early growth of Middlesbrough in the Census Reports. In 1831 there is the short remark that, 'the Stockton and Darlington Railway terminating near this place, has tended to increase the population'¹. In the following census report there is a longer comment. After remarking on the few people who were either absent from the census count by being at Stokesley fair or having emigrated to America, there appears, 'Since 1831 Middlesbrough, which then consisted of a few farm-houses and cottages, with a population of 383 persons, has become a considerable town, possessing a dock for the conveyance of shipping. Several foundries, a pottery, and other manufactories have been established in the parish. Middlesbrough is also the terminus of the Stockton and Darlington Railway.'² Yet in the following report the main comment on Middlesbrough contains a reminder of the complications regarding the use of Census material, that the population of the township of Middlesbrough is larger than that of the town.³ Yet if one turns from the North Riding data to that of Durham, there

- 1) Enumeration Abstract, vol 2, 1833 (149) p 780.
- 2) Enumeration Abstract, part 1, 1843 (496) p 376.
- 3) Compare the township total of 7631 as shown in Population Tables I, vol 2, 1852, [1632] pp 340/1, with the town's total of 7431 as shown in the same volume, p 102.

is a similar account of growth to that given ten years earlier.¹
 There is no hint of a great shift in the economic base of the town in these ten years. Referring to this lack of drama in the demographic comparison between the 1841 and 1851 positions an article written a generation later cites the slow iron industry take off on the one hand, and the faltering of coal expectations on the other.² Yet the fact remains that the great demographic burst was yet to come, and when it came, it was remarkable even by the standards of the nineteenth century.

Patrick Nuttgens has recently commented on this by repeating that 'in 1801 there were four houses and twenty-five inhabitants. In 1831 there were 154; the expansion had begun. Ten years later, in 1841, there were 5,463; by 1861 there were 3,203 houses and 19,460 inhabitants; by the beginning of the twentieth century there were 91,302. The whole of this fantastic expansion caused by private enterprise ...'³ Similarly many writers have been struck by the sexual imbalance of the town.

The balance between the sexes showed a marked preponderance of males in all three reports, i.e. 1831/51. These showed a shift from a more balanced population of the earlier returns, but here the numbers concerned are so small that it is difficult to make

- 1) Population Tables I, vol 2, 1852 [1632] p 13.
- 2) Middlesbrough 1831 - 81 - Article in the Graphic (1881), p 374.
- 3) P.Nuttgens op cit p 85. Fifteen years earlier Richard Hoggart had used almost identical phrases in his use of Middlesbrough as 'a good example of the nineteenth century boom town'. This example was used as a note to his more detailed account of Hunslet. See, The Uses of Literacy (1957) pp 13 and 291.

broad generalisations. Bearing in mind the total population concerned, men predominate in 1831 by 24, in 1841 by 415, and in 1851 by 369. This is in contrast with Stockton where the population could be described as normal, in that there are more females in all three censuses.¹

This kind of imbalance has given rise to another often remarked aspect of Middlesbrough development, beginning probably with E.G. Ravenstein. Although he was writing of the situation in 1881 for the most part, his remarks were part of a developing pattern that went back into time: in the case of Middlesbrough to the start of the town. Beginning a section 'Woman is a greater migrant than man' he goes on to show that Middlesbrough is one of the very few towns that 'have proved more attractive to males than to females'.² The key of course is in the sort of employment offered. Here it is possible to look at proportions of those employed in agriculture and those in industry, by looking at the family occupations in the 1831 report and personal occupations in the 1841 and 1851 reports. Similarly also, the age balance of early Middlesbrough has excited comment.

In a double contrast between both differing Victorian cities, and between nineteenth and twentieth century experience, Professor Briggs has noted that 'Middlesbrough had 36 per cent of its population

1) These figures given in the Appendices.

2) E.G. Ravenstein - On the Laws of Migration (Journal of the Royal Statistical Society, June 1885). In this sense he compares the character of Middlesbrough with West Ham, St. Helens, West Bromwich, Airdrie, Hamilton, Greenock and Londonderry. These being the centres of heavy masculine work such as iron and coal mining, the iron industry, and machine building, *pp 96-7.*

below the age of fifteen in 1841 and 1901, a significantly higher figure than the English town with the highest 1951 figure - 31.1%¹ - Huyton-with-Ruby'. Not only this but Briggs found that the male/female ratio was also interesting to compare. He noted that 'Middlesbrough, with more males than females both in 1851 and 1901, stood out in this connection as much as in its remarkable statistics of growth, a matter of civic rhetoric'. In this sense also Professor Briggs points out that Ravenstein, in the later nineteenth century, was impressed with Middlesbrough because of its rapid growth, its homogeneity, and its male preponderance; and this set of features made for a comparison with the towns of the American west.

²
Ravenstein not only looked at the amount of migration but tried to suggest its springs of action. He classified types of migrants into long stay/short stay, long distance/short distance, direct/by stages, etc. His laws of migration suggested that migration took place over short distances and in waves, that townfolk were less migratory than country people, that women were more migratory than men, and that there were exceptions to these 'laws'. Middlesbrough provided him with a prominent exception.

The town he claimed had a 'native county element of 73.2%' in 1861, but soon after this (migrants) flocked into the town in increasing numbers ... so that by 1871 the native county element was found to have sunk to 50.1%, that is, only about one half the inhabitants were natives of Yorkshire'.³ Thus he had to concede

1) Asa Briggs - The Human Aggregate (in The Victorian City, 1973), p 99.

2) E.G. Ravenstein - The Laws of Migration (Journal of the Statistical Society, vol 6, 1885), pp 198-9.

3) " " " pp 215 - 6.

that his short distance rule of migration was broken in that 'there (was) no county of England and Wales which has not contributed its contingent towards the population of Middlesbrough, although the contingents of the nearest border counties, and of Yorkshire itself, have been heaviest'.¹ Broken also were the rules regarding the migration of females, and that regarding the countryman as opposed to the townsman.

Forty years after Ravenstein's main contribution to the process of labour migration,² Redford took up the same ideas, and added some further refinements of his own. His main contributions are said to be his stress on the town as a magnet rather than the countryside being a force of repulsion, and the fact that migration tended to be short distance:³ yet Ravenstein had already put forward the second idea, and the first could be implied from the same article. As had Ravenstein before him, Redford had to deal with the population of Middlesbrough as an exception.

He noted that 'the extent to which the railways modified the character of industrial migration in the later nineteenth century may be gauged from the history of Middlesbrough, which was practically created by the railway.'⁴ Noting the growth of the town down to the mid-nineteenth century, he saw that 'as yet, its growth had been the result of short-distance migration mainly; in 1861 nearly three-quarters of its population was still Yorkshire by birth'. As with the earlier publication, the change was noted after this time, in that 'during the next ten years ... the population of the town more

- 1) Ravenstein's tables for 1861 and 1871 are given in the appendices.
- 2) A.Redford - Labour Migration in England 1800 - 50 (1926, rep 1964).
- 3) In a preface to the reprint, W.H.Chaloner has noted that Redford's 'second contribution was to show ... that internal migration was for the most part short-distance (or short-wave) migration'.
- 4) Redford op cit p 189.

than doubled itself, and miners and iron-workers flocked in from Durham, South Wales, Staffordshire, and other centres. In 1871¹ only one-half of the inhabitants were natives of Yorkshire'. On the basis of this, Redford concluded that 'improved transport facilities had evidently strengthened industrial migration sufficiently to cause an appreciable (though slight) modification of the general trend of movement'. Yet one weakness in this estimation concerns that of the 'native county' idea. It is true that Middlesbrough was in Yorkshire, but then two more factors have to be taken into account, which neither Redford nor Ravenstein before him did. Middlesbrough was only on the very fringe of the county, and the county itself was really three counties. Middlesbrough ought really to be seen as part of Durham as well as the North Riding; and the East and West Ridings classed as separate counties. After all, one had merely to cross the river from Stockton and walk four miles along the river bank to be in Middlesbrough, and yet be seen statistically as coming from another county; whilst a man may have travelled up to a hundred miles from south Yorkshire to be seen as moving within the same native county.

One group to which all writers pay some attention in the question of migration was the Irish. In the late nineteenth century Denvir noted that 'Lancashire, in 1851 as in 1841 still had the largest number of Irish-born ... (and) in Yorkshire, which comes next in point of Irish population, the increase was considerably² above the average for the whole country'. Turning specifically to the various districts of Great Britain, he noted also that 'on

1) A.Redford, op cit. Of the other half, who were not from Yorkshire the writer notes that 13.3% were from Durham, 3.9% from Wales, and 2.6% from Staffordshire.

2) John Denvir - The Irish in Britain (1892), p 155.

the restoration of the English Catholic Hierarchy the whole of Yorkshire was formed into the diocese of Beverley' but soon this became two, 'Leeds and Middlesbrough'. This he explained by pointing out that 'It was natural that Leeds, as the most important town in Yorkshire should be chosen as one', whilst Middlesbrough was chosen 'not only from its geographical position, but also on account of the Catholic population having become so numerous ...' This population he described as being 'nearly all Irish, and chiefly employed at the blast furnaces, at the docks, and other industries of the place.'

Redford took up this same theme 34 years later, although he was more concerned with the social and economic effects of the Irish rather than with sheer numbers. He showed that in spite of much popular myth, Irish labour did not predominate in the building of the English railways. Although it had been estimated that 'about fifty thousand labourers had been drawn to railway construction ... the Irish labourers employed did not at any time exceed five thousand, one-tenth of the whole.' This was the position between 1831 and 1841, but after the potato famine things changed, so that 'petitions poured in from all parts of the kingdom complaining of the distress caused by this terrible racial invasion'. The main social significance of this was seen as 'its tendency to lower the wages and standard of living of the English wage-earning classes'. Not only this, but related to standards of life were 'a lower efficiency as workmen, a worse moral tone, ... more given

1) J.Denvir op cit p 440.

2) A.Redford op cit p 150.

3) " " p 156.

4) " " p 159.

to drunkenness, they were slovenly, careless, and stupid'.¹ Yet having given such a list, Redford completes something of a circuitous argument by adding that 'on this account they were not usually put in charge of power-driven machinery, and were necessarily given the lower-paid work'. Thus 'they formed a submerged class'.

Not only were the Irish employed as cheap labour but they 'were frequently used as strike-breakers.'² Redford shows how in the cotton strike at Preston in 1854, 'the employers imported persons from (Ireland) to take the place of the strikers'. In such a way it was found that 'in many parts of the country English navvies would not allow Irishmen to work with them, and it was necessary to keep the two races separate in order to avoid fighting'.³ As the example from Middlesbrough at this time showed, 'the intrusion of Irish workers caused much friction also in the newer industrial centres'.⁴

1) A.Redford op cit p 159.

2) " " p 161.

3) " " p 163.

4) The example is of course in reference to the Dock excavation dispute of March 1840. For legal outcome see appendices. Yet even the Middlesbrough example shows that there were complications that Redford chooses not to stress. It was not simply a matter that the Irish were prepared to work for less than the English but it was also the culture of agricultural poverty that was part of the Irish background, and the role of Westminster in this economic aspect. Redford's most vigorous writing on this topic is when he is describing the Irish as almost wilfully attempting to undercut the English wage rates: the role of the employer needs to be explored much more here. In the case of Middlesbrough, the Irish were being used to prevent a rise in pay for the English navvies; and in relation to the Irish concerned in the Empsall material, they showed similar qualities to their English counterparts: Redford's list of failings was not in evidence. Denvir has shown for example that in certain cases the Irish actually took up middle-class occupations, as in the example of some being doctors in York.

In a very recent work, J.A. Banks has looked once more at the reasons for the build up of urban populations in the nineteenth century.¹ Although acknowledging that more work needs yet to be done on the problem, he supports the idea of "densité morale"² as the main cause of this sort of migration. Yet given this, he has some basic questions to pose regarding the demographic nature of the Middlesbrough experience. Why for example were the 'characteristics of moral density distinct from what obtained generally; and 'in the face of aggressive masculinity, (was) feminism a movement which found it difficult to take roots ...?'³ In reply it would be possible to say that it was not "densité morale" that attracted migrants to the town: it was "densité matérielle"; and given the local industrial structure, jobs for men were available but not for women. Women of course came to the town but usually with husbands; they had little part in shaping the character of the town. Whilst more work can yet be done on the topic, we can say that aggressive masculinity did not favour the feminist movement; yet, at the same time, there have been some prominent women advocates of change in the town whose energies have often been taken up in struggles that were of a general social class nature as opposed to the more narrow feminism. At the same time as Banks asked his questions of Middlesbrough, Raphael Samuel noted that 'the Irish were among the first' to settle in the boom towns of mid-Victorian England (Middlesbrough, Barrow-in-Furness, West Ham)'. Yet he also noted that 'they were among the first to leave when

1) J.A. Banks - The Contagion of Numbers (in The Victorian City, 1973), p 106.

2) This was the concept of Emile Durkheim that posed the attractiveness of the town to the rural inhabitant, in the crowdedness of the town, and the variety or urban activities. This was placed alongside the concept of "densité matérielle", which covered simply the sheer productive capacity of the urban system.

3) Banks op cit pp 116 - 7.

there was a depression'¹. In the case of Middlesbrough there was not simply this uncertain element in a population that was made up of the Irish, but there was also a positively nomadic element, in that 'quite apart from the native sailors - perennial comers and goers - there were the sailors from other ports'.

From references to the town such as the foregoing, some expectations arise before a detailed study on a household basis takes place. One expects a population with more men than women, and of these men, one expects them to be young, working-class, and employed in shipping, coal-handling, and later industries such as pottery and iron-making. Whilst many will have been born in a nearby county, large pockets will have come from elsewhere, especially Ireland; and after 1861 this 'non-native' element will become predominant.

On household structure one would expect large families but few relatives. The population is young and therefore fertile, and being working-class, less liable to use artificial means to restrict their family size. Few relatives would be expected because these would be a hindrance on the essential economic unit that the town made inevitable, but there might well be large numbers of lodgers. This, simply because the work is for men, and population tended to out-strip any reasonable housing accommodation.

Within the household unit also few servants or apprentices would be expected. Servants would not normally form part of the household in this social class, and the economic structure of the town did not suggest many occupations normally having apprenticed labour.

With such expectations in mind, it is possible to form a pattern of useful questions to ask of the enumerators' books.

1) Raphael Samuel - Comers & Goers (in *The Victorian City*, 1973), p. 125.

2) Sampling from the Enumerators' Books

a) Methodology

There are three main aspects in regard to the work I have done with the enumerators' books. First there is the posing of questions; and this is based on the need for comparability with similar work in other areas, and the expectations of the actual population in question. Then there is the question of the size of the sample: this not only concerned statistical reliability, but also the phraseology used. Finally there is the question of method: this involves the system of data collecting, the coding of such, and the mechanical means employed to serve out results.

Questions were based on the household unit. On the one hand this often covers more than the nuclear family whilst on the other can be less than the total occupiers of a house. In regard to each head of household, questions were asked of the head, the immediate family, and other members of the household with particular emphasis on the lodgers. Note was made of total household size alongside the size of the family within the household unit: of course in many cases the household unit and the family were the same.

Regarding details of members of the household, the questions fall into three groups. First there are details of the head of the household. The type of head is noted under one of eight kinds: male married, widowed or unmarried, female married, widowed or unmarried, and male or female unspecified. Then age is noted. Then occupation expressed in two ways: first as an industrial grouping and next as a social class. Industrial grouping is one of seven kinds: professional, administrative, manufacturing, distribution (which also includes personal service, transport and building), agriculture (which includes fishing), residual (including the retired,

members of the forces, and the church), and unspecified or unclear. Social class falls into six groups: Manufacturers (employing 25 or over) and professionals; employers (of less than 25), lower professionals and farmers; skilled labourers and self-employed shop-keepers; semi-skilled labourers; unskilled labourers and domestic servants; and finally housewives, spinsters, and the retired.¹

This is followed by the birth place of the head. Seven types are noted: those born in Middlesbrough, North Yorkshire, Durham, other parts of England and Wales, Scotland, Ireland and Foreign parts.

Two pieces of information are taken for the wives: age, and birth place. Similarly with the eldest and youngest children in the family: age and birth places are noted.

Moving on to the household, numbers of relatives, workpeople, servants and lodgers are recorded. With this latter, more information is collected. For each lodger up to six (apart from complete families) I have noted the sex, age, social class, and birth place. Where families of lodgers exist within a household, I have noted the total number of such lodgers, but not details of wives and children, apart from remarking how the family unit is made up; but if adult females appear as lodgers, even if sisters of the male lodgers, then their details are recorded as fully as ordinary male lodgers.

Having amassed this data, four broad questions are asked of it from the computer. First in relation to families, I ask totals and percentages in regard to the whole for the head of the

1) See appendices for further details, p headed, 'Classification of Social Status'.

household in relation to type. Age groups are broken down into six divisions: under 20, 20 - 29, 30 - 39, 40 - 49, 50 - 59, and 60 plus. Again totals and percentages of the whole are noted. Very similar calculations are then asked for, respecting also industrial grouping, social class, and birth places. Thus with such data and calculations, we can say what kinds of people predominated in the town at the various times of census taking. Comparisons can be made with the town at the various dates, and between the town and other places at the same time. We can say for example, what the portion of bachelors was to other types (given the sex imbalance in the town we could anticipate a fairly high proportion of unmarried men); whether the heads were predominantly young (as again would be expected); that the industries were few, and the social class generally low, would again be expected; and that birth places were mainly nearby at first but then widening enormously, apart from Irish settlement.

Wives and children are analysed from the point of view of age and birth place. Wives would be expected to be young, and children numerous, and close in age spans. Birth places would be expected to follow the pattern of men in the case of wives, although one would expect to find a fair proportion of local girls married to husbands from father away. Eldest children would be expected to be born out of the town whilst youngest children would be expected to be born within the town: some earlier movements of the family should be detectable from the birth places and ages of these children. Apart from simply the ages and birth places of the children, I have calculated the number of families actually with children, as opposed to those who show no children, and of those with children, I have taken the average. Of course one problem here is that the information relates only to those children present in the house on

the night prior to collecting the census forms: in some cases there are bound to be more children in the family than is shown on the enumerators' register.

The second broad question relates to the household. Here I take relations, workpeople, servants, and lodgers in turn, and ask: how many households possess these, and of those who do, what is the average size. If one anticipates an extended family structure covering three generations, then the number of families with relations should be high; but if one expects the characteristics of the pioneer settlement of young people, then it will be low: relations will have been left behind in some other part of the country. Similarly one would expect a small number of servants in such a community: presumably the small middle-class would have a large number of servants with such a large working class and the lack of alternative female employment. Sometimes also there could be some confusion regarding who were actually full-time servants. In the 1841 material for example, I get the impression with inn-keepers that some of the household classed as servants should really be shown as workpeople; and sometimes also it seems that some servants with working-class families were simply a help-out while the mother of the children was ill (maybe during a pregnancy), such help to disappear once the mother is on her feet again.

I anticipated only a small number of families in possession of workpeople, and of these only a low average of the number of such people. Alternately, with lodgers, I would anticipate a large number of households in possession, and a large average. These I would expect to be mainly young men, a sizeable portion of whom come from Ireland, and tending to be unskilled, or at the best semi-skilled, in industry. When visitors have been shown I have excluded them

from the analysis; but in the case of the 1841 information, of course, visitors as such are not separately classified: thus the number of lodgers could be higher in the collected data than is the actual case. In the same census, some lodgers, as collected in the data, could in fact be in-laws, and as such better shown as relations, but again separate classification was not made.

The third broad question comes out of the analysis of lodgers. Having established the number of households in possession of lodgers, and the average number of lodgers in such households, I then ask a number of more detailed questions about the lodgers of the town. I compare the numbers of male as opposed to female lodgers, and the averages per possessing household. I then look at the age structure of the lodgers, using the six age groups that I mentioned earlier in connection with the analysis of household heads: ¹ besides showing the numbers and percentages in each group, I show the average age of the lodgers in Middlesbrough. With the social class of the lodgers I show the numbers in each class with the appropriate percentage. Finally in respect of the birth place of the lodgers, I ask the numbers and percentages coming from the various sources of origin. With these two last pieces of analysis, I ask the actual birth place of the lodgers in relation to social class: thus I can test long-distance and short-distance migration with levels of skill, in particular the Irish compared with the other main groups.

The final broad question reverts once more to the family within the household. Working mainly from the social class of the head of the family, I ask numbers and percentages in relation to age, industrial grouping, and birth place. Similarly with the wife and children of the head, I relate the social class of the head to the age and birth place of both the wife and the children. The amount of useful information from the analysis of these two variables

1) See p 285.

is obvious. I then extend this kind of analysis by social class of the head, to relations, workpeople, servants, and lodgers. Here I show numbers in possession of these household elements and the average in each case of those actually in possession. Thus many ideas can be tested from such analysis. Ideas that relate to relatives possessed by upper class family households as opposed to lower and middling classes: the expectation is that there would be few relatives as part of the same household in the upper class families, but progressively more as one descended the social scale. With workpeople one would expect some in certain middling professions and trades but none higher up or lower down. With servants and lodgers, one would expect the former with the upper social groups and the latter with the lower social groups. This kind of analysis with two variables can show us whether such expectations are a fact, and if so, to what numerical degree they occur in real life. There are of course many other questions that can be posed and answered from the possession of such data.

In regard to the size of the samples, I have tended to follow the lead of Armstrong in his pioneer work on York in 1841 and 1851. For the years 1841, 1851 and 1861, I have taken a 10% sample of households (lodging houses excluded), and for the census of 1871 I have taken a 5% similar sample: the populations for 1841 and 1851 are 5,463, and 7,431, in both cases for the township; and for 1861 and 1871, the populations are 18,992 and 39,563, in both cases for the municipality. Like Armstrong I have taken every k th item in sequence, and I have compensated for lodging houses by taking the $k + 1$ sample when a lodging house was encountered, followed by

- 1) Armstrong refers to this kind of sampling as 'an unbiased random sample', that is, without reference to particular characteristics; but R.S.Schofield points out that the method should really be called a 'systematic sample', in that random number tables are not used. (See Sampling in Historical Research (1972) pp 151 - 4).

the $k - 1$ item for my next sample.

Once the size of the household sample was decided, appropriate sheets were designed for both the recording of individual items taken as samples, and the listing of the various data of the samples in columns. The sample record shows the sample number (from 1 onwards), the enumeration district, the page number of the enumerators' book, the street name, the surname of the household head, and finally any particular remarks about the sample: the most frequent remark was to show the composition of the families of lodgers.

The sample sheets are divided into 57 columns. For each household I have taken data in the following order: first the sample number that links with the sample record: in this way particular samples have been traced back to the enumerators' books when doubts of any part of the data have been felt. This is followed by the size of household and family. Details of the head was then recorded, showing type, age, occupation group, social class and birth place: apart from the age, the data was coded within the range 0 to 9.

Similarly the age and birth place of the wife, eldest child and youngest child followed, with also a note of the total number of children in the family. Absolute numbers then followed for relations, workpeople, servants and lodgers. Also for lodgers I recorded sex, age, social class and birth place: provision was made for up to six lodgers.

Once the information for each census was collected, I then transferred the data from the sample sheets on to coding sheets for a punch card operator. The transfer of the information on to punch cards was done on an I.C.L. punch machine, and the completed cards were then fed into a computer, type I.C.L. 1905E. The computer

programme was written for me by Mr. E.Crouch of the Mathematics Dept., Teesside Polytechnic, on the Fortran Coding principle. Mr. Crouch supervised the actual computer operation, and checked the print-outs for errors.

From the computer data of the four censuses, 1841 to 1871 I propose to have five stages of analysis:

- a) to analyse each census separately, noting the economic situation at the time of taking the census;
- b) to compare the changes in the household structure of the town over the forty years under review, and attempt to account for any significant changes;
- c) to note where previous generalisations in regard to the population of the town are confirmed by the findings, and to give a quantitative description for such views;
- d) to note any significant new findings that are in any way different from established views regarding the demographic structure of the town.
- e) finally, to make comparisons with other areas and towns.

2) Sampling from the Enumerators' Books1) The 1841 Census

The 1841 samples produced an average household of 5.90 persons and an average family of 3.99 persons. Looking at this family unit in more detail, I have analysed the head, wife and children by first one variable: type, or age, or industry etc; and then by two variables whereby the basic analysis by social status is sub-divided to make comparison with the other variables.

1) The Familya) The HeadTable 9

By type:	Male married	Male widower	Male unmarried	Female Married	Female widow	Female unmarried	F unspecified	M
Number and percentage.	76 (82.61)	0	0	0	0	1 (1.09)	10 (10.87)	5 (5.43)

This table shows that the vast majority of household heads were married men. Possibly the 10.87% of unspecified females and 5.43% males were widows and widowers respectively; otherwise the non-appearance of widows and widowers seems unlikely. In a mid-nineteenth century society early death was more common than today (e.g.

industrial accidents as far as men were concerned, and death during childbirth (regards women) so some widows and widowers would inevitably constitute a part of this population.

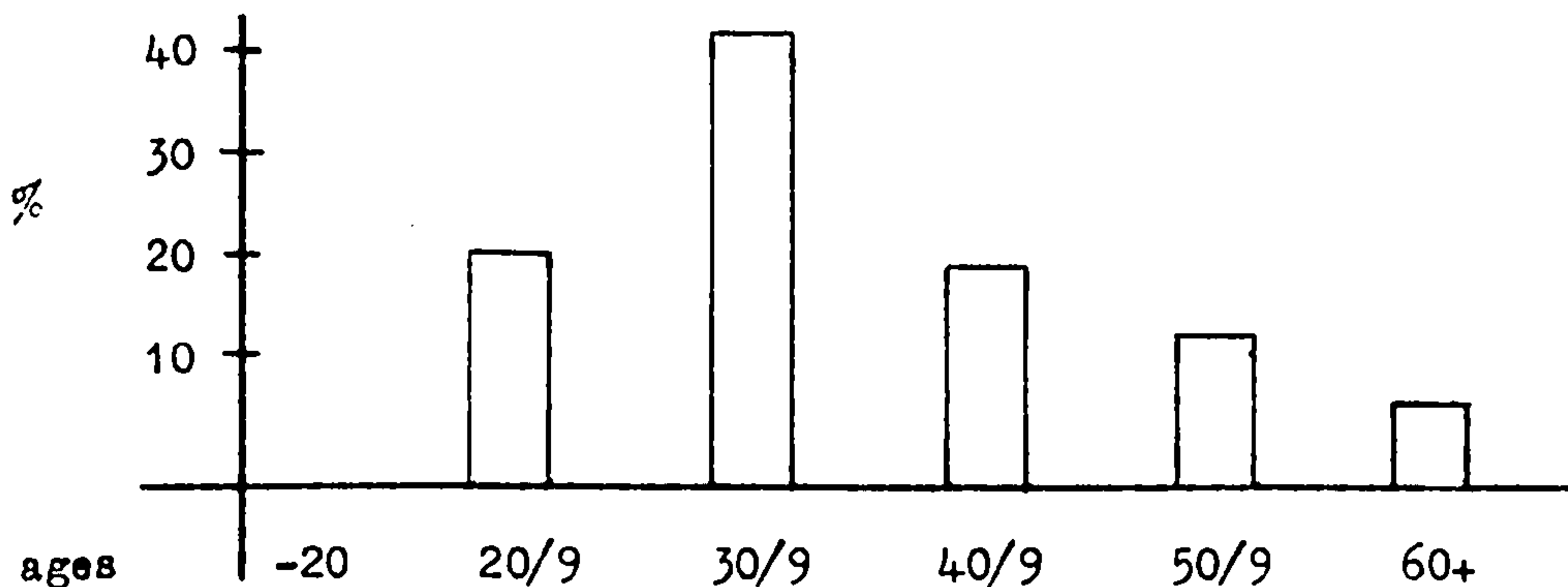
The average age of the household head was 36.57, and the detailed analysis follows:

Table 10

Age:	Under 20	20 to 29	30 to 39	40 to 49	50 to 59	60 and over
Number and percentage	0	19 (20.65)	39 (42.39)	18 (19.57)	11 (11.96)	5 (5.43)

As would be expected from the average, the majority of the heads are in or around the thirties. There are none below 20, and few above 50. This gives an even distribution plus a short tail for the late middle-aged and the old:

FIG i



By industry:

Here 7 groups were considered. These were:

not stated: this covered two main types; females where no occupation was shown and males where the occupation was too general to denote an actual industry, e.g. clerk and labourer.

professional: solicitors, doctors.

administrative: both government employees and managers of private concerns.

manufacturing industry:

distribution: covering personal service, transport and building.

agriculture: including also fishing.

residual: retired, the armed forces, the church.

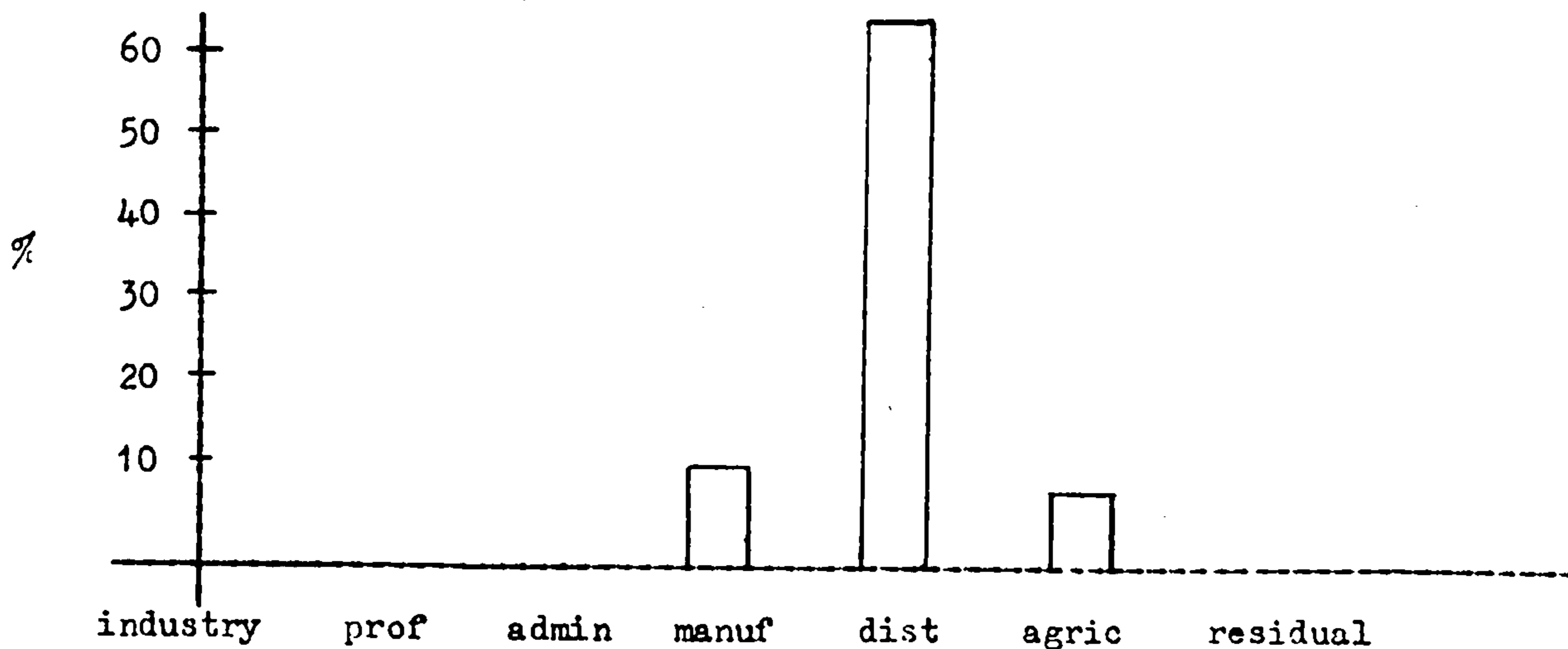
Table 11

	not stated	prof.	admin.	manuf.	dist.	agric.	residual
number and percentage	17 (18.48)	0	0	9 (9.78)	59 (64.13)	7 (7.61)	0

If the 18.48% of 'not stated' samples are ignored, then the results illustrate

the 'frontier' town image of Middlesbrough. The industries do not include the professional and administrative ranks, but are concentrated on the coal-carrying trade. This category of 'distributive' is of course augmented by personal services, building and transport, but nevertheless it clearly shows the nature of the town after 10 years' growth. The small amount of manufacturing industry (9.78%) shows the limited success, to that date, of Joseph Pease's attempt to attract industry to the town, e.g. in 1834 a pottery was started, and in the following year ship-building was introduced. Similarly the even smaller amount of agriculture, 7.61% is an echo of the area in its pre-1830 days, as well as a reminder that the existing amount of urbanisation was as yet very small. Thus, as with the age distribution, a similar view of industry shows a relatively homogeneous population:

FIG ii



By social status:

1

Here 7 groups were used. These were:

not stated: mainly female heads where no occupation was given.

capitalists: this included employers of 25 people or more and professional people.

1) See appendices for further details.

small employers: shop-keepers with a few assistants, lower professionals and farmers.

skilled labourers: this group included self-employed shop-keepers.

semi-skilled labourers:

unskilled labourers:

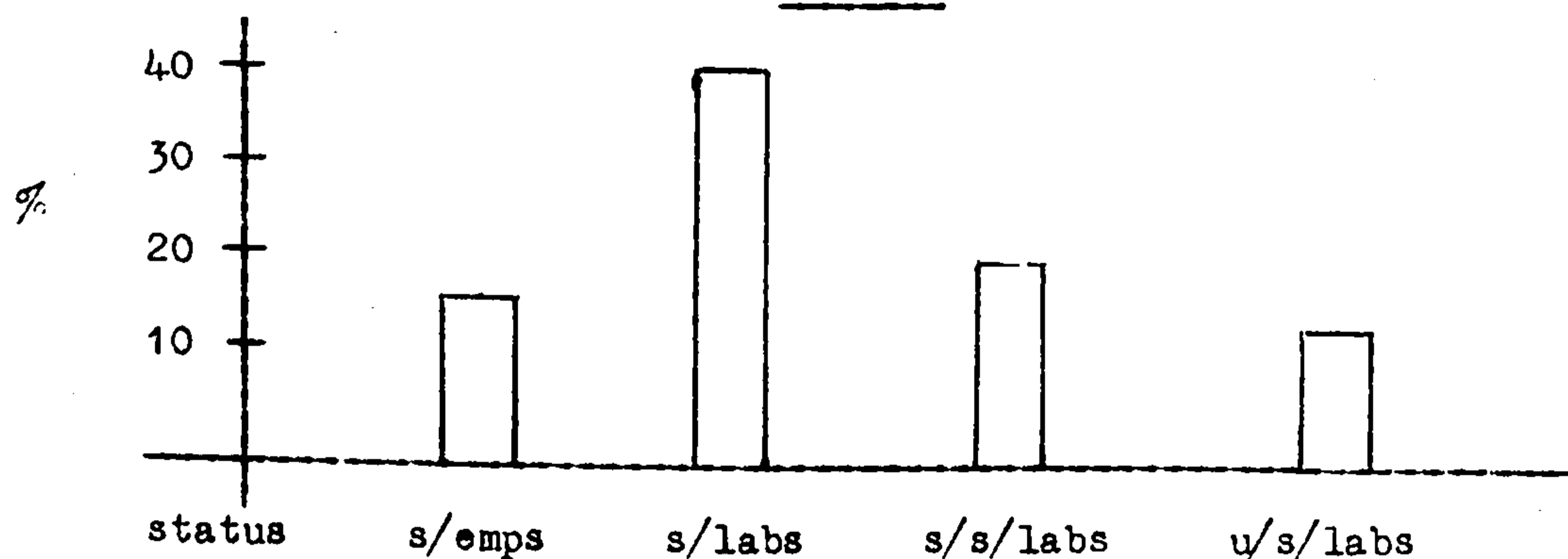
residual: including housewives, spinsters and retired.

Table 12

	N.S.	C.	S.E.	S.L.	S.S.L.	U.S.L.	R.
number and percentage	11 (11.96)	0	14 (15.22)	37 (40.22)	18 (19.57)	12 (13.04)	0

These results show a predominantly working-class population, which, however, has a marked spread of degrees of skill: large employers and the retired are non-existent; the tendency was for there to be small scale concerns. The histogram looks less extreme than the industrial one, and more even than that for age-distribution.

FIG iii



By birth place:

Here 7 localities were used; those born in Middlesbrough, rest of North Riding, Durham, rest of England and Wales, Scotland, Ireland and Foreign parts. For the 1841 sample, however, the nature of the information available meant that instead of these first two localities, the whole of Yorkshire had to be shown, and Durham had to be included in the rest of

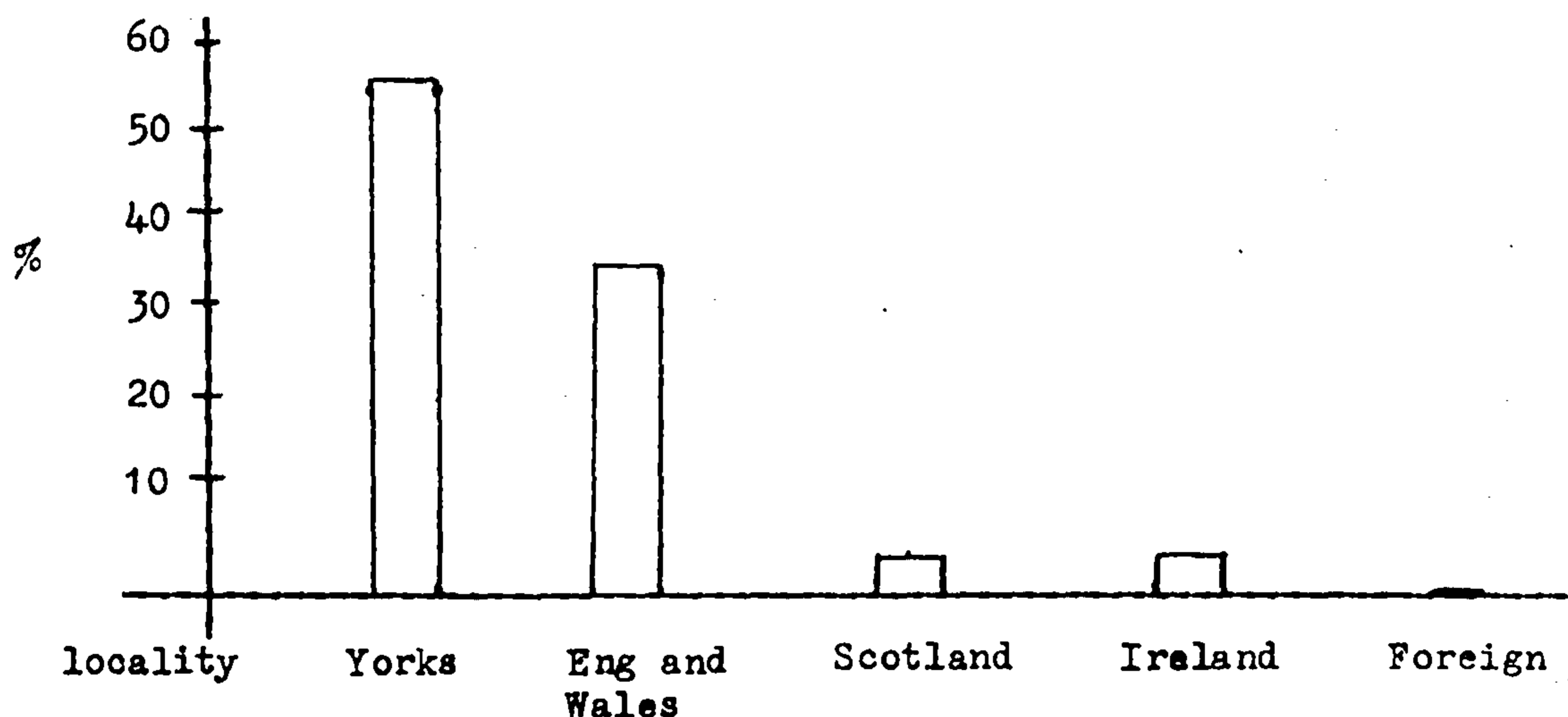
England and Wales;

Table 13

	Yorks	Rest of England and Wales	Scotland	Ireland	Foreign
number and percentage	52 (56.52)	32 (34.78)	4 (4.35)	4 (4.35)	0

This shows a majority from the native county, and very few from beyond England and Wales. This of course suggests short distance migration, but two useful elements must remain hidden: how many of the 56.52% from Yorkshire came from the more remote West and East Ridings? And how many of the 34.78% from the rest of England and Wales came from the nearby county Durham? If there were very few migrants from the West and East Ridings, and many from county Durham, then the short distance migration concept becomes even stronger, certainly the amounts for Scotland and Ireland were low.

FIG iv



b) The Wife

Here the age - group and the birth places were considered. Using a pilot scheme, I analysed also the occupation of wives, but in only a

very small number of cases was an occupation given. No doubt some wives did some paid employment, even if it was only taking in washing occasionally for neighbours, but the enumeration information did not show this. An attempt to sample the occupation of wives would have resulted in a very small percentage of those so occupied, a larger percentage shown as housewives, and a very large percentage of the category 'unknown'. In the circumstances I did not pursue this particular information.

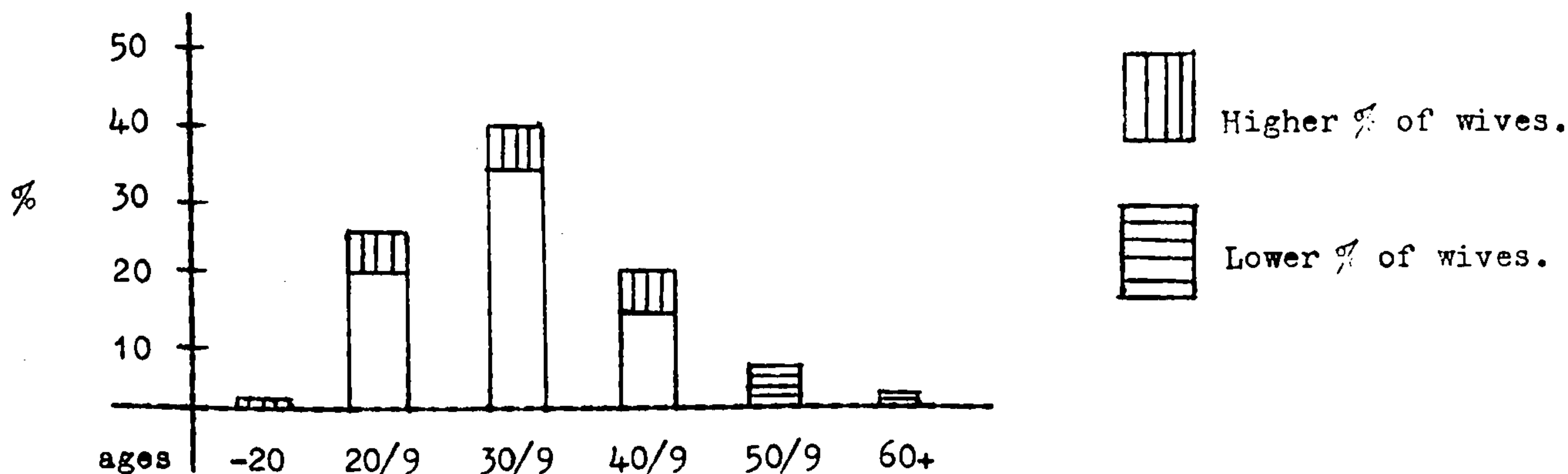
The average age of the wife was 33.43 years, and the break-down into age groups was as follows:

Table 14

By Age:	under 20	20 to 29	30 to 39	40 to 49	50 to 59	60 and over
number and percentage	1 (1.32)	21 (27.63)	31 (40.79)	16 (21.05)	6 (7.89)	1 (1.32)

As with the husbands, the majority of wives are in or around the thirties, and although there are few above 50, there is a small proportion below 20. This emphasises that the average age for the wife was 3.14 years less than that for the head 88.04% of whom were men. Thus a comparison of the ages of wives and household heads shows:

FIG v



This shows a larger proportion of wives than heads in all the age groups from under 20 to 49, then fewer in the age groups from 50 upwards.

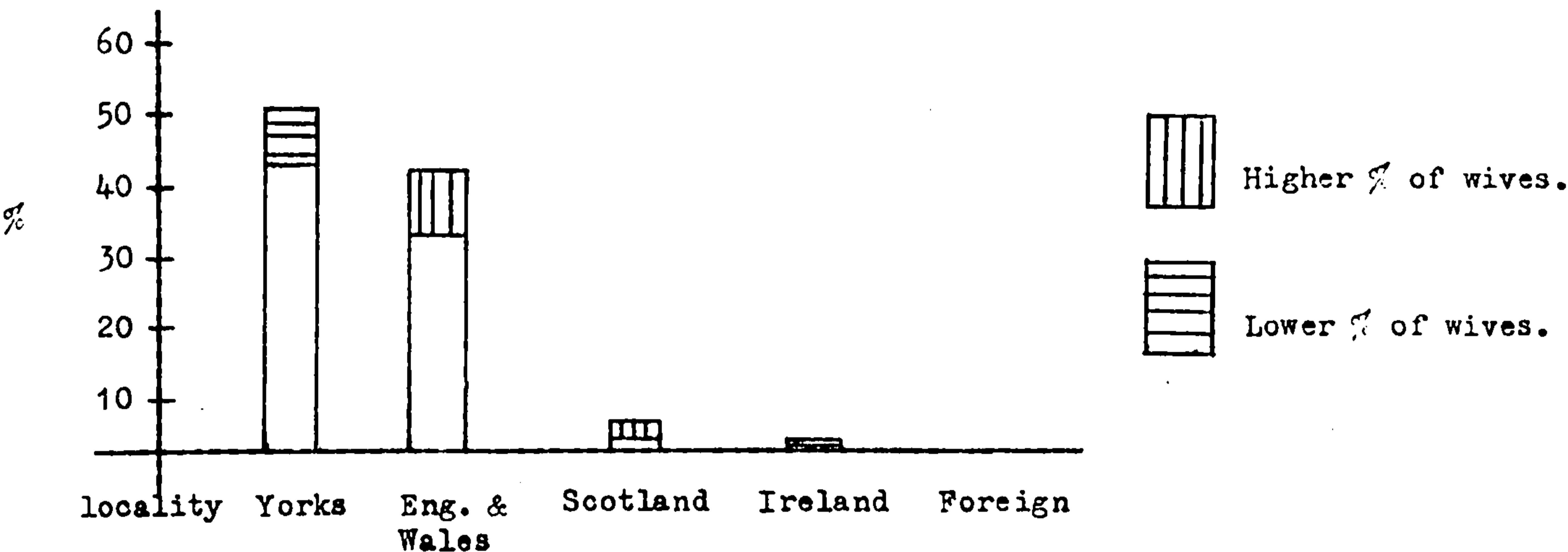
By birth place:

Table 15

	Yorks	rest of Eng. and Wales.	Scotland	Ireland	Foreign
number and percentage	39 (51.32)	32 (42.11)	4 (5.26)	1 (1.32)	0

As with heads, there was a majority of migrants from the "native" county, but in contrast there was a larger proportion from the rest of England and Wales. The comparisons are:

FIG vi



In that a smaller proportion of wives than heads were born in the native county, and also in that a larger proportion were born in the rest of England and Wales, and a slightly larger proportion in Scotland, the statement by Ravenstein that "woman is a greater migrant than man" is borne out. Allowance nevertheless has to be made for the huge area covered by Yorkshire, the proximity of county Durham and the fact that a smaller portion of wives than heads came from Ireland.

c) The Children

Of the 92 households in the sample, 69 recorded children, while 33 showed none. Thus 75% of the households had children, having an average number of 2.87 children. Of these children, the ages and birthplaces of the eldest and youngest children were noted.

The average age of the eldest child was 9.16 years, and the places of birth were as follows:

Table 16

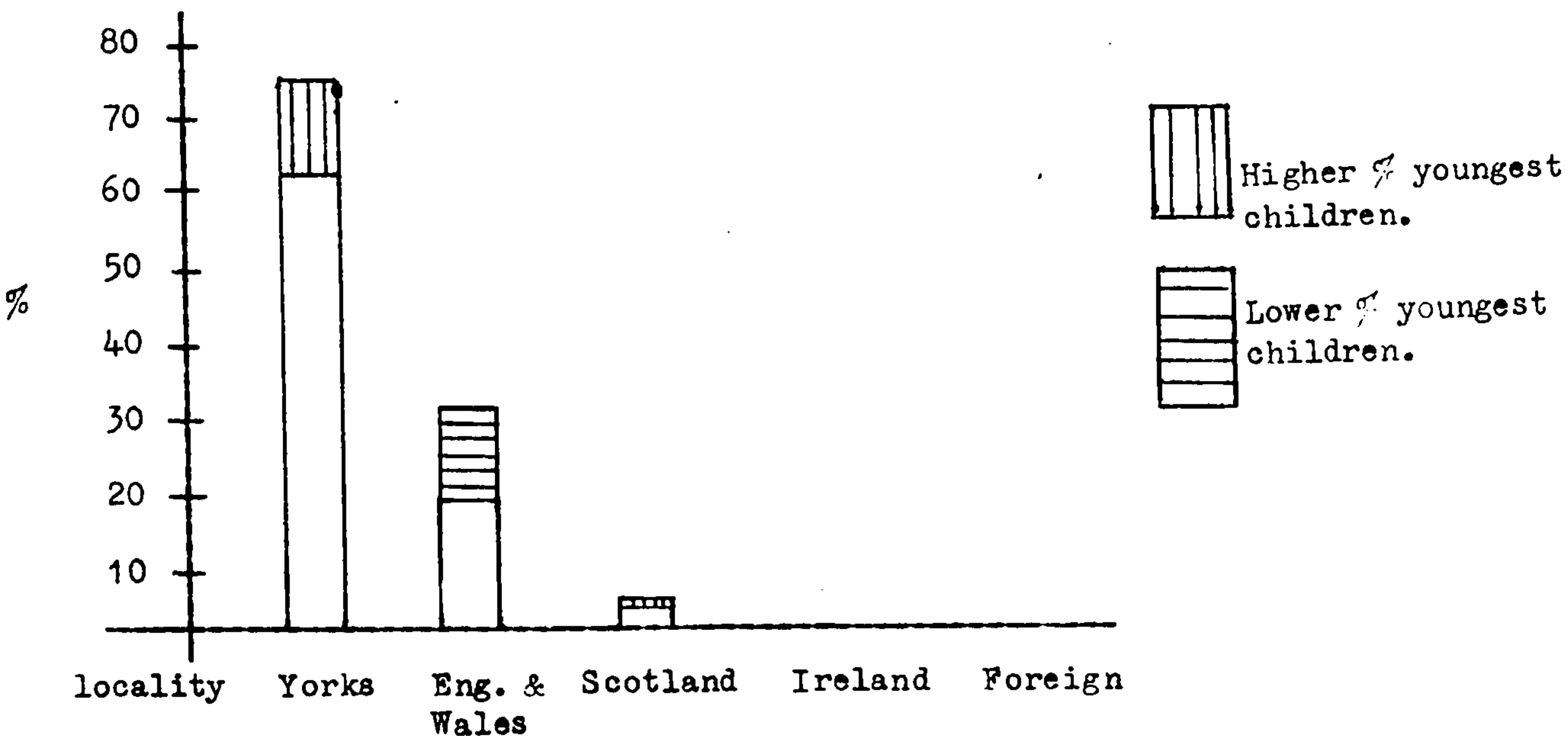
	Yorks	rest of Eng. and Wales	Scotland	Ireland	Foreign
number and percentage	43 (62.32)	23 (33.33)	3 (4.35)	0	0

And for the youngest child; whose average age was 2.96 years:

Table 17

	Yorks	rest of Eng. and Wales	Scotland	Ireland	Foreign
number and percentage	39 (75.00)	10 (19.23)	3 (5.77)	0	0

As one would expect, a larger proportion of children were born in the native county than their parents, while fewer tended to be born in the more distant areas of Scotland and Ireland. Not only this, but the difference becomes more marked as the age group of the children under consideration becomes less. Thus a graphic comparison between eldest and youngest children by birthplace would show:

FIG vii

d) The Head - 2 variable analysis.

For this information the computer was programmed to take the social status groups of the head, and then to further sub-divide the material. Thus three pieces of analysis were produced whereby status groups were divided along lines of age groups, industrial groups and birthplaces. Comparisons could thus be made along these three lines, in terms of differences in social status.

In all three cases the columns are devoted to social status, as described in the appendices. The rows are devoted to age group, industrial group and birthplace respectively. The age group follows the same pattern as that on p291; the industrial group as that on p 292; and birthplace as that on pp294 and295.

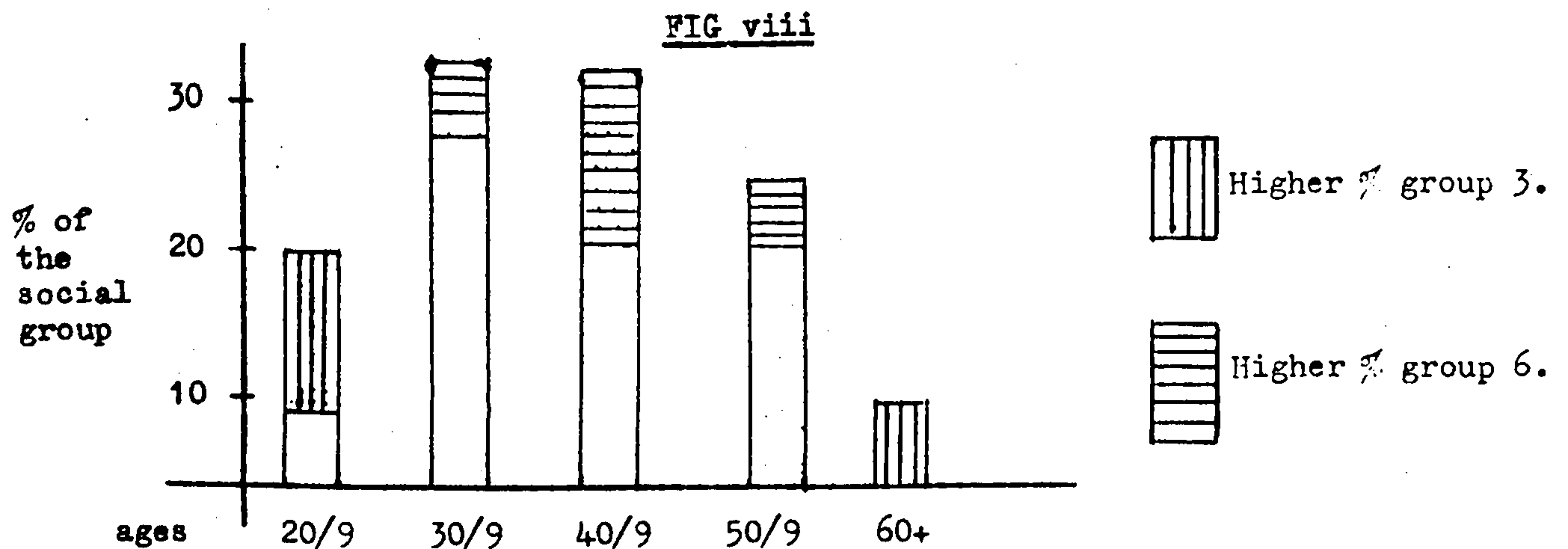
By social status and age group:

Table 18

age - groups	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
under 20	0	0	0	0	0	0	0
20 - 29	2 (18.18)	0	3 (21.43)	9 (24.32)	4 (22.22)	1 (8.33)	0
30 - 39	6 (54.55)	0	4 (28.57)	18 (48.65)	7 (38.89)	4 (33.33)	0
40 - 49	2 (18.18)	0	3 (21.43)	5 (13.51)	4 (22.22)	4 (33.33)	0
50 - 59	0	0	3 (21.43)	3 (8.11)	2 (11.11)	3 (25.00)	0
60 & over	1 (9.09)	0	1 (7.14)	2 (5.41)	1 (5.56)	0	0

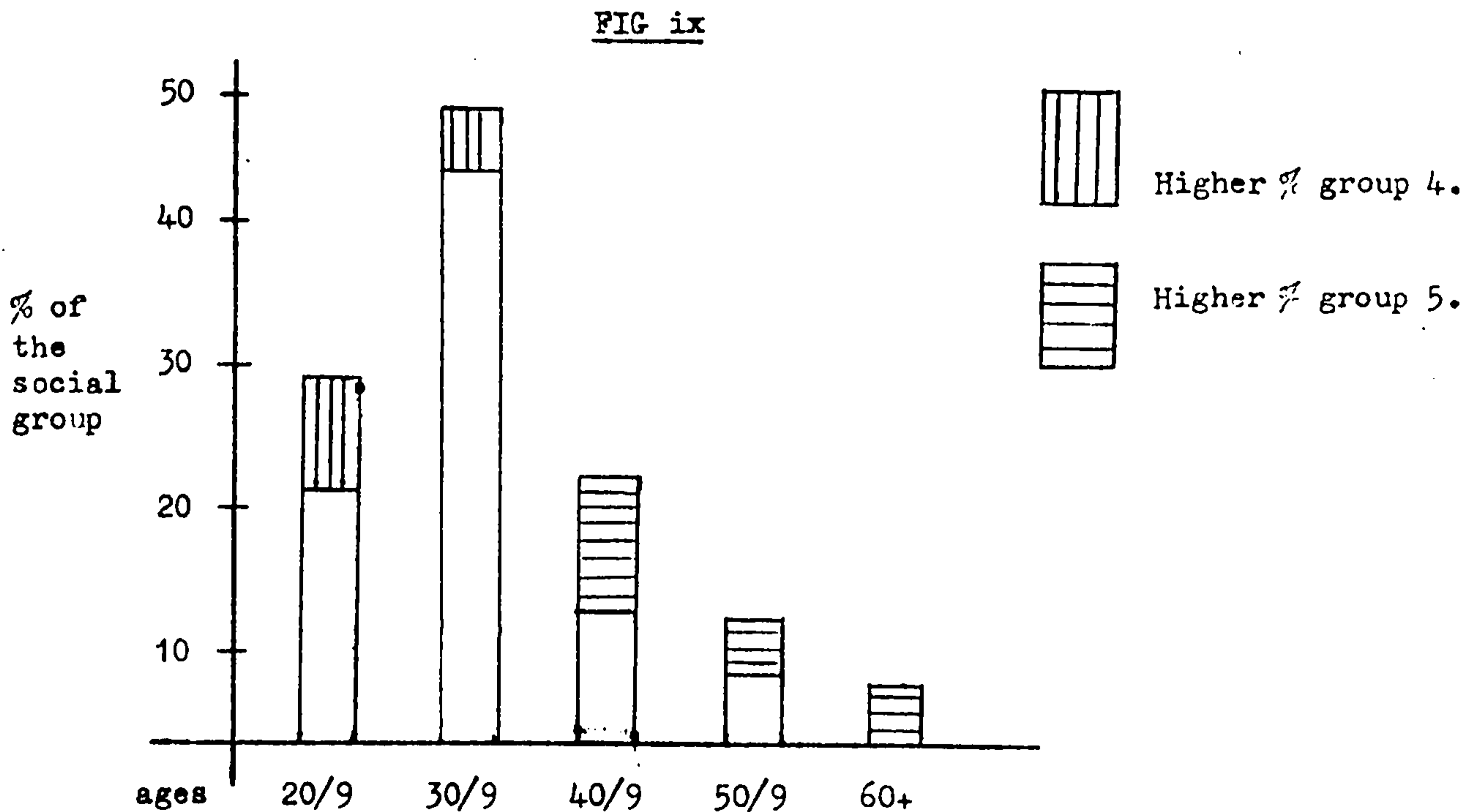
Apart from the samples where social status cannot be categorised because of lack of information in the enumerators' books, the above results suggest two distinct patterns. The small employers and the unskilled labourers show an even spread across the age groups, whilst the two intermediate groups of skilled and semi-skilled labourers show an initial marked rise, then a rapid fall-off, as the age group increases.

Thus, groups 3 and 6 resemble each other:



Both exhibit a rise from the twenties to the thirties, representing more opportunities for the small employers, but continuing drudgery for the unskilled. The fall off occurs a decade earlier for the labourer than for the small employer: this suggests the problem of keeping up a physically hard job for the labourer after the age of fifty, whilst the corresponding fall off after the fifties for the small employer suggests a comfortable retirement from the age of sixty onwards.

Groups 4 and 5 correspond thus:



In both these groups there is a sharp fall in proportion between the thirties and the forties, although the rate of fall is somewhat steeper among the semi-skilled. This could suggest a drop in efficiency on the part of the workman after the age of forty which involved a transfer to less exacting work, although one would expect this sort of decline at a more advanced age. If, however, this were the case, it would be logical

that the skilled labourer should respond more sharply than his semi-skilled colleague; similarly it would account also for the flattened effect of the pattern for the unskilled labourer between 40 and 59: a case of the semi-skilled man experiencing demotion in his forties: By social status and industrial group:

Table 19

industry	not stated	caps.	s/emp.	s/labs.	s/s/labs.	u/s/labs.	res.
not stated	11 (100.00)	0	0	1 (2.70)	0	5 (41.67)	0
prof.	0	0	0	0	0	0	0
admin.	0	0	0	0	0	0	0
manuf.	0	0	1 (7.14)	8 (21.62)	0	0	0
transport	0	0	12 (85.71)	28 (75.68)	18 (100.00)	1 (8.33)	0
agric.	0	0	1 (7.14)	0	0	6 (50.00)	0
residual	0	0	0	0	0	0	0

This table bears out earlier remarks in regard to social status and industry in the town at this time. 85.71% of all small employers are in the distribution, transport, personal service and building group; this same group also absorbs 75.68% of the skilled labour force, all the semi-skilled labour, and a small amount (8.33%) of the unskilled labour. Of far less significance is manufacturers and agriculture. Both account for only 7.14% of small employers: the former using 21.62% of the skilled labour force and the latter using 50.00% of the unskilled labour force.

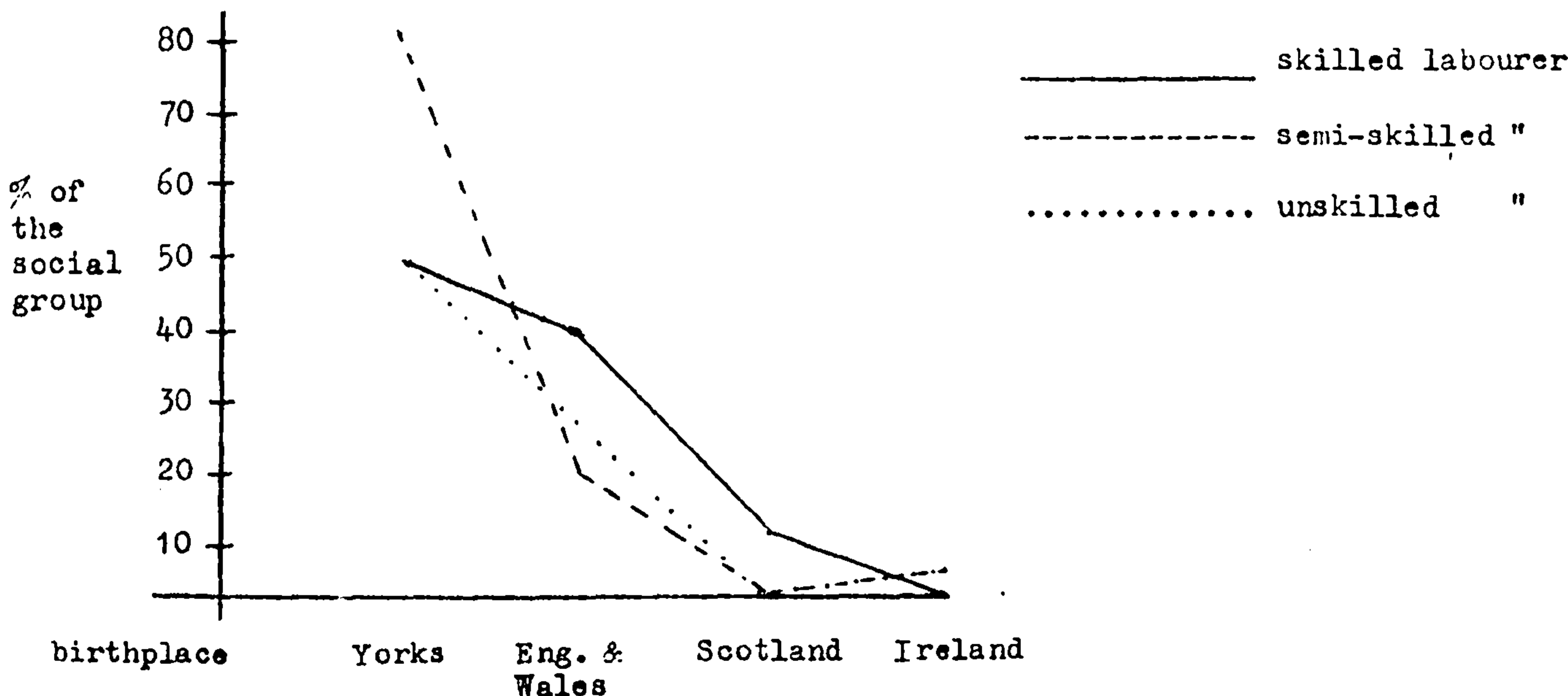
By social status and birthplace:

Table 20

birthplace	not stated	caps.	s/emp.	s/labs.	s/s/labs.	u/s/labs.	res.
Yorks	6 (54.55)	0	7 (50.00)	18 (48.65)	15 (83.33)	6 (50.00)	0
rest of Eng. & Wales.	4 (36.36)	0	7 (50.00)	15 (40.54)	3 (16.67)	3 (25.00)	0
Scotland	0	0	0	4 (10.81)	0	0	0
Ireland	1 (9.09)	0	0	0	0	3 (25.00)	0
Foreign	0	0	0	0	0	0	0

The main pattern from this table shows that those heads with the highest status (small employers) are all from either the native county or from the rest of England and Wales: none are from Scotland, Ireland or abroad; and of these particular heads 50% were born in the native county. Among the labourers, all three groups show a decline in numbers as one goes further afield for birthplace, within a particular group; or as one remains in the same birthplace while going down the level of skill. Graphically the former case looks thus:

FIG x



Thus apart from the expected case of willingness to migrate if the distance was not far, it also seems that the higher the level of skill, the more willing was a workman to migrate. The Scots born made up 10.81% of the skilled labour force, but none of the semi or unskilled labourers; Ireland presented the exception in that, apart from 9.09% of unstated occupation, it contributed 25% to the unskilled labour force, but none to the more skilled groups of labour: this 25% equalled the total number who came from England and Wales, apart from those born in the native county.

e) The Wife - 2 variable analysis

As in the case of the head, the social status groups (according to the head) of the wives were drawn up in columns; and by rows, information on age, and birthplace was recorded. The average age per social group was:

Table 21

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
average age	0	0	33.67	32.46	32.83	37.27	0

And broken down into age groups, the data appears:

Table 22

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
under 20	0	0	0	0	1 (5.56)	0	0
20 - 29	0	0	4 (33.33)	11 (31.43)	5 (27.78)	1 (9.09)	0
30 - 39	0	0	3 (25.00)	15 (42.86)	6 (33.33)	7 (63.64)	0
40 - 49	0	0	4 (33.33)	6 (17.14)	5 (27.78)	1 (9.09)	0
50 - 59	0	0	1 (8.33)	3 (8.57)	1 (5.56)	1 (9.09)	0
60 & over	0	0	0	0	0	1 (9.09)	0

We can compare the four groups of social status by graph, and note whether or not the shapes correspond to those of household heads. While expecting generally the graph of wives' ages to be above those of the heads in that the wives' average age is below that of men, one would expect the shape of corresponding graphs to be roughly the same. This is true in the cases of skilled and unskilled labourers, but not in the other two groups.

The non-corresponding groups are:

FIG xi

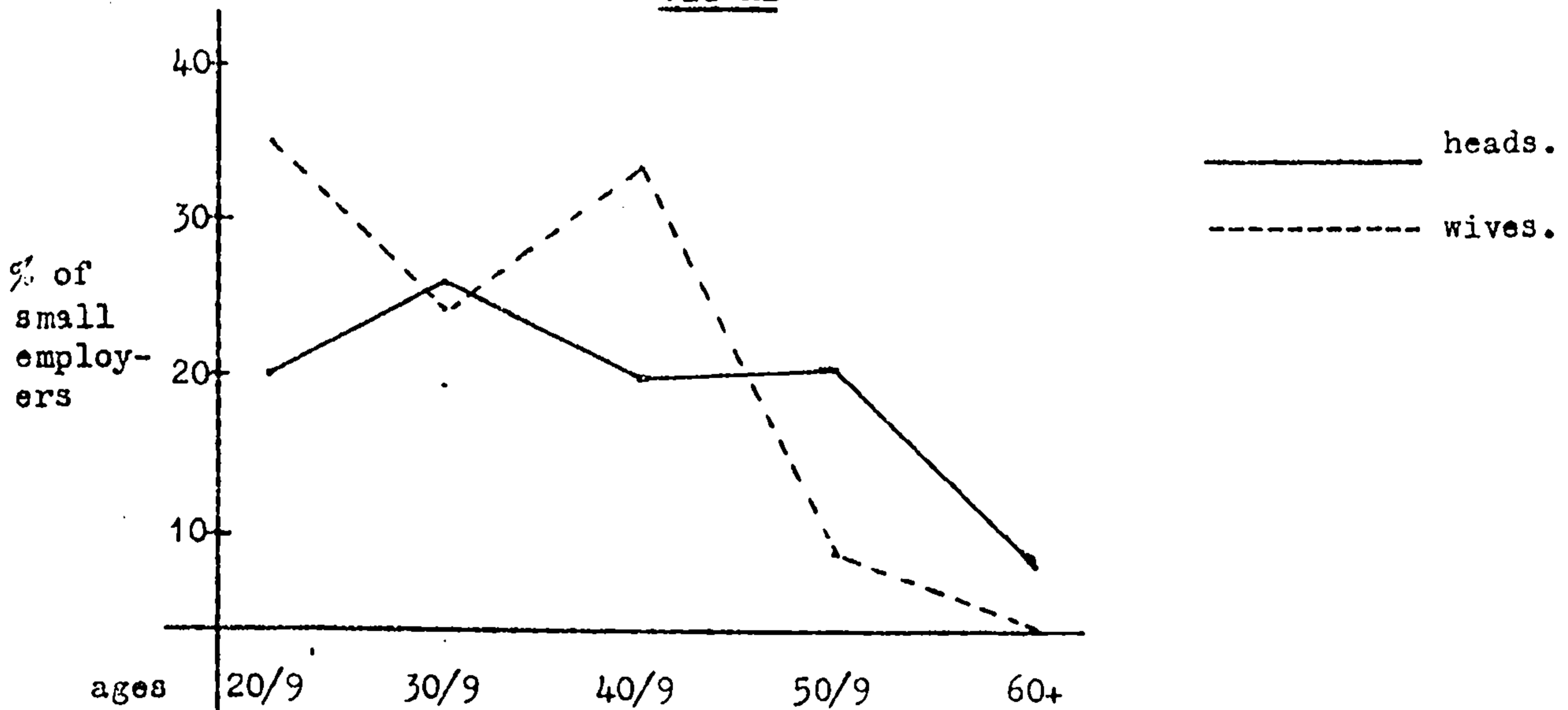
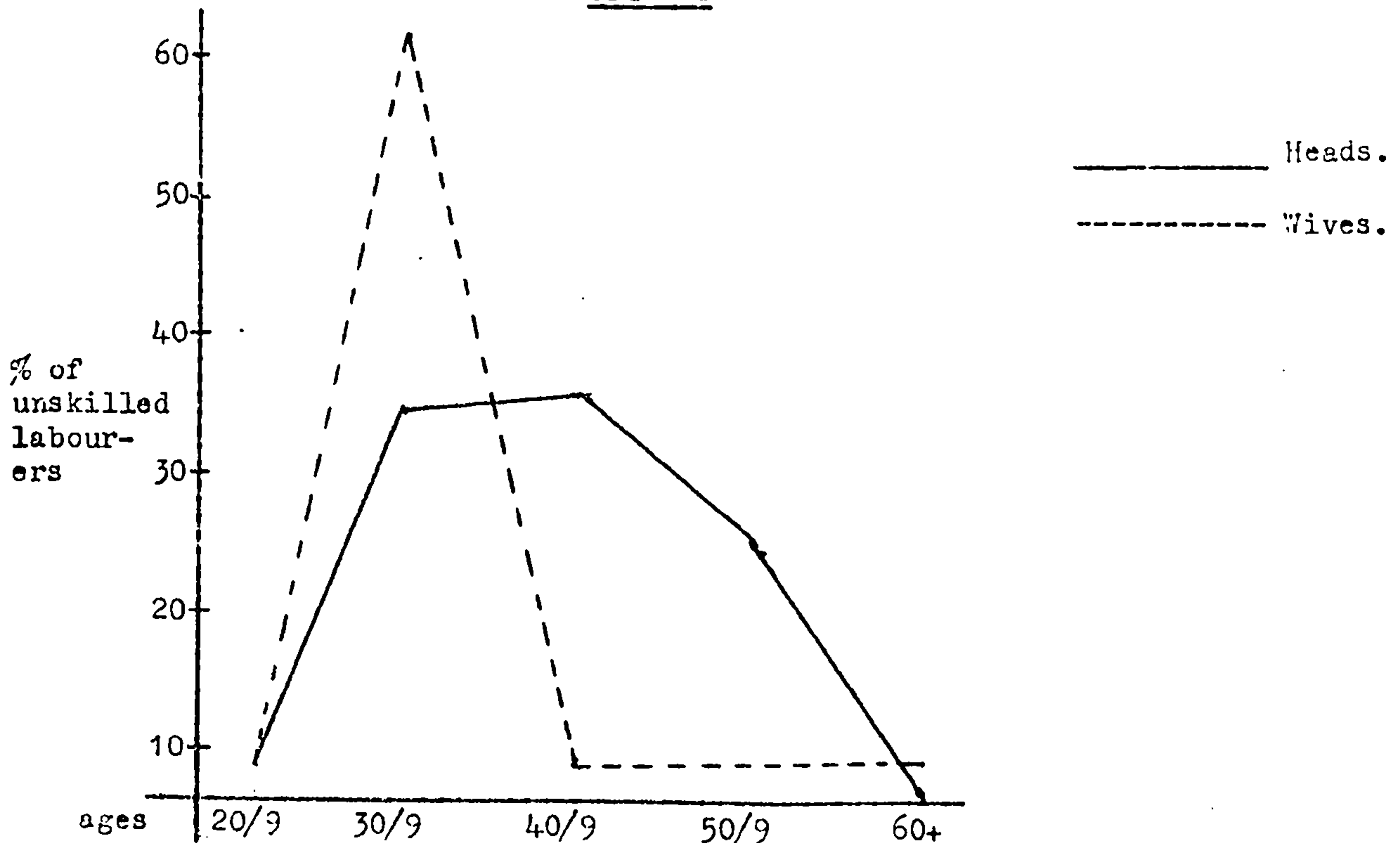


FIG xii



While the corresponding groups appear:

FIG xiii

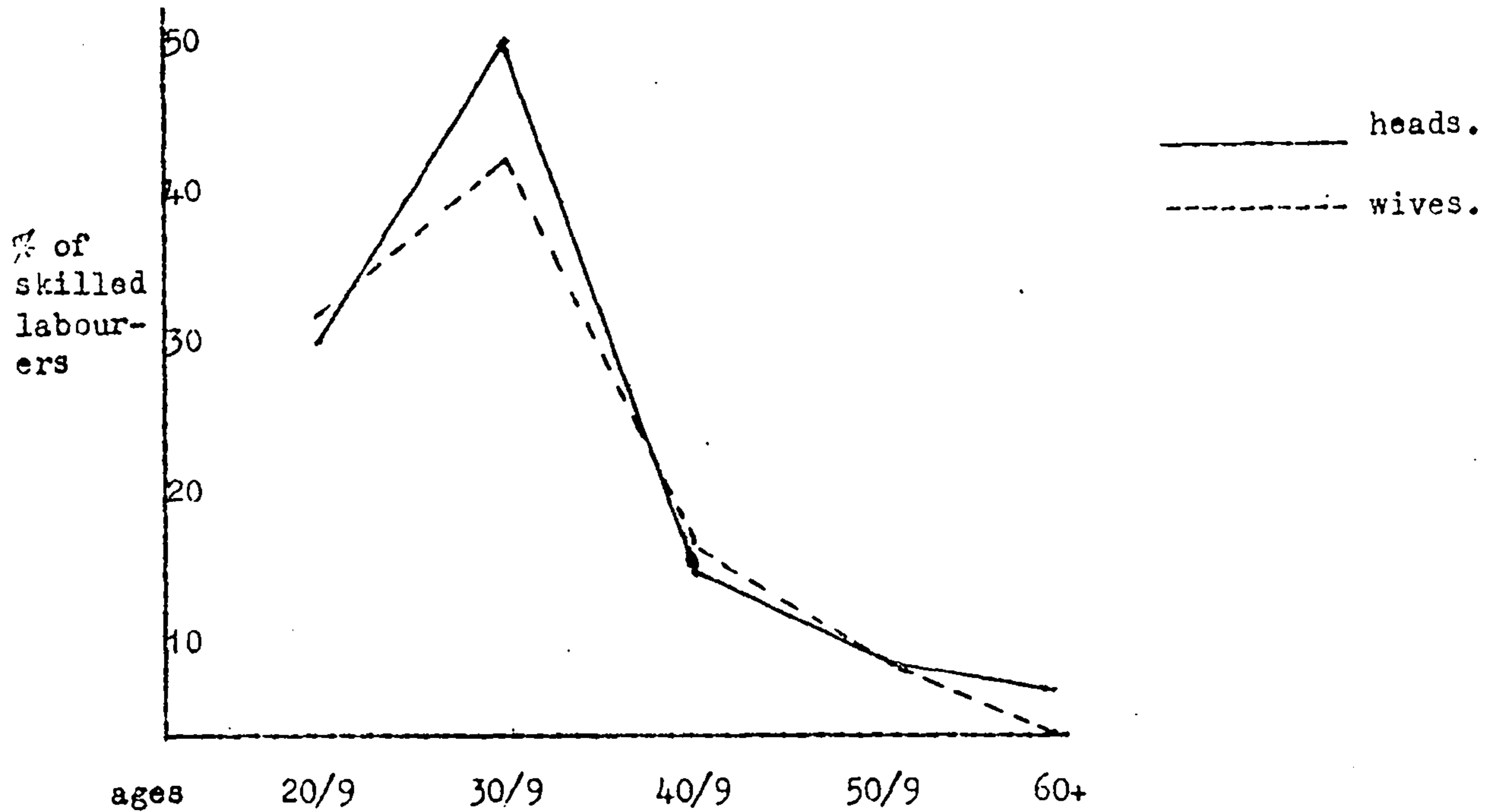
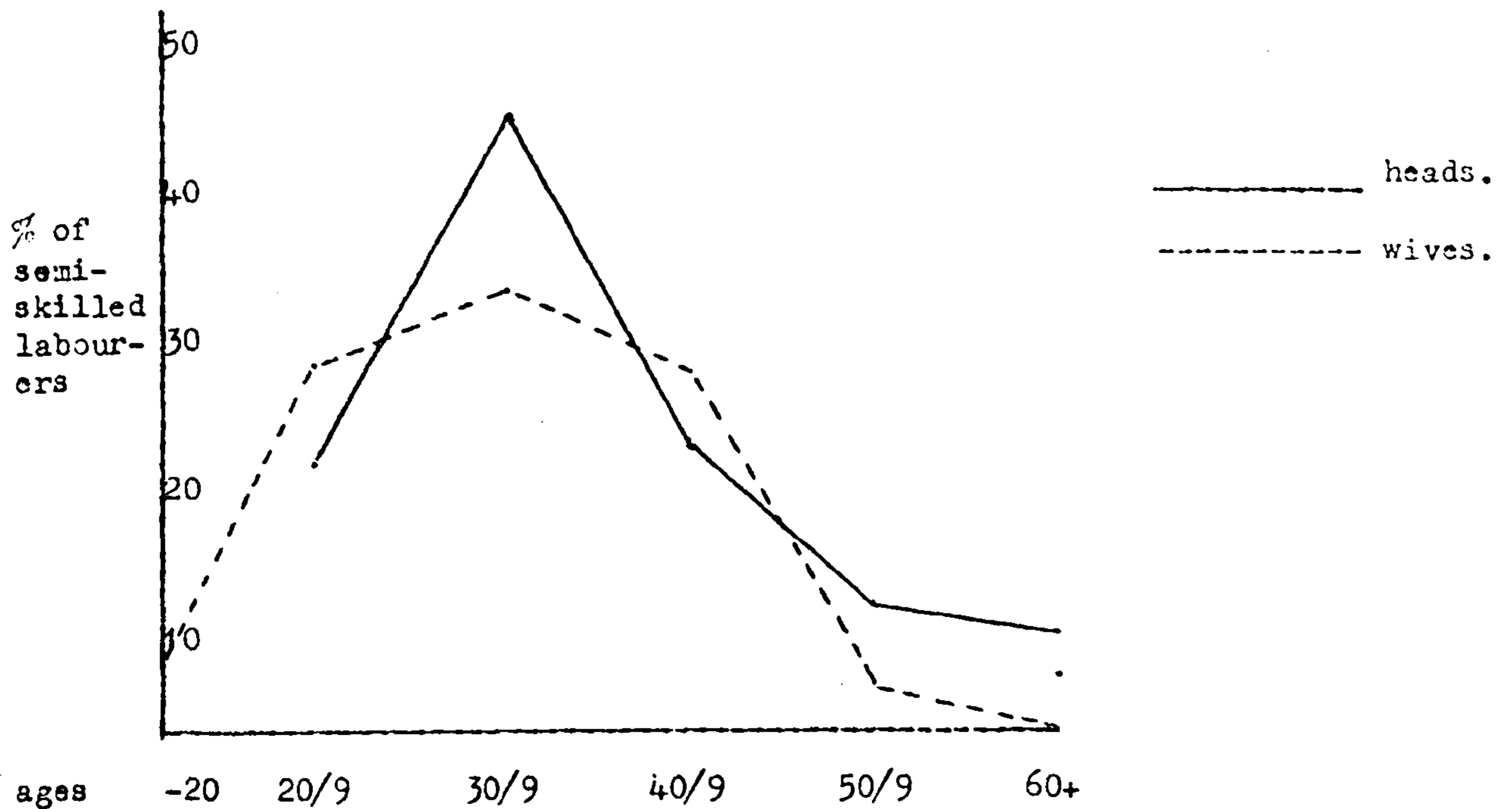


FIG xiv



In the case of the non-corresponding groups, there is an impression that in some age groups, the wives are likely to be older than household heads. In the case of small employers, this occurs in the forties, whilst in the

unskilled labour group this occurs in the thirties. Two factors may be responsible for this: early deaths of wives (possibly in childbirth) which would reduce the proportion of wives in a particular age-group, or a tendency for men to marry older women at a certain stage in their careers.

By status and birthplace:

Table 23

birthplace	not stated	caps.	s/emp.	s/labs.	s/s/labs.	w/s/labs.	rea
Yorks	0	0	7 (58.33)	14 (40.00)	14 (77.78)	4 (36.36)	0
rest of Eng. & Wales	0	0	5 (41.67)	18 (51.43)	4 (22.22)	5 (45.45)	0
Scotland	0	0	0	3 (8.57)	0	1 (9.09)	0
Ireland	0	0	0	0	0	1 (9.09)	0
Foreign	0	0	0	0	0	0	0

Although there is a trend here to follow the pattern of household heads, whereby the very highest group is from either the native county or from the rest of England and Wales, when one turns to the three classes of labourers, the earlier pattern no longer holds. Heads showed an almost unflinching decline in proportions as one moved further from the native county, whereas in two of the three groups in the case of wives, there was a midway rise before the unmistakable decline comes with those born in Scotland and Ireland.

As with small employers, the wives of semi-skilled labourers followed the general pattern of the downward sloping curve, but in the case of skilled labour, there is a smaller proportion of those born in the native county, than those from the rest of England and Wales, and in the case of unskilled labour, this feature is even more marked.

These latter two groups compare thus:

FIG xv

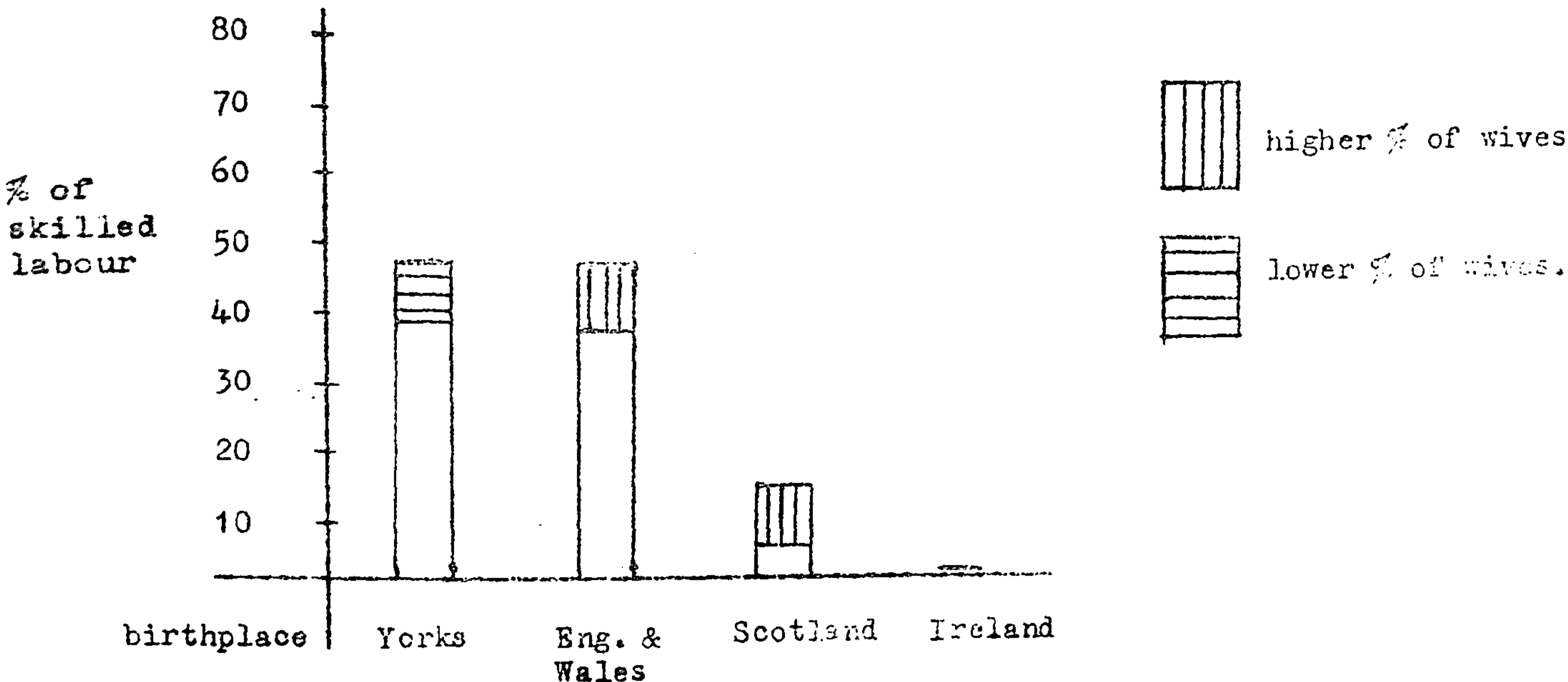


FIG xvi



The implication is that although a larger proportion of household heads came from the native county than did their wives, the trend was reversed in the proportions from the rest of England and Wales. This reversal continued in the case of unskilled labour when one looks at those born in Scotland; but in the case of skilled labour the original trend returns at this point.

In both cases, equal, and very low, proportions were of declared Irish birth. Bearing in mind the rather special geographical position of Middlesbrough in regard to Yorkshire and Durham, already referred to, the histogram for the two grades of labourer under discussion suggests that wives were greater migrants than heads of households.

f) The Children - 2 variable analysis

The average number of children by social status was:

Table 24

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	w/s/labs.	res.
total number and average	14 (2.33)	0	24 (2.67)	78 (2.69)	49 (3.27)	33 (3.30)	0

Here the results suggest clearly that the average number of children in a family grew as one descends the scale of social status. Not only this, but these averages are very close in the case of the two highest of these status groups; and similarly close at a higher level in the case of the two lowest groups. The average for skilled labour exceeds that for small employers by a mere 0.02 years; and the unskilled labour group exceeds that for the semi-skilled by almost the same amount, 0.03 years.

The eldest child by social status and birthplace:

Here cases when only one child was recorded in a family, were included in the category of 'eldest child'. The table shows:

Table 25

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Yorks	3 (50.00)	0	5 (55.56)	17 (58.62)	12 (80.00)	6 (60.00)	0
rest of Eng. & Wales	3 (50.00)	0	4 (44.44)	10 (34.48)	3 (20.00)	3 (30.00)	0
Scotland	0	0	0	2 (6.90)	0	1 (10.00)	0
Ireland	0	0	0	0	0	0	0
Foreign	0	0	0	0	0	0	0

One would expect a larger proportion of children to be born nearer or in Middlesbrough than heads or wives; in fact given the almost non-existence of the town before 1830, one would expect to find no locally born parents before the 1851 census. With only slight exception, children are recorded as being born nearer the town than their parents. Of the four status groups shown in this table, the proportion of children born in Yorkshire is higher in all groups but that of semi-skilled labourers, where the children's proportion is only 3.33% less than household heads, yet is greater than wives by 2.22%. The lower proportion of children born in the rest of England and Wales, suggests a movement of parents into Yorkshire.

A similar table for youngest children is:

Table 26

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Yorks	4 (80.00)	0	4 (66.67)	13 (65.00)	11 (91.67)	7 (77.78)	0
rest of Eng. & Wales	1 (20.00)	0	2 (33.33)	5 (25.00)	1 (8.33)	1 (11.11)	0
Scotland	0	0	0	2 (10.00)	0	1 (11.11)	0
Ireland	0	0	0	0	0	0	0
Foreign	0	0	0	0	0	0	0

In comparison with eldest children, one would expect larger proportions of youngest children to be born nearer the town. The average age between these two groups of children is 6.20 years which represent a significant amount of time in the movement of the Middlesbrough population at this stage of development. In the circumstances, all the Yorkshire born groups of youngest children show a larger proportion than the corresponding groups of eldest children; conversely the proportions for births in the rest of England and Wales are all smaller.

2) The Household

Two pieces of analysis are presented here. First there is a simple comparison of the households with relations, workpeople, servants and lodgers, as opposed to those without these additions. In each case an average is given for relations etc. within the possessing household. Secondly all four categories: relations, workpeople, servants and lodgers, are shown in relation to the social status of the household.

a) Distribution of relations etc.

Table 27

	number of households		% with	average in the possessing households
	with	without		
relations	8	84	8.70	1.00
workpeople	3	89	3.26	1.67
servants	16	76	17.39	1.25
lodgers	55	37	59.78	2.60

With a town such as Middlesbrough one would expect a large number of relations in the households, but the numerical analysis does not show

this. Not only is the proportion of households in possession of relations very low, only 8.70%, but the average number of relations is only 1.00, the lowest possible average. Such relations refer to any member of the head's family, in addition to the nuclear group, recorded in the census return. Such a low proportion and average suggests the rarity of the extended family in Middlesbrough at this time: at least in the sense that the extended family shared the same house.

One would anticipate that the workperson element of the household would be small. Although the town had not, by 1841, become a centre for heavy industry with few firms and large work-forces, it was not, on the other hand, a place of craft industries. Only 3.26% of households possessed workpeople, and these with the low average of 1.67 per household.

Similarly a small servant element would be expected. The town was more the sort of area that supplied servants to more prosperous places that provided employment for such help. In fact the proportion of 17.39% of households in possession of servants seems somewhat high, although the average of 1.25 per possessing household is low. Possibly the proportion of 17.39% is inflated by inaccurate descriptions on the part of the home heads, e.g. inn keepers describing waitresses and barmaids as servants; or similar descriptions of casual domestic help in an emergency, such as sickness or childbirth, when the essential element of such help in the household was its short-term nature.

Finally regarding lodgers, one would expect a large household element. In fact a large proportion of households, 59.78%, had lodgers; and of these the average was the high one of 2.60. Two factors were present here: the speed of growth, whereby housing provision lagged behind the rate of increase of the in-coming population; and the need of a mid-century working-class community to augment its income.

b) Relations - 2 variable analysis:

Table 28

social status of households	number of households		% with	average in the possessing households
	with relations	without relations		
not stated	2	9	18.18	1.00
caps.	0	0	0	0
s/emps.	2	12	14.29	1.00
s/labs.	3	34	8.11	1.00
s/s/labs.	0	18	0	0
u/s/labs.	1	11	8.33	1.00

Given that the number of relations in households in the town was small at this time, one might expect that such households would be found among the lower levels of social status. This situation is not borne out by the table. The highest social group here represented has indeed the highest proportion with relations, not the lowest. In a similarly unexpected way, the class of

skilled labour has only a marginally smaller proportion in possession of lodgers than the class of unskilled labour (0.22%) while the intermediate group of semi-skilled labour shows no households with relations. In all cases of course, the average number of relations per household is inevitably the lowest amount of 1.00.

e) Workpeople - 2 variable analysis:

Table 29

social status of households	number of households		% with	average in the possessing households
	with workpeople	without workpeople		
not stated	0	11	0	0
caps.	0	0	0	0
s/emps.	3	11	21.43	1.67
s/labs.	0	37	0	0
s/s/labs.	5	18	0	0
w/s/labs.	0	12	0	0

As would be anticipated, all the workpeople in households were in those of the small employers. This group includes, of course, shop-keepers with assistants, lower professional people, and farmers. At the same time, the average of 1.67 workpeople in the possessing households suggest very small scale businesses and other concerns.

d) Servants - 2 variable analysis:

Table 30

social status of households	number of households		% with	average in the possessing households
	with servants	without servants		
not stated	4	7	36.36	1.00
caps.	0	0	0	0
s/emp.	8	6	57.14	1.50
s/labs.	4	33	10.81	1.00
s/s/labs.	0	18	0	0
u/s/labs.	0	12	0	0

As in the case of workpeople, the distribution of servants among the various classes of household comes out expectedly. The small employers were by far the largest users of servants: over half the sample (57.14%) in fact have servants. The average being 1.50 per household. The only other group in possession is the class immediately below, viz. the skilled labourers. Here the number of servant-keeping households is much smaller, 10.81% as opposed to 57.14%, and the average drops from 1.50 to 1.00 per household. The fact that both the lowest social groups, semi and unskilled labour show no servants whatsoever, suggests that the earlier idea¹ of temporary help in times of emergency is not likely. If such had been the case, then some proportion, albeit small, of these last two classes of household, would have shown some servants in situ.

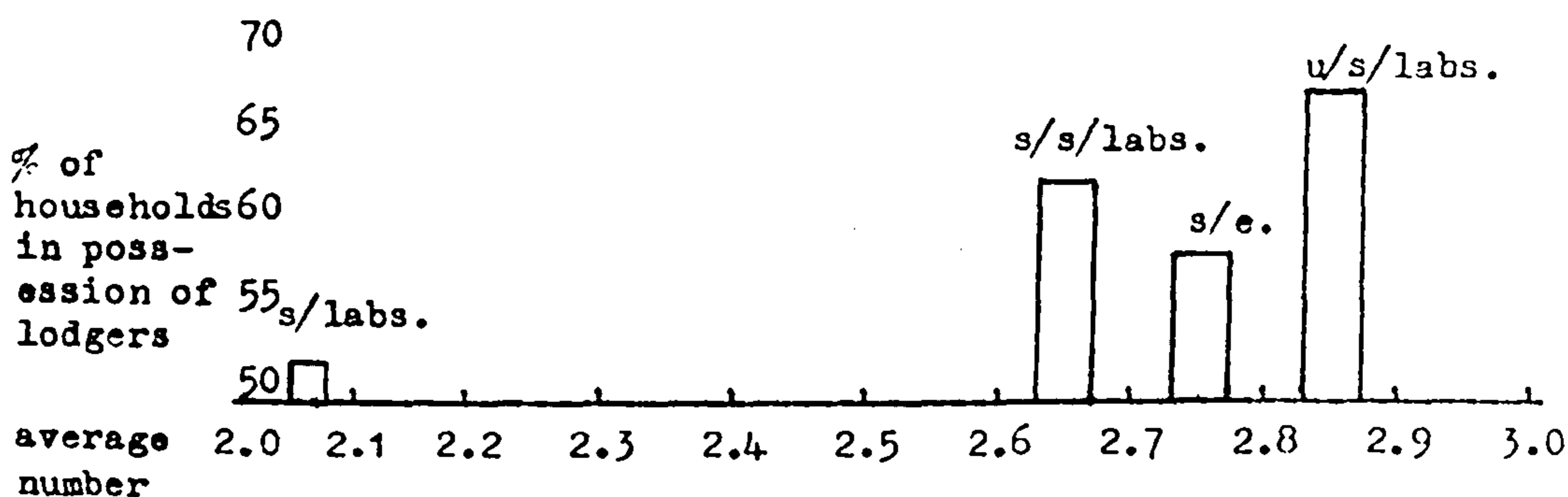
1) See p 313.

e) Lodgers - 2 variable analysis:

Table 31

social status of households	number of households		% with	average in the possessing households
	with lodgers	without lodgers		
not stated	9	2	81.82	3.33
caps.	0	0	0	0
s/emps.	8	6	57.14	2.75
s/labs.	19	18	51.35	2.05
s/s/labs.	11	7	61.11	2.64
w/s/labs.	8	4	66.67	2.87

If two possible factors behind the large number of lodgers in the town are taken into account, then the findings shown in this table are understandable.¹ If the income factor alone operated, then one would expect a higher proportion of lodgers, per social group and per household, the lower one looked down the social scale. This in fact occurs among the three classes of labour listed above, but the data for the class of small employers upsets this even pattern. Thus the situation appears:

FIG xvii

1) See p 313.

The class of small employers has a larger proportion of possessing households than the class of skilled labour, and also a higher average number in possession than both skilled and unskilled labour. If, however, the lag in the rate of house building is taken into account, then the position of small employers in regard to lodgers becomes plausible: it was not simply accommodation that was sought, but accommodation appropriate to the status of the lodger. Thus young professional men would seek accommodation in the sort of houses occupied by the small employer class. Thus in each of the four social groups there were lodgers of the same status as the head, and sometimes below, but rarely above. Thus any prospective lodger above the status of skilled workmen would look for lodgings superior to those that the labouring classes could supply. At this point the lure of an income increased by a rent would play a part, even among the small employer class, but nevertheless the proportion of households in possession and the average number of lodgers both seem high.

3) The Lodgers

As this group of inhabitants is obviously such an important element in Middlesbrough's economic development, some further questions were programmed regarding this group. These questions covered two main areas. First, questions on the distribution of age, status and birthplace; and second, on the relation between social status and birthplace.

a) Distribution of ages, etc.:

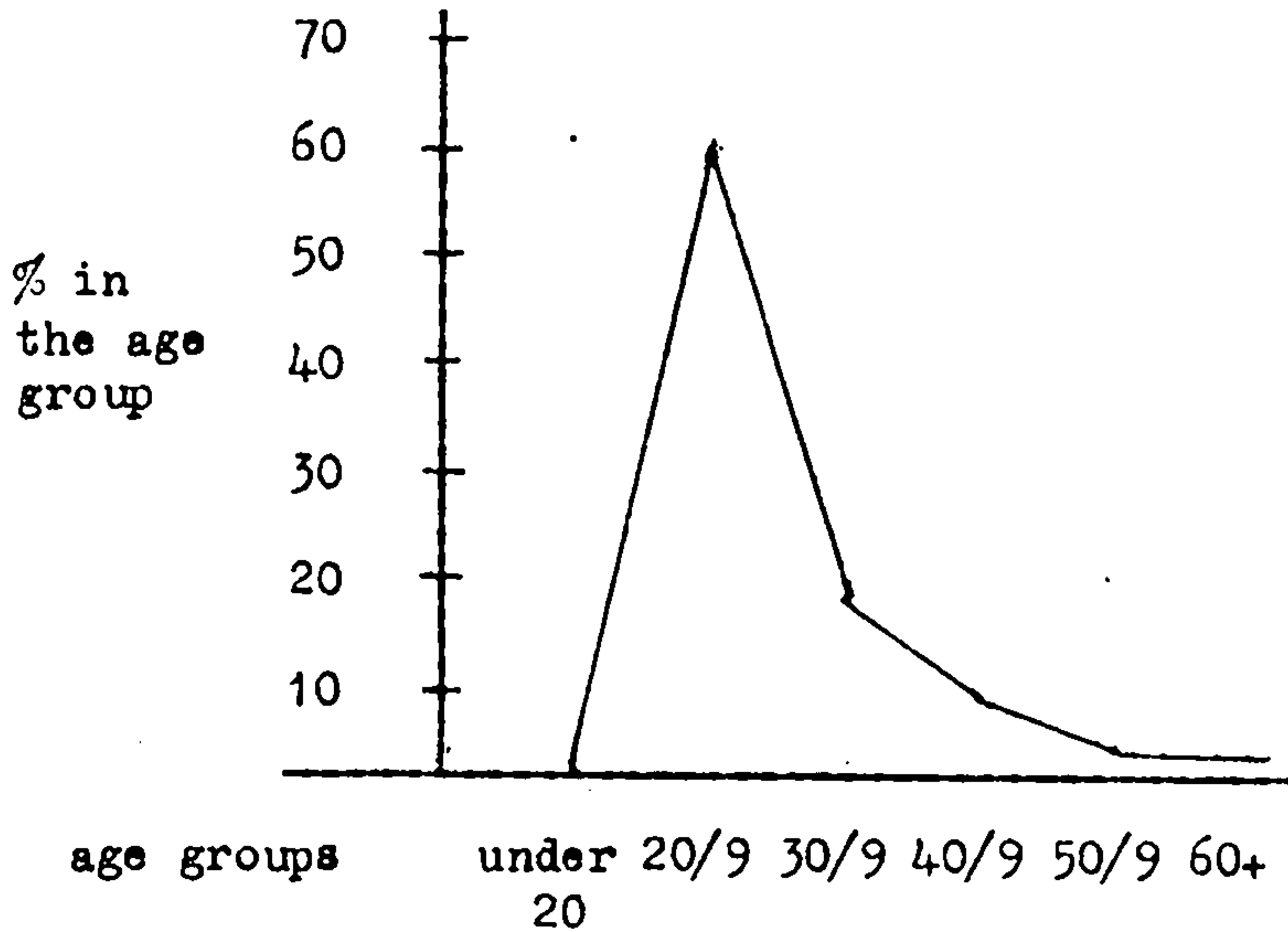
There were 87.62% male lodgers, as compared with 12.38% female. This bears out the strong masculine character of the town's population, although this proportion is somewhat exaggerated in the way that this particular piece of information was gathered. While total numbers of lodgers were recorded for all the work on lodgers so far, only certain lodgers were noted for the more detailed work. These were lodgers who came to Middlesbrough "in their own right". Because of a number of factors, space and time mainly, it was not practical to list all the details of all those people classed as lodgers, so such detail was confined to the essential element related to work, and dependents were not included in this amount of detail: wives and children were omitted here, but of course this did not include female lodgers, in their own right. Similarly a widow lodger would be included here, but not her children. In effect this meant that 73.42% of the total number of all lodgers was considered in detail. The average age of the "essential" lodger was 27.61 years, thus adding to the impression of the young men as being the typical newcomer to the town. Broken down into age groups, this becomes:

Table 32

	under 20	20 - 29	30 - 39	40 - 49	50 - 59	60 +
number and percentage	6 (5.71)	64 (60.95)	19 (18.10)	10 (9.52)	3 (2.86)	3 (2.86)

Thus the very strong emphasis can be seen as a graph, whereby the rise and fall of the curve on either side of the twenties age group is very sharp:

FIG xviii



Compared with the curve for heads of households and that for wives, the peak for lodgers, in the twenties, occurs a decade before these other two groups.

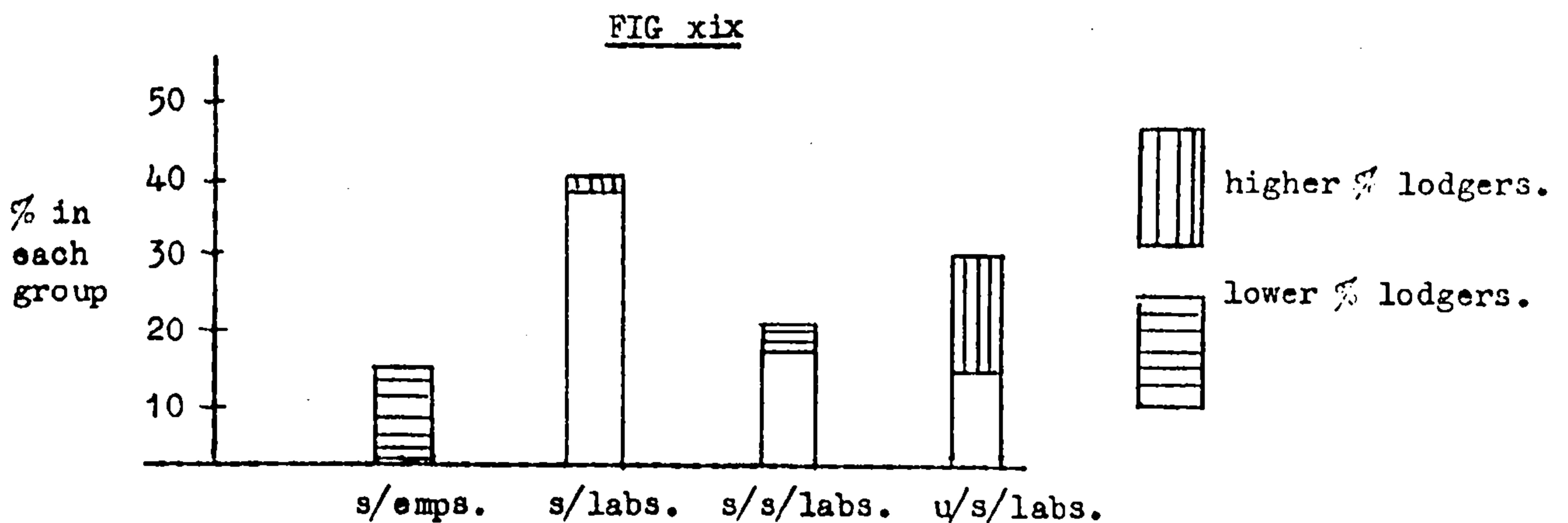
By social class:

Table 33

	not stated	caps.	s/emp.	s/labs.	s/s/labs.	u/s/labs.	res.
number and percentage	11 (10.48)	0	1 (0.95)	43 (40.96)	18 (17.15)	31 (29.53)	1 (0.9)

This table provides some interesting comparisons with the corresponding table for heads of households. Having noted the difference in average age (36.57 years for heads compared with 27.61 for lodgers) and bearing in mind the likely status differences between a household head and a lodger, one would expect lower levels of status on the part of the lodgers. The tables do not completely bear this out. Instead of smaller proportions

on the part of the lodgers in the higher groups of small employer and skilled labourer, and higher proportions in the two lower status groups, we find a more complex difference. At the two extremes of the status groups, this expectation holds true; although the proportion of small employers seems extremely low: but the intermediate groups do not conform. In proportions which are the reverse of the general expectation of comparative status, the lodgers had a slightly higher proportion of skilled labourers than the heads, the small amount of 0.74% while having a lower proportion of semi-skilled labour, 2.42%. Thus the pattern for lodgers becomes quite irregular, and compares with heads, as follows:



By birthplace:

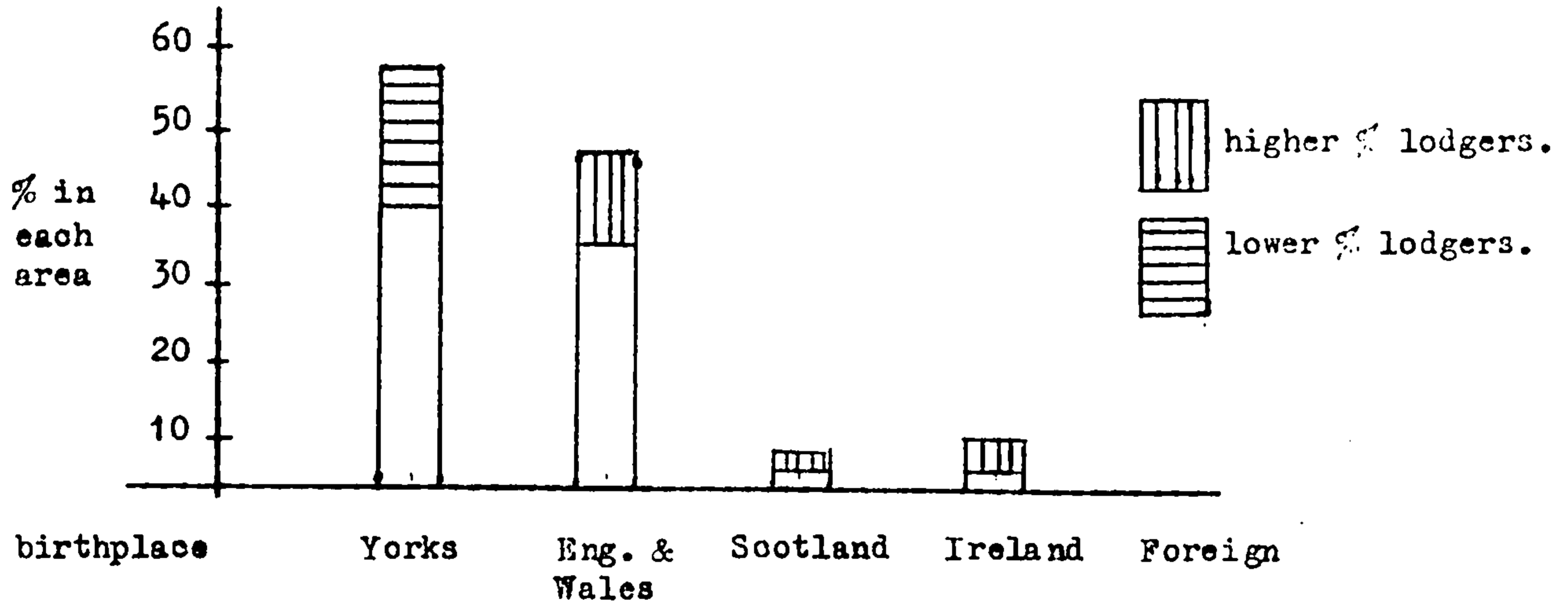
Table 34

	Yorks	rest of Eng. and Wales.	Scotland	Ireland	Foreign
number and percentage	42 (40.00)	50 (47.62)	4 (3.81)	9 (8.58)	0

Here the expectation might be that lodgers were probably born further afield than heads of households, and the table bears this out. This difference is

not the moderately slight shift that one gets by comparing heads with wives, but a much more pronounced one whereby the pattern of lodgers' birthplaces becomes irregular in comparison with those for heads and wives. The birthplace comparison of lodgers with heads appears thus:

FIG xx



Thus while a smaller proportion of lodgers were born in Yorkshire compared with household heads, a larger one was born in the rest of England and Wales; and similarly a larger proportion was born in Ireland as compared with Scotland.

b) Lodgers - 2 variable analysis; by social status and birthplace:

Table 35

	not stated.	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Yorks	7 (63.70)	0	0	14 (32.56)	8 (44.45)	13 (41.96)	0
rest of Eng. & Wales.	3 (27.30)	0	1 (100.00)	26 (60.47)	9 (50.00)	10 (32.26)	0
Scotland	1 (9.10)	0	0	2 (4.66)	0	1 (3.22)	0
Ireland	0	0	0	1 (2.34)	1 (5.56)	7 (22.59)	0
Foreign	0	0	0	0	0	0	0

Compared with heads of households, the lodgers' table shows small proportions

of skilled and semi-skilled labour with Yorkshire as the place of birth. Consequently there appears very large proportions born in the rest of England and Wales in comparison with the figures for heads. This contrast appears thus, while the comparative patterns for unskilled labour appear much more regular:

FIG xxi

skilled labour

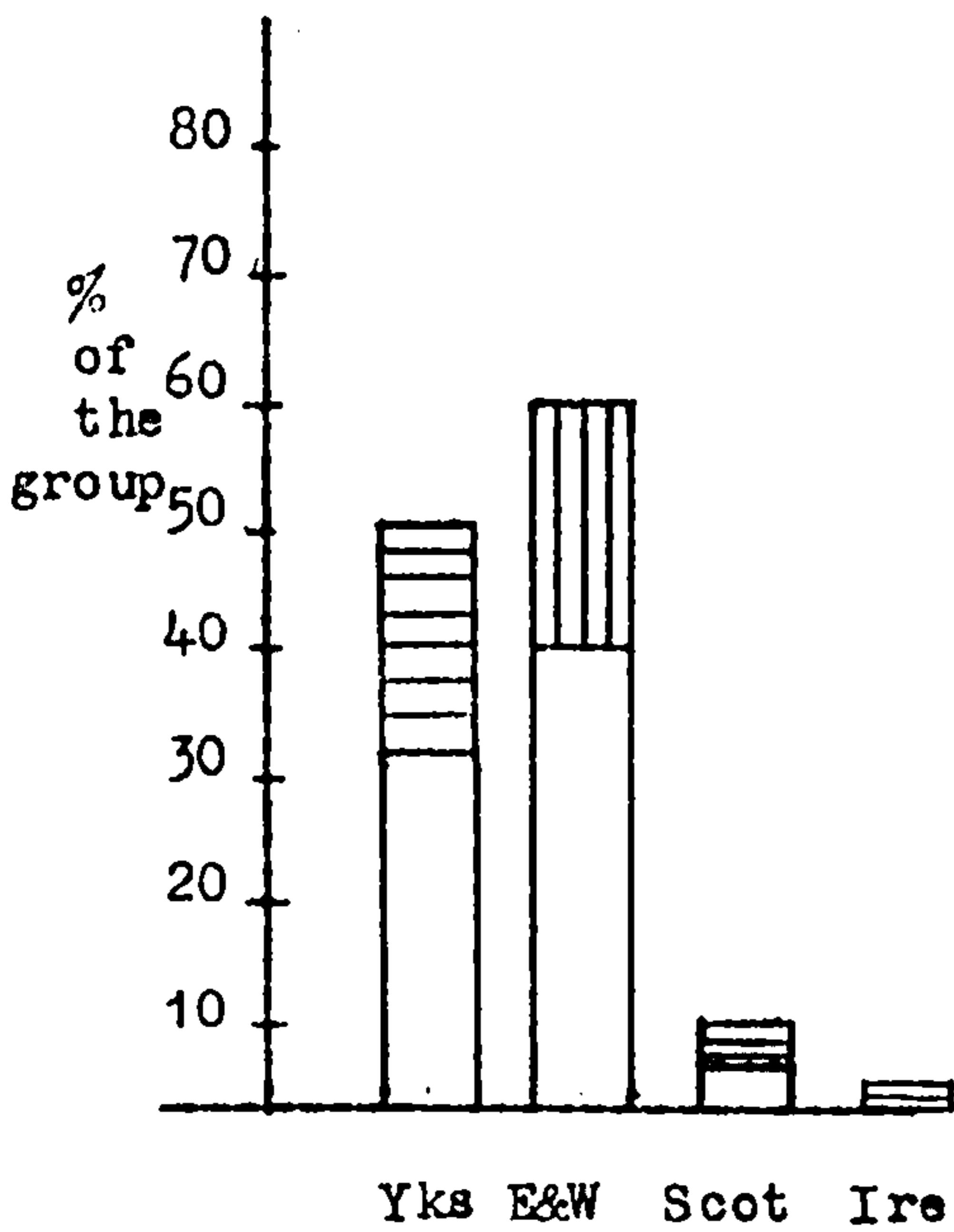


FIG xxii

semi-skilled labour

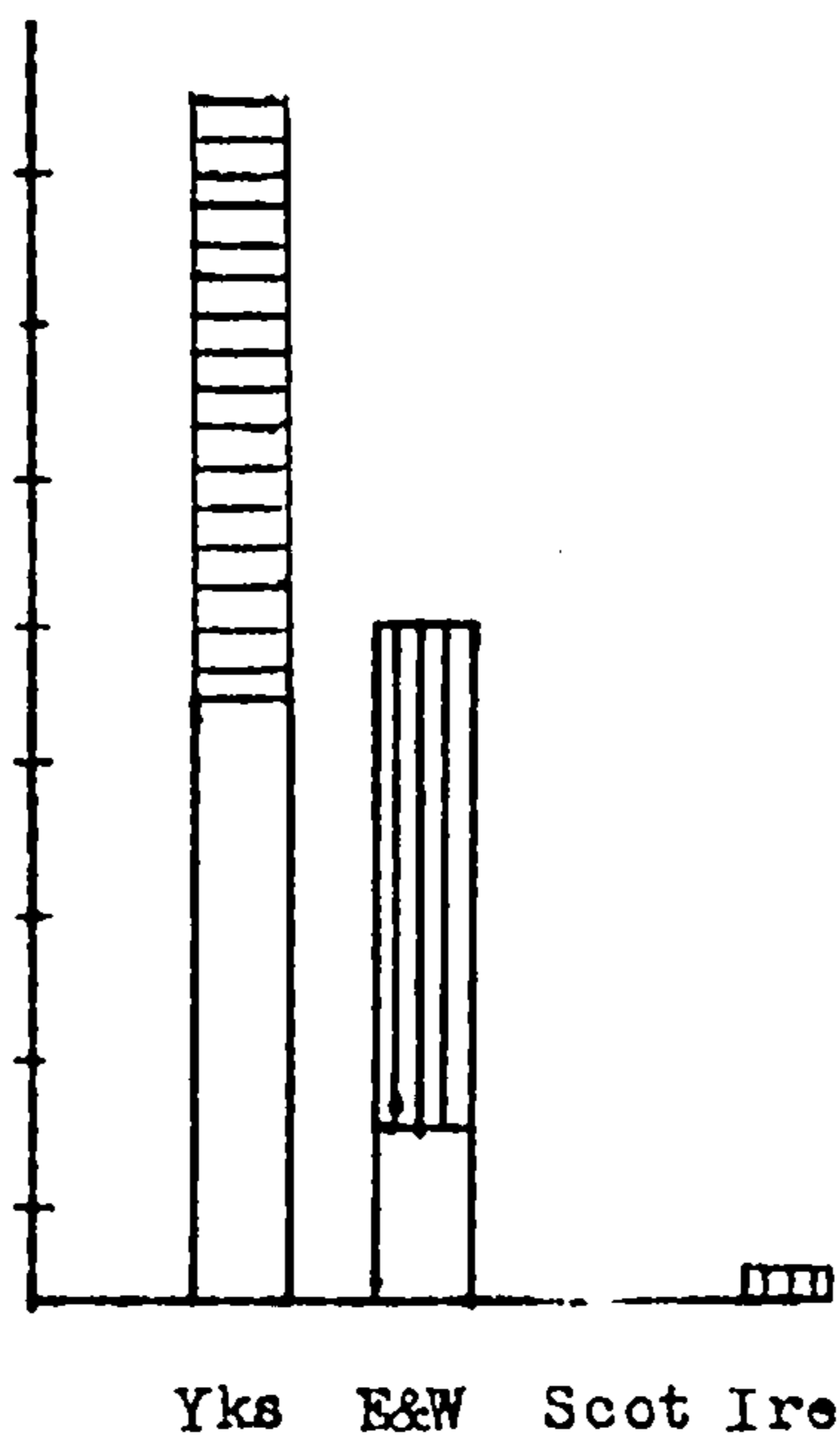
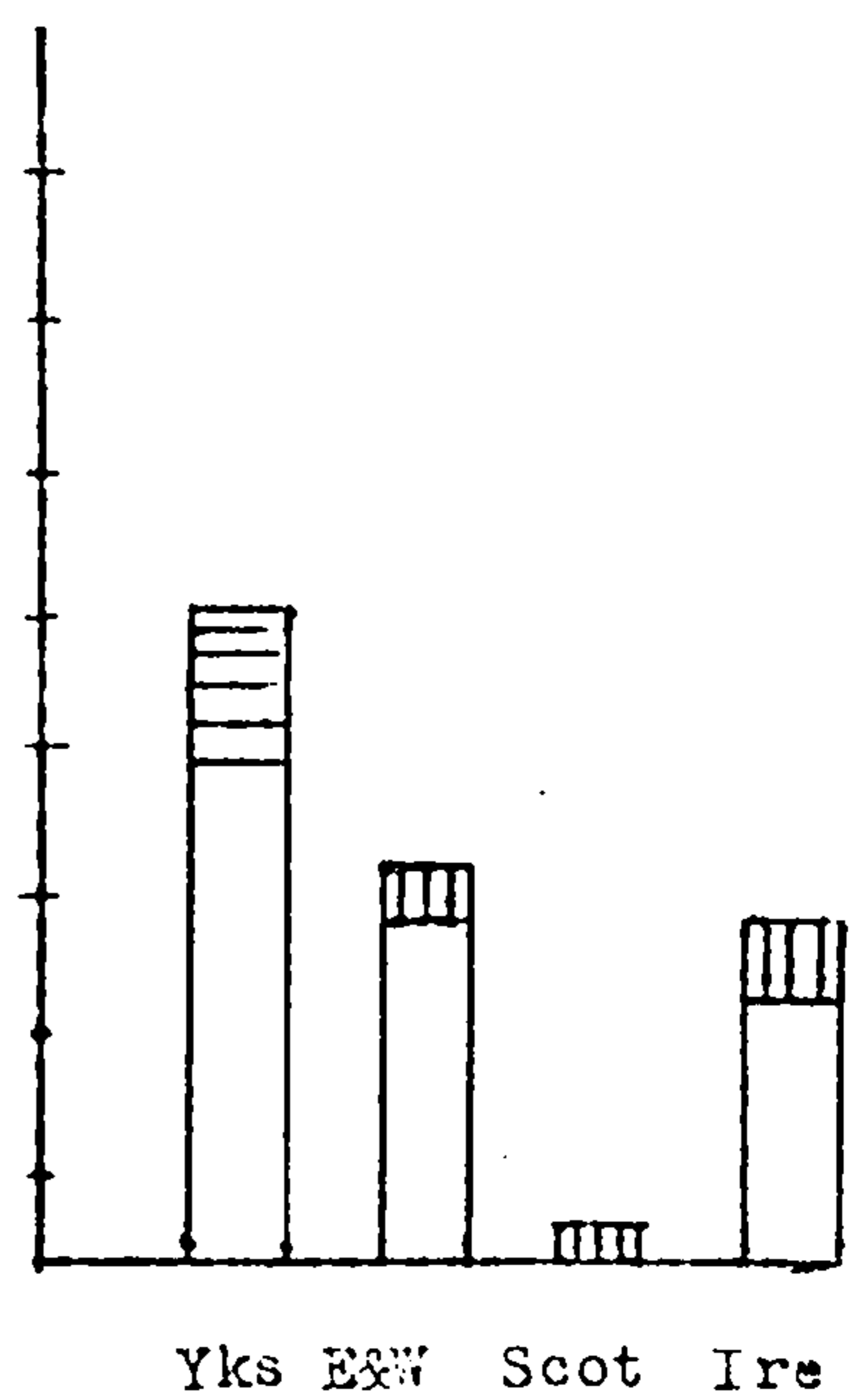




FIG xxiii

unskilled labour



 higher % lodgers.
 lower % lodgers.

Summary1) Aggregate Situation

The 1841 census marked the end of the first decade of Middlesbrough's urban growth. This growth saw a huge population increase which became one of the main characteristics of the town, so often commented upon by the Victorians. Compared with the immediate counties, and England as a whole, we can see the sheer rapidity of this increase, at a time when such a characteristic was not unique.¹

Table 36

	1831	1841	% increase
England & Wales	13,896,797	15,914,148	14.6
Durham	253,910	324,284	27.7
N.Yorks	190,756	204,122	7.0
Middlesbrough	154	5,463	3,448.0

The age and sex data of these areas compare thus; for 1841:²

Table 37

	under 20	over 20	% under 20	male	female	% male
England & Wales	7,361,199	8,674,598	45.9 ³	7,777,586	8,136,562	48.9
Durham	154,120	170,164	47.5	160,073	164,211	49.4
N.Yorks	91,894	112,228	45.0	100,482	103,640	49.2
Middlesbrough	2,414	3,049	45.3	2,939	2,524	53.8

In that the population of Middlesbrough had risen from almost nothing in this decade, comparisons with the rates from the immediate counties and the county as a whole have limited value. We can note nevertheless that while Durham had almost twice the national rate of increase, the North Riding had just under a half of this rate. The great difference is accounted for by the

1) Enumeration Abstracts, pt 1, 1843 (496) p 8.

2) Age Abstracts, pt 1, 1843 (497) pp 344/5, 366/7, 372/3.

3) Total includes off-shore islands of England and Wales.

general nature of the respective economies.

More value can be had, however, from comparisons of age and sex. Middlesbrough's percentage of the under 20's lies between those of the North Riding and England and Wales: only Durham shows a figure well above the national count. Thus the image of "young" Middlesbrough has not yet emerged.

Turning to sex structure, we can already see one of the other main characteristics of the town's population. While Durham and the North Riding have a larger percentage of males than the national proportion, Middlesbrough has a much larger percentage. Thus in that the town's male percentage is almost 5% above that of England and Wales, the image of "masculine" Middlesbrough has already emerged.

I will now make a few brief comments on the family, household and lodger situation in the town.

2) The Family This averaged 3.99 members. The head was typically a married man in his mid thirties. He worked in the distribution category of industry, his status was often that of skilled labourer, and his birthplace was often Yorkshire.

His wife was in her early thirties, was also likely to have been born in Yorkshire, and had 2.87 children. The eldest child was more likely to have been born in Yorkshire than his parents, and the youngest child, more likely still. Between the average ages of these children (9.16 - 2.96 years) there was 6.20 years.

When the variable of social status was analysed alongside the other variables of age-group, industrial group and birthplace, certain minor divergences from the basic patterns emerged. In age structure,

there was a basic similarity for heads of small employer and unskilled labourer status in that both showed a proportionsl evenness through the age groups from 30 to the fifties; the groups of skilled and semi-skilled labour both showed a dramatic peak for the thirties. In industry the single variable analysis was confirmed in that the transport grouping dominated; the only slight deviation from this was the large proportion of unskilled labour in agriculture, but here the small absolute amounts of labour analysed were not enough to make for a significant exception to the norm. The birthplace analysis confirmed the skill and distance relationship.

Regarding the wife and age-groups, two groups followed the pattern of heads, but two groups diverged. These divergent groups were those of small employers and unskilled labourers: the first in that wives showed a smaller proportion for the thirties but compensated in the forties; and for the second group the converse situation applied. The only exceptions regarding birthplace were wives of small employers and unskilled labourers where in both cases larger proportions were born in England and Wales outside Yorkshire than corresponding groups of household heads.

The two variable analysis of children showed that the lower the status of the family the more likely was the number of children to be above average. The two higher groups (small employers and skilled labourers) showed a mean average of 2.68 children; while the two lower groups (semi and unskilled labour) showed a mean average of 3.29 children. Among eldest children, a particular high proportion of semi-skilled labourer status were born in Yorkshire; while among youngest children there were very high proportions so born in all four status groups, although the category of semi-skilled labour

remained the foremost.

3) The household. This averaged 5.90 members, and this meant an increase of 1.91 on the average nuclear family. Single variable analysis showed that this increase was made up largely of lodgers and not by the other three possible categories of relation, workperson, or servant.

The numbers of both relations and workpeople proved to be small. Relations were a small average and a very small percentage of possessing households and workpeople a larger average but a smaller percentage. Servants were a more significant addition to the household with a moderate average but a significant proportion of 17.39% of possessing households. Lodgers, however, made up the bulk of the difference between the nuclear family and the household.

In all four main social status groups over half the households possessed lodgers. The average holding was 2.60 per household, out of a percentage of 59.78 households in possession.

Two variable analysis showed that of the small proportion of relations in households, the largest percentage was among the "upper" classes: one household in seven of the smaller employers possessed relations as compared with only one house in twelve among the skilled and unskilled labourers. The analysis of workpeople by two variables confirmed that all were possessed by the small employers, and of these the average holding was small.

Servants were far more significant. Over half the households of small employer status possessed servants, and at an average of 1.5 per household. Just over 10% of skilled labourer households

also possessed servants, but at the lower average of one per household. None were possessed by the two lower social groups.

4) Lodgers

Single variable analysis showed that at least two factors were at work in deciding the distribution of lodgers over the four social status groups. Going from skilled labour households down to unskilled ones, we saw that the lower the status group of household the larger the proportion with lodgers, and the larger the average number of lodgers. The small employer class however do not have a smaller proportion and average of lodgers than the labouring groups; but they have a larger proportion of households with lodgers than the skilled labouring group and also they have a larger average per household than both the skilled and semi-skilled labourers. Thus a second factor must be propounded. If the need for extra income accounts for the shape of the curve of lodgers and household social status; then lodger expectation, coupled with some housing shortage could account for the large number of lodgers in small employer households.

As regards the distribution of lodger characteristics at this time, single variable analysis suggests that the "typical" lodger was male, in his twenties, skilled often, and born in

England and Wales outside Yorkshire. Two variable analysis reveals that this pattern of birthplace is most applicable to lodgers of skilled and semi-skilled labourer status.

The 1851 Census

There are two main refinements in the analysis of the material for this and succeeding census compared with 1841. Birthplaces are given precision, in that those persons born in Middlesbrough can be pinpointed; and visitors in households can be eliminated from the analysis. In the 1841 analysis visitors could not be identified, and so may have swollen the lodger proportions and averages.

Otherwise the layout and content of the analysis follows substantially the same pattern as was used for the 1841 material, except that use will be made of comparative work, especially the use of the 1851 enumerators' books for York and Preston.

1) The Family

The average family size was 3.84 persons, a slight drop on the earlier census; whilst the average for the household fell from 5.90 to 4.54 persons.

This average family size of 3.84 persons can be compared with other towns in different economic situations, e.g. York, which Armstrong described as a town experiencing "comparatively rapid urban growth,¹ without the factory based industrial development"; and Preston, which Anderson described as "a half-way house between a predominantly urban-industrial/commercial post-capitalist England of the present day".²

1) W.A.Armstrong - Stability and Change in an English County Town (1974) p 176.

2) M.Anderson - Household Structure and the Industrial Revolution (in P. Laslett (ed) - Household and Family in Past Time, 1972) p 215.

Average family size in 1851:

Table 38

Middlesbrough	York	Preston
3.84	3.45	4.2

Anderson accounted for the high Preston figure in comparison with that of York by three main factors: early marriage, a young population and the fact that a lot of children in Preston remained at home until marriage.¹ Middlesbrough shared these first two characteristics with Preston, but not the third. This third characteristic which Anderson described as "probably the most crucial factor" arose from the availability of work for children in the textile mills. They did not therefore have to go into service or migrate to other areas. The nature of Middlesbrough's economy excluded such opportunity. Thus Middlesbrough occupied a mid-way position in this respect, between traditional York and industrial Preston, where the factory system was all pervasive. Turning to the comparative household data, we find that apparently York moves into the mid-way position that Middlesbrough occupied in the comparison of family data:

Average household size in 1851:

Table 39

Middlesbrough	York	Preston
4.54	4.7	5.4

Later in this section I will discuss these differences in detail. Suffice it for the moment to note that differences in data recording must inevitably inflate the size of the York household in comparison with that of Middlesbrough.

1) M.Anderson (1972) op cit p 233.

This arises in two ways, First, Armstrong has used the convention of regarding the enumerator's long line as an accurate demarcation of each household : I have used the convention of taking the description 'head' for such demarcation. Secondly, the York material includes visitors in the household count. Dr. Armstrong has recently noted that "it is difficult to know what to make of this category"; and he justifies his inclusion of visitors by noting that in his opinion "the term was, in some cases at least, a genteel alternative for lodger, or paying guest". I have already noted my elimination of visitors in the 1851 analysis, as indeed did Dr. Anderson in his work on Preston; otherwise Middlesbrough would have retained the mid-way position of the nuclear family comparisons.

a) The Head

By type:

Table 40

	Male				Female			
	married	widower	unmarried	unspecified	married	widow	unmarried	unspec
number and percentage	131 (79.39)	4 (2.42)	5 (3.03)	0	12 (7.27)	12 (7.27)	1 (0.61)	0

As in 1841, the great majority of heads were married men. Almost the same small percentage lies outside this main category, but this time not unspecified. The widow and widower element is there; but the number of married women as household heads is equally prominent. Desertion by the husband, or even the husband simply being away from home on the night of the census, could account for this.

1) W.A. Armstrong - A Note on the House Structure of Mid-Nineteenth Century York (in P. Laslett - Household and Family in Past Time, 1972) p 205.

2) Armstrong (1974) op cit p 184.

The average age was 40.41, an increase of 3.81 years since 1841. The distribution was:

Table 41

under 20	20 to 29	30 to 39	40 to 49	50 to 59	60 and over
0	33 (20.00)	57 (34.55)	34 (20.61)	31 (18.79)	10 (6.06)

Although there was little difference in the proportions of the two censuses for the twenties and the forties, the shift from the thirties to the fifties accounts for the average increase. The general result is that the age spread is more even, and the dramatic peak seen in the 1841 analysis becomes less prominent. Thus while continuing to reflect the characteristics of an immigrant population's youthfulness, the town is also beginning to show the characteristics of a settled population in that the middle-aged groups are more prominent.

The analysis of industrial grouping shows:

Table 42

not stated	prof.	admin.	manuf.	distn.	agric.	residual	not clear
18 (10.91)	2 (1.21)	0	35 (21.21)	101 (61.21)	5 (3.03)	3 (1.82)	1 (0.61)

Thus while the distribution group still maintains the highest proportion, over 60%, the manufacturing group becomes more prominent in that there is more than a doubling while agriculture is more than halved. The dating of this census coincides with the point when the infant iron industry, based on the finishing processes, begins to grow into the town's basic industry with the rediscovery

of the Cleveland iron ore deposits. At the same time, the frontier rawness of the place is beginning to be tempered, as the start of a professional proportion indicates.

By social status:

Table 43

not stated	caps.	s/emps.	s/labs.	s/s/labs.	w/s/labs.	residual
4 (2.42)	2 (1.21)	24 (14.55)	54 (32.73)	29 (17.58)	40 (24.24)	12 (7.27)

The main changes that these figures indicate are a proportional shift in skill within the labouring groups, and the emergence of a small proportion of the capitalist group. This shift in skill is from that of skilled labour to unskilled: a fall in the proportion of 7.49% in the former, and a rise of 11.20% in the latter. The implication is that with the growth of industry in the town, the unit of production became larger, while opportunities for unskilled work also increased. The comparative proportions for small employers and semi-skilled labour remained approximately the same: a drop of merely 0.67% with the former, and a drop of 1.99% with the latter.

By birthplace:

Table 44

Middlesbrough	Rest of N.Yorks	Durham	Rest of Eng. and Wales	Scotland	Ireland	Foreign
0	78 (47.27)	41 (24.85)	33 (20.00)	4 (2.42)	9 (5.45)	0

Here very little comparison can be made between the two censuses because of

the change in style of the household return regarding details of birthplace. The strong element of short distance migration can be more clearly seen in the 1851 table than in the earlier one. While the proportion from Scotland fell by nearly a half (4.35% to 2.42%), that from Ireland increased slightly (4.35% to 5.45%). Nevertheless the total proportion from both areas remains at less than one-twelfth of all heads. The big change occurs in the proportions for the 'rest of England and Wales', with a fall from 34.78% to 20.00%, but this is not to compare like with like: County Durham and the West and East Ridings of Yorkshire have to be allowed for. From the 1851 Durham proportion of 24.85%, we can guess that maybe half the 1841 England and Wales figure of 34.78 could be accounted for as Durham born, but this cannot be proven. Nevertheless the 'short distant migration' idea is well supported in the 1851 table with almost half the population of household heads born in the North Riding, and almost a quarter born in Durham.

b) The Wife

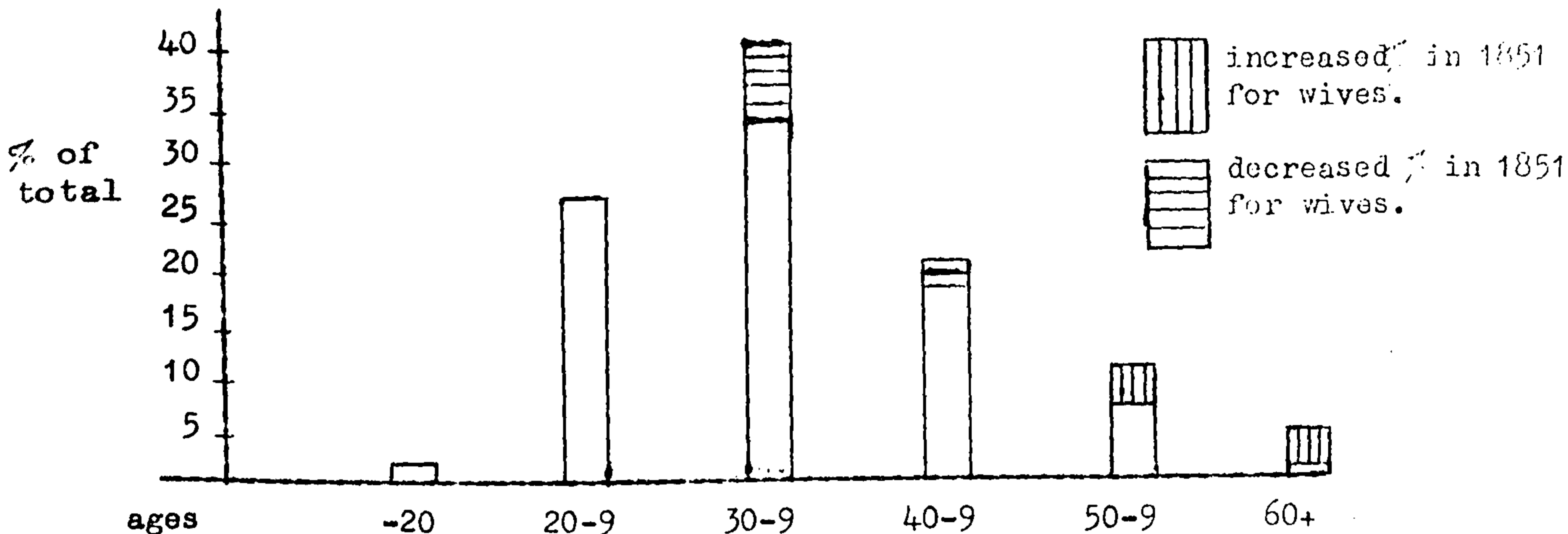
The average age was 37.48 years; an increase of 4.03 on the earlier census, and a slightly larger amount than that for heads. The detailed spread was:

Table 45

under 20	20 - 29	30 - 39	40 - 49	50 - 59	60 and over
2 (1.55)	36 (27.91)	45 (34.88)	24 (18.60)	15 (11.63)	7 (5.43)

This table shows the sort of levelling out that came to light in the data on heads. The 1851 data shows a smaller proportion of wives in their thirties and forties, but larger proportions in their fifties and sixties:

FIG xxiv



As for heads, the explanation for this shift is the movement away from the urban frontier characteristic.

By birthplace:

Table 46

Middlesbrough	Rest of N.Yorks	Durham	Rest of Eng. and Wales	Scotland	Ireland	Foreign
0	62 (48.06)	38 (29.46)	22 (17.05)	2 (1.55)	5 (3.88)	0

The general pattern of the change in the distribution of birthplaces between the two censuses is the same as that for heads. While Scotland and Ireland remain negligible, the isolation of the Durham proportion tends to militate against the idea that "woman is a greater migrant than man". Although the 1841 statistics suggested this, more was hidden than revealed. In comparison with the proportions for heads in the 1851 census, slightly more wives were

born in the North Riding: an increase of 0.79%; a greater increase, 4.61% occurred for Durham; and a consequential drop of 2.95% for the rest of England and Wales can be seen.

c) The Children

Of the 165 households in the sample, 122 recorded children, while the other 43 showed none. Thus 73.94% of households had children, with an average of 2.78 per household. This proportion and average is only minutely smaller than the parallel amounts for the 1841 census.

This aspect of Middlesbrough's family structure obviously relates to my earlier comparison with York¹ and Preston² :

Table 47

	Middlesbrough	York	Preston
Percentage of households with children.	73.94	66.2	81
Average size of child group.	2.78	2.7	2.9

Thus expectedly Middlesbrough occupies a mid-way position. I have already noted Anderson's remarks on the reason behind the large child count in Preston. The significant difference between Middlesbrough and York is not in the size of the child group, but in the proportion of households with children.

1) Armstrong (in Laslett, 1972) op cit p 210.

2) Anderson (in Laslett, 1972) op cit p 232.

Although in crude marriage-rates York District was on the high side in national terms, Armstrong has noted nevertheless that "there were relatively more bachelors and especially spinsters,¹ and fewer married persons ... than in the nation at large".

After a general discussion of this phenomenon, Armstrong noted the "unusual sex-structure" of the 1851 population of York, in that the female population was very large. Here contrast with Middlesbrough is interesting:

Table 48

Number of females per 1000 males, 1851.	Middlesbrough township	York Municipal Borough	England and Wales
All ages.	908	1,138	1,027
Age groups 20 - 39.	900 ²	1,191	1,042

Armstrong concluded that in the case of York, "such a remarkable sex-distribution would permit the co-existence of both a high marriage rate and a low proportion ever-married"³. Conversely Middlesbrough had a remarkable sex-distribution in the opposite direction, and the proportion of households with children reflected this feature.

1) Armstrong (1974) op cit pp 161/4.

2) This is the figure for Yarm sub-district, 61% of whose population were Middlesbrough inhabitants; no closer check is possible in 1851.

3) Armstrong (1974) op cit p 164.

Turning specifically to this Middlesbrough population, the average age of the eldest child was 12.42 years, an increase of 3.26 years from the earlier census. The spread of birthplaces was:

Table 49

Middlesbrough	Rest of North Riding	Durham	Rest of England and Wales	Scotland	Ireland	Foreign
39 (32.49)	34 (28.32)	32 (26.66)	10 (8.32)	2 (1.56)	3 (2.49)	0

The expected larger proportion of children born locally compared with adults, is more clearly seen here than in the 1841 figures. Almost one-third were born in the town itself, while over a half were born in the two immediate counties. Only a twelfth of these children were born in the rest of England and Wales. Youngest children showed expectedly a more pronounced step in the same direction. The average age of these children was 5.65 years, an increase of 2.69 years on the earlier census; and the spread of their birthplaces was:

Table 50

Middlesbrough	Rest of North Riding	Durham	Rest of England and Wales	Scotland	Ireland	Foreign
60 (64.52)	13 (13.98)	11 (11.83)	7 (7.53)	0	2 (2.16)	0

While the proportions of youngest children born in the two immediate counties, was something under half these of eldest children, the proportions for Middlesbrough and the Rest of England and Wales illustrate the shift in birthplace distribution. Almost two-thirds were born in the town (twice the eldest child proportion), while the proportion born in the Rest of England and Wales falls to less than one-thirteenth.

d) The Head - 2 variable analysis

By status and age:

Table 51

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
under 20	0	0	0	0	0	0	0
20 - 29	2 (50.00)	0	0	15 (27.78)	7 (24.14)	6 (15.00)	3 (25.00)
30 - 39	1 (25.00)	1 (50.00)	10 (41.67)	17 (31.48)	10 (34.48)	15 (37.50)	3 (25.00)
40 - 49	0	0	8 (33.33)	14 (25.93)	4 (13.79)	6 (15.00)	2 (16.67)
50 - 59	1 (25.00)	0	6 (25.00)	6 (11.11)	8 (27.59)	8 (20.00)	2 (16.67)
60 +	0	1 (50.00)	0	2 (3.70)	0	5 (12.50)	2 (16.67)

Of the four main groups in the table, only the age spread for skilled labour bears much resemblance to the 1841 data, and even this exception is in a much attenuated form. The dramatic effect produced for skilled labour in the 1841 census with the peak in the thirties now resemble much more the flattened shape

of the representation for the small employers and unskilled labourers in the 1841 analysis. In place of this flattened effect, the small employers of 1851 now are resembled by a regular downward sloping pattern, while that for unskilled labour now has a wave-like downward slope. Similarly the pattern for semi-skilled labour in 1851 has such a shape. In the absence of continuity in the shape of these intercensal comparisons, the tentative generalisation advanced for the 1841 material have to be scrapped, or at least considerably modified. The former corresponding pairs now appear as follows:

FIG xxv



% gain in 1851 compared with 1841.



% loss in 1851 compared with 1841.

Small employers

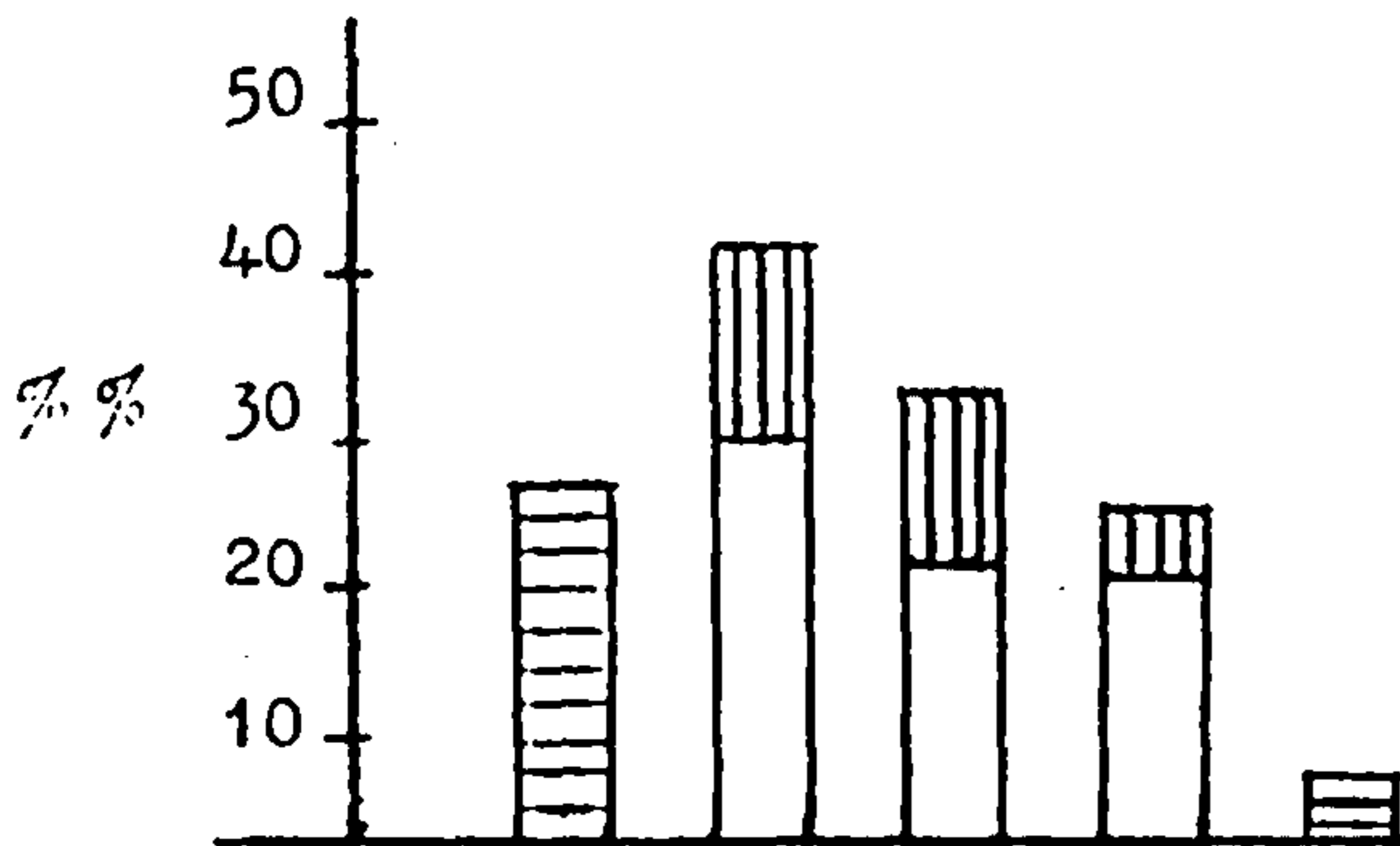


FIG xxvi

Skilled labour

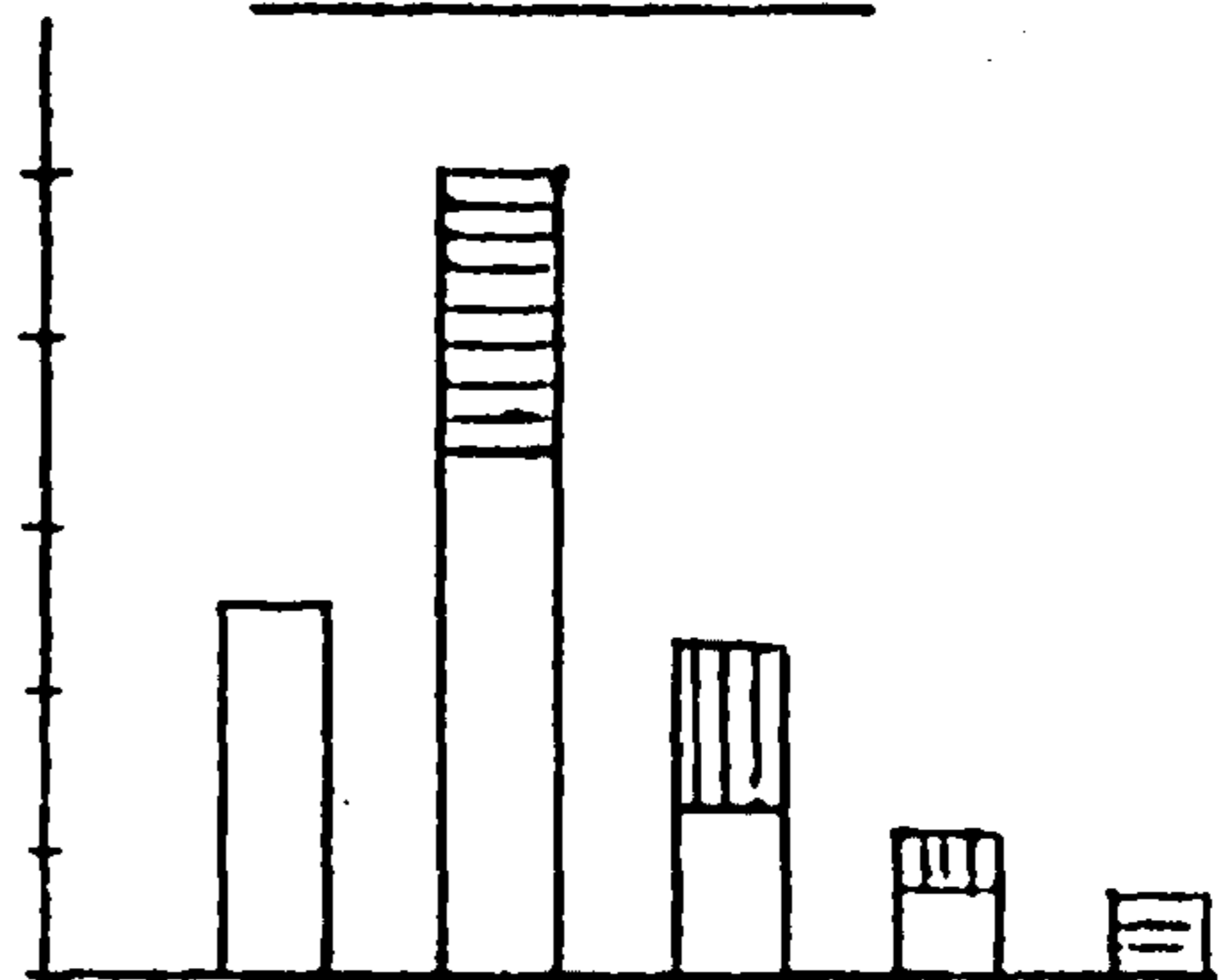


FIG xxvii

Unskilled labour

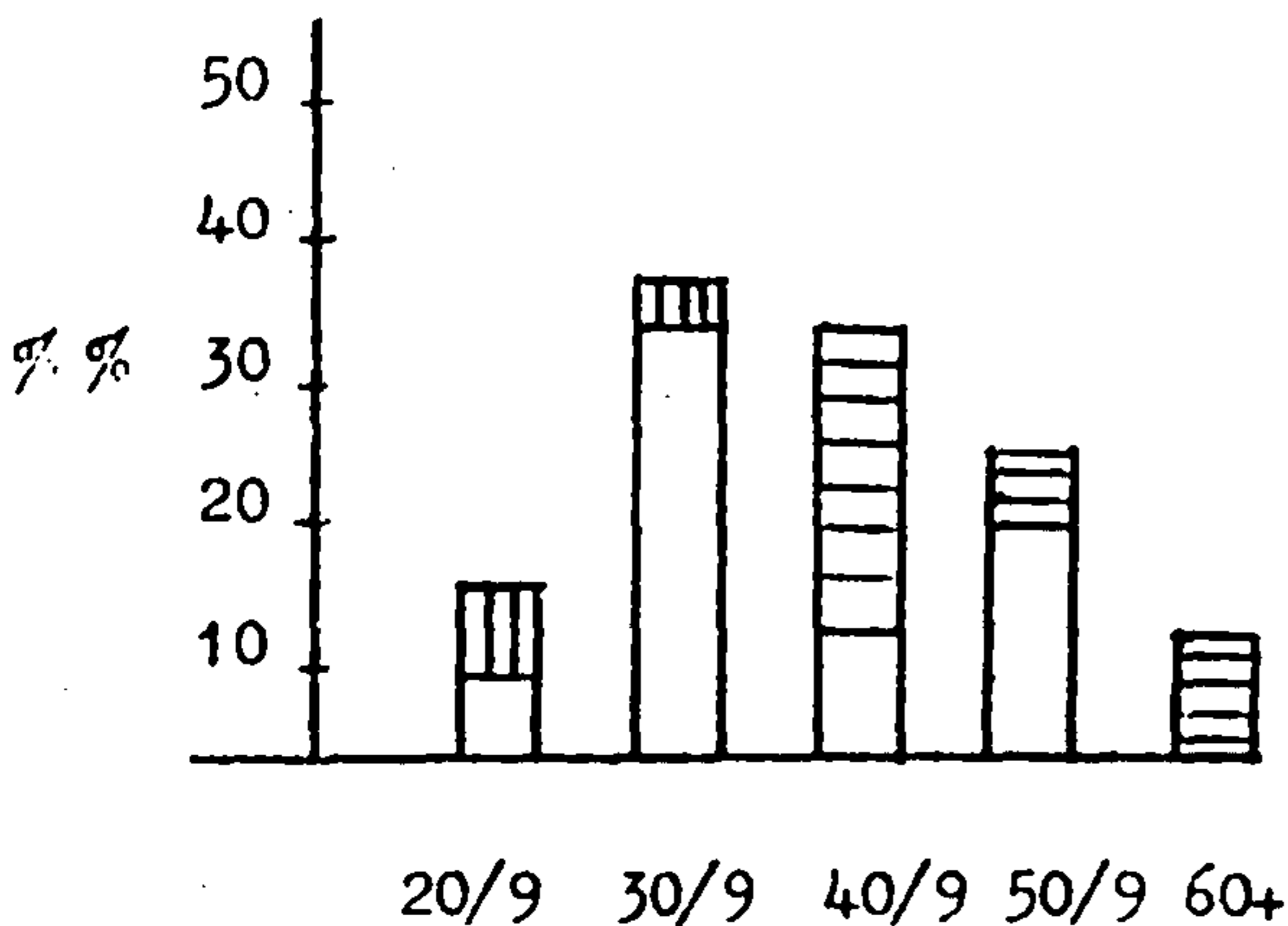
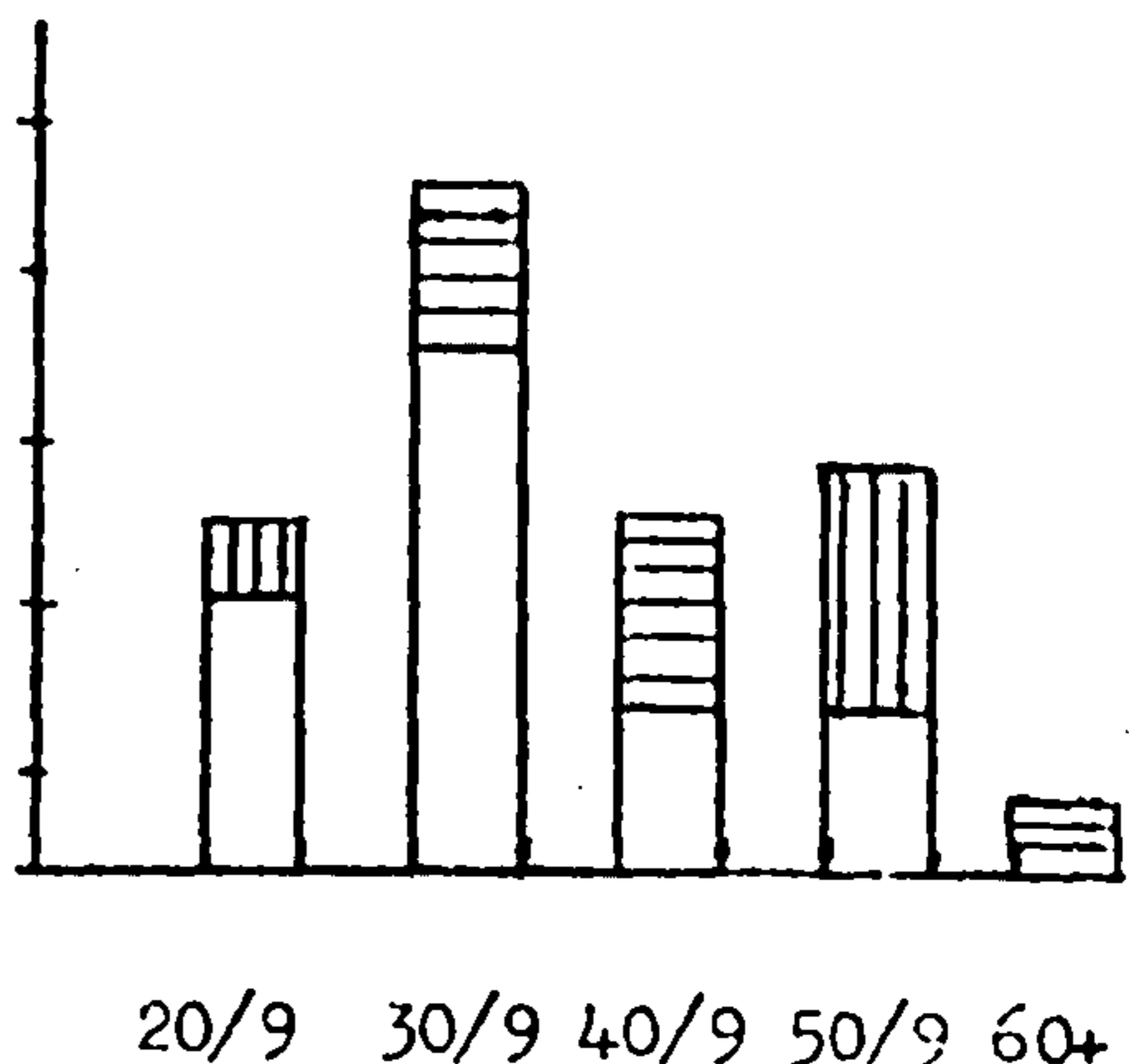


FIG xxviii

Semi-skilled labour



Again two pairs of similar data emerge but not the same pairs as in 1841. In 1851 it is the patterns for the upper status groups which are alike, having a regular shape of rise, plateau and decline, although the small Employer data are the more dramatic. The two lower status groups have now a wave like shape, and of these, the pattern for the semi-skilled labourer is the more uniform.

Given such changes, we must modify the earlier remarks on small employers, to show less opportunities for the younger section of the community, but after the age of thirty, continuing prospects into late middle-age. For the skilled workman prospects of work at this level now extend into the fifties. For the semi-skilled, the fall-off in early middle-age remains, but work picks up again in the fifties. Thus, although some men may experience physical incapacity at this time, there must nevertheless be more work at this level now available, and the number of men in their fifties who are capable of such work must more than compensate for this earlier fall off. Finally for the unskilled labourer, the fall-off comes ten years earlier and is sharper in the rate of decline. This cannot be attributed to physical decline as the downward slope of the pattern comes with the forties, but like the data for the semi-skilled, rises again in the fifties. Particularly noticeable here is the $12\frac{1}{2}\%$ of unskilled labourers in their sixties. Thus the earlier remarks in regard to early physical fall-off whereby men slip down to a lower point of skill in early middle-age have to be considerably amended; and such amendment has also to take

account of the changing demands for labour in the town with the early growth of the iron industry. In this sense we can say that one significant change was the greater demand for semi- and unskilled labour.

By status and industrial group:

Table 52

industry	not stated	caps.	s/emp.	s/labs.	s/s/labs.	u/s/labs.	res.
not stated	4 (100.00)	0	0	0	0	3 (7.50)	11 (91.67)
prof.	0	1 (50.00)	1 (4.17)	0	0	0	0
admin.	0	0	0	0	0	0	0
manuf.	0	0	3 (12.50)	13 (24.07)	5 (17.24)	14 (35.00)	0
transport	0	0	20 (83.33)	41 (75.93)	24 (82.76)	16 (40.00)	0
agric.	0	0	0	0	0	5 (12.50)	0
residual	0	1 (50.00)	0	0	0	1 (2.50)	1 (8.33)

The changes indicated by this table are along the lines one would expect: the greater prominence of manufacturing industry. Transport however remains dominant. In terms of proportion, it maintains its share of small employers and skilled labourers, and in fact increases its share of unskilled labour by fivefold, although its share of semi-skilled labour drops to something over four-fifths, and the loss goes to the manufacturing group. This same group also increases its share of small employers to one-eighth of the total, and its share of skilled labour from just over one-fifth to almost a quarter. It is in less skilled labour that the great increases

in manufacturing industry come however. The semi-skilled increase to over one-sixth from nothing, and from the same base, the unskilled became over one-third. The agricultural group disappear apart from one-eighth of the unskilled labour force.

By status and birthplace:

Table 53

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	0	0	0	0	0	0	0
Rest of North Riding	3 (75.00)	1 (50.00)	7 (29.17)	23 (42.59)	19 (65.52)	22 (55.00)	3 (25.00)
Durham	0	0	4 (16.67)	15 (27.78)	7 (24.14)	8 (20.00)	7 (58.33)
Rest of Eng. and Wales.	0	1 (50.00)	11 (45.83)	13 (24.07)	2 (6.90)	4 (10.00)	2 (16.67)
Scotland	1 (25.00)	0	1 (4.17)	2 (3.70)	0	0	0
Ireland	0	0	1 (4.17)	1 (1.85)	1 (3.45)	6 (15.00)	0
Foreign	0	0	0	0	0	0	0

If one takes the immediate counties of the North Riding and Durham as the "local" birthplace, then not only are the generalisations of the 1841 data confirmed, but actually strengthened. If one looks down the columns, then the further one moves from the locality for the birthplace, the smaller proportion of that particular group is found. Similarly as one moves from skilled to semi-skilled labour, the numbers in the sample fall. The exception here comes with unskilled labour, especially in the case of those born in Ireland. Here the situation in regard to employment in the penultimate place of residence must be taken account of: not only do high levels of skill,

and therefore reasonable income in a new growing town, persuade men to migrate over longish distances; but sometimes economic depression can drive men from an area. The Irish seemed quite volatile in this respect.

e) The Wife - 2 variable analysis

The average age for social group was:

Table 54

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
years	0	61.00	40.95	34.26	38.00	38.81	39.00

and in age-groups:

Table 55

under 20	0	0	0	1 (2.13)	1 (3.57)	0	0
20 - 29	0	0	2 (10.00)	19 (40.43)	6 (21.43)	9 (28.12)	0
30 - 39	0	0	10 (50.00)	14 (29.79)	8 (28.57)	12 (37.50)	1 (100.00)
40 - 49	0	0	3 (15.00)	8 (17.02)	9 (32.14)	4 (12.50)	0
50 - 59	0	0	4 (20.00)	5 (10.64)	3 (10.71)	3 (9.37)	0
60 and over	0	1 (100.00)	1 (5.00)	0	1 (3.57)	4 (12.50)	0

In all the four social groups that can be usefully compared with the 1841 analysis, there is no major difference in the pattern of age distribution. Taking the former non-corresponding groups first, the curve for wives of small employers again produces a wave like shape, although in a more extreme form than previously. Half these wives in fact are now located

in the thirties which suggests not only an older population, but fewer very young women migrating to the town. This however is more than compensated for, by the higher proportion of very young women in the skilled and unskilled labour groups. With the wives of unskilled heads particularly this is so, in that the proportion of wives in their twenties jumps from less than one-tenth to more than a quarter. Fundamentally, however, the trend of the patterns does not change.

By status and birthplace:

Table 56

	not stated	caps.	s/emp.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	0	0	0	0	0	0	0
Rest of North Riding	0	1 (100.00)	8 (40.00)	20 (42.55)	18 (64.29)	15 (46.88)	0
Durham	0	0	8 (40.00)	14 (29.79)	8 (28.57)	8 (25.00)	0
Rest of Eng. and Wales	0	0	4 (20.00)	11 (23.40)	1 (3.57)	5 (15.63)	1 (100.00)
Scotland	0	0	0	2 (4.26)	0	0	0
Ireland	0	0	0	0	1 (3.57)	4 (12.50)	0
Foreign	0	0	0	0	0	0	0

This table emphasises the point made on the basis of one variable analysis of wives' place of birth: that from this analysis, women were not greater migrants than men. If the two immediate counties are shown as one total proportion, then in only one status group did the proportion of women not exceed that of heads. This group, unskilled labour, shows a lead by heads of 3.12%; but alongside this, wives exceed heads by 34.16% in small employer status, by

1.97% in skilled labour and by 3.20% in semi-skilled labour.

f) The Children - 2 variable analysis:

The average number of children by social status groups was:

Table 57

	not stated	caps.	s/emp.	s/labs.	s/s/labs.	u/s/labs.	res.
number and average	9 (4.50)	1 (1.00)	54 (3.18)	103 (2.64)	67 (3.05)	86 (2.69)	1 (2.78)

The symmetry of the 1841 analysis is not present in this table. Instead of decline in status alongside increase in averages, a jagged pattern emerges whereas in 1841, the lowest status group has the largest average number of children, now, in 1851, it is the highest status group (capitalist status excepted) which has the largest average of children. The only group to maintain a consistent average is that of skilled labour with 2.64 as compared with the earlier 2.69.

The eldest child by status and birthplace:

Table 58

Middlesbrough	2 (100.00)	0	9 (52.94)	15 (38.46)	7 (31.82)	5 (15.63)	1 (11.11)
Rest of North Riding	0	1 (100.00)	4 (23.53)	4 (10.26)	10 (45.45)	11 (34.37)	4 (44.44)
Durham	0	0	2 (11.76)	14 (35.90)	4 (18.18)	9 (28.12)	3 (33.33)
Rest of Eng. and Wales	0	0	2 (11.76)	3 (7.69)	1 (4.55)	4 (12.50)	0
Scotland	0	0	0	2 (5.13)	0	0	0
Ireland	0	0	0	1 (2.56)	0	2 (6.25)	0
Foreign	0	0	0	0	0	0	0

In all four main status groups, there is a larger proportion of eldest children born in the town or in the two immediate counties than the proportions for household heads. Bearing in mind that no heads are shown as having been born in Middlesbrough down to this time, one would also expect a smaller proportion of eldest children to be born in the immediate counties (Middlesbrough excepted) than the proportion for heads. Largely the analysis bears this out with only two exceptions: skilled and unskilled labour born in Durham. In these cases the proportion of eldest children exceeds that of heads by 8.12%. This difference suggests that the movement of these levels of labour migrated from Durham to Middlesbrough more sluggishly than the equivalent groups from other parts of the North Riding. Thus in spite of the growing attraction of the town as a place of work, there were more counter attractions north of the Tees than south for labour below the skilled level. This must reflect the difference in a county that is more and more concerned with coal mining compared with one having an agricultural base.

The youngest child by status and birthplace:

Table 59

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	2 (100.00)	0	9 (75.00)	19 (63.33)	13 (72.22)	14 (51.85)	3 (50.00)
Rest of North Riding	0	0	1 (8.33)	2 (6.67)	3 (16.67)	6 (22.22)	1 (16.67)
Durham	0	0	1 (8.33)	4 (13.33)	1 (5.56)	3 (11.11)	2 (33.33)
Rest of Eng. and Wales	0	0	1 (8.33)	4 (13.33)	0	2 (7.41)	0
Scotland	0	0	0	0	0	0	0
Ireland	0	0	0	1 (3.33)	0	1 (3.70)	0
Foreign	0	0	0	0	0	0	0

As would be expected, the number of youngest children born in Middlesbrough makes up a larger proportion of each social group than the equivalent for eldest children. Often this difference is very large and this trend becomes more marked as one moves down the social scale. While the proportion of those youngest children of small employers exceeds that for eldest children by almost half as much again and that for skilled labourers by two thirds, the proportions for semi and unskilled labour are quite dramatic : over twice the proportion in the first group, and over three times in the second. Consequently the proportions of these youngest children born outside the town drop considerably, often to negligible amounts.

2) The Household

a) Distribution of relations etc:

Table 60

	number of households		% with	average number in the possessing households
	with	without		
relations	30	135	18.18	1.53
workpeople	8	157	4.85	1.75
servants	16	149	9.70	1.06
lodgers	21	144	12.73	1.71

This table makes for some interesting comparison with the 1841 equivalent. First there is the increase in relations, both as a percentage in possession and as an average. Although far from suggesting a community made up of extended families, the doubling of the proportion and the increase by over half as much again of the average takes one nearer to the extended family idea, although the nuclear family remains predominant.

Here comparison can also be made with York and Preston:

Table 61

area	% of households with kin, 1851.
Middlesbrough	18.18
York ¹	22
Preston	23

But in spite of Middlesbrough's lagging the other two towns in this particular feature, the percentage of 18.18 is far removed from comparable proportions for pre and post industrial communities:

Table 62

100 English communities, 1574 - 1821	10.1 ²
England and Wales, 1966 (approx.)	10

The workpeople data is little changed over the 10 years, and reflects the continued absence in the town of industries and crafts where the living-in workperson was traditional.

Servants show a surprising fall off in both percentage and average, although this latter is only slight. Given that the earlier proportion seemed high, this drop of 7.6% in possession could take us nearer what one would expect of the town: namely just under one-tenth of the households in possession of servants, but this does not explain why the 1841 analysis seems too high.

Yet compared with York and Preston, this reduced proportion appears reasonable:

1) Anderson (in Laslett, 1972) op cit p 220.

2) P. Laslett - Mean Household Size in England since the Sixteenth Century (in P. Laslett - Household and Family in Past Time, 1972) p 149.

3) Armstrong (in Laslett, 1972) op cit p 213. The author noted here that an earlier proportion of 19.3% had included a 2.3% count of trade assistants.

Table 63

area	% of households with servants 1851
Middlesbrough	9.70
York	17 ¹⁾
Preston	10

The greatest difference between the 1841 and 1851 Middlesbrough tables is in the lodger details. Here the proportion is reduced to a fifth of the earlier figure. Thus the apparent decline in lodgers in the town is seemingly astronomical, but in fact the absolute number is not so great when one allows for an increase in the town's population, and the increase in the average number of servants per household. Nevertheless an important trend is apparent, and two factors probably lie behind this large difference. In the first place there is the relative decline in the fortunes of the town in the 1840's which would mean less attraction for prospective lodgers, but probably of far more significance is the exaggeration of the lodger figure by the failure of the 1841 enumerators to distinguish visitors. Although one would expect York to have a sizable number of households possessing servants, it remains surprising that the Preston percentage is higher than Middlesbrough at this time. However, Dr. Anderson included apprentices in his servant category, whilst I reserved this category for domestic servants only and included apprentices in my category of workpeople.

1) Anderson - in Laslett), 1972) op cit p 220.

This Middlesbrough percentage seems small however in comparison with York and Preston:

Table 64

area	% of households with lodgers, 1851.
Middlesbrough	12.73
York	21
Preston	23

Yet the methods of data collection inevitably deflate the comparative Middlesbrough percentage. Dr. Armstrong has included in his category of lodgers "all those not identifiable as members of the household head's family, nor described as kin, domestic servants or visitors". Thus included are all classes of living-in assistants, including journeymen, shop assistants, apprentices etc. Consequently Armstrong concluded that "the scope of the category is too wide", which "has led to a slight overcount of lodgers"¹.

Similarly Dr. Anderson included lodging houses in his count of lodgers: my count was restricted to households. Anderson has noted that "large lodging houses were in a definite minority" (in Preston) but goes on to add that "21% of all lodgers lived in a house with more than six others, and 11% in a house with twelve or more". He concluded that, "these larger lodging houses may not have been many in number, but they contained more than 2%² of the population".

1) Armstrong (1974) op cit p 180.

2) Anderson (1971) op cit p 47.

b) Relations - 2 variable analysis:

Table 65

status of household	number of households		with	average in the possessing household
	with	without		
not stated	0	4	0	0
caps.	0	2	0	0
s/emps.	6	18	25.00	1.33
s/labs.	10	44	18.52	1.50
s/s/labs.	6	23	20.69	1.50
u/s/labs.	5	35	12.50	1.50
residual	3	9	25.00	1.67

The 1841 situation where the small employers were proportionately the largest possessors of relatives, is repeated in this table, but the comparative proportions between the various social groups is now much more even. Not only this, but the small employer group has the lowest average of households in possession, whilst the group of unskilled labour shares the highest average with skilled labourers. Thus whilst this table does not illustrate the situation of the lowest class of household having the largest number of relatives, it is nevertheless a move away from the quite inexplicable situation presented by the 1841 table.

By reworking some of this data, comparisons can be made with the situation in York, which Dr. Armstrong has shown in a table of combined social class for 1851:¹

Table 66

Percentage of households with kin	Classes I & II	Class III	Classes IV & V
Middlesbrough	23.18	18.52	15.94
York	27.1	21.0	19.4

The table shows that the Middlesbrough situation for the proportion of households in possession of relatives closely resembled that of York. The slight difference being that fewer households in relation to the total possessed kin. The phenomenon whereby the upper classes had a greater propensity to co-reside with kin, than other social groups, held true in both cases.

1) Armstrong (1973) op cit p 187.

c) Workpeople - 2 variable analysis:

Table 67

social status of household	number of households		with	average in the possessing household
	with	without		
not stated	0	4	0	0
caps.	0	2	0	0
s/emp.	7	17	29.17	1.86
s/labs.	1	53	1.85	1.00
s/s/labs.	0	29	0	0
u/s/labs.	0	40	0	0
residual	0	12	0	0

Compared with 1841, the above table supports the former idea of a town possessing few small scale concerns; but at the same time shows some slight growth in this direction. There formerly just over one-fifth of the small employer group had living-in workpeople, now well over a quarter were so placed; and moreover, the average has slightly increased.

d) Servants - 2 variable analysis:

Table 68

social status of household	number of households		with	average in the possessing household
	with	without		
not stated	0	4	0	0
caps.	0	2	0	0
s/emp.	9	15	37.50	1.11
s/labs.	3	51	5.56	1.00
s/s/labs.	0	29	0	0
u/s/labs.	2	38	5.00	1.00
residual	2	10	16.67	1.00

This table follows the general trend of the 1841 analysis, and exhibits two interesting features. First, with regard to the numbers of servants kept, there is a decline during this ten year period. Whereas formerly over a half of the small employer group kept servants, now only something over one-third are in possession. Not only this, but the average number of servants per possessing household falls from 1.50 to 1.11: a substantial drop of 0.39 per household. Similarly the proportion of skilled labourer households in possession falls from a tenth to one-twentieth while the average remains at the minimum of 1.00. These two declines could be accounted for by the bleak years of the town between the initial optimism regarding the coal trade, and the growth of a large scale iron industry. In the uncertain years of the 1840's it is conceivable that an obvious economy would be the reduction of servant keeping. The other feature of this table is the existence of servant keeping by the households of unskilled labourers, and by the residual group. The proportions of unskilled households is very small however, and could be accounted for by some kind of emergency help, as mentioned on pages 22 and 23. It is with the residual class having one sixth of its households possessing servants that this social group first comes into the analysis in any significant way. Although this group is small in comparison with the four groups discussed mostly in the analysis so far, its servant possessing shows that housewives, spinsters and the retired were assuming some slight significance in the town by 1851.

Dr. Armstrong has set out his York findings by separate classes and these compare with Middlesbrough as follows:

Table 69

Percentage of households possessing servants, 1851, in	Class I	Class II	Class III	Class IV	Class V
Middlesbrough	0	37.50	5.56	0	5.00
York	81.4	57.9	9.1	5.8	0

In every instance but one, Middlesbrough lagged York in servant keeping. I have already noted the fact, and likely reason for a short-run decline in servant keeping in Middlesbrough. Conversely there is Dr. Armstrong's observation that domestic servants "made up an abnormally large proportion of the total labour force in York".

e) Lodgers - 2 variable analysis:

Table 70

social status of household	number of houses		% with	average in the possessing household
	with lodgers	without lodgers		
not stated	1	3	25.00	1.00
caps.	0	2	0	0
s/emps.	1	23	4.17	3.00
s/labs.	6	48	11.11	1.33
s/s/labs.	4	25	13.79	1.00
u/s/labs.	7	33	17.50	2.43
residual	2	10	16.67	1.50

This table produces the pattern that one would expect if the only factor in letting rooms to lodgers was the dire need of extra income. Here the proportion of households possessing lodgers increases as one descends the social scale, although the average per possessing household does not follow such a consistent pattern. If the other factor mentioned earlier in connection with the lodgers of small employer households, namely status expectations on the part of middle-class lodgers, then the small proportion of such lodgers could more than be accounted for. Thus the main difference in the tables for 1841 and 1851 is the huge reduction in the amount of lodging in small employer households. This reduction from over a half to less than one twentieth could mainly be accounted for by the "visitor" situation of 1841 that has already been noted. It seems that middle-class households were more likely to have put up overnight visitors than labourer households, thus their lodger holding will have been the one that was consequently swollen beyond the credible.

Armstrong also noticed what appeared to be a disproportionate amount of lodging with Class II households. Regarding the 1851 census he noted that the incidence of lodging "would have borne a symmetrical, inverse relationship to class" had it not been "for the high incidence of lodgers in Class II".¹ Comparison with Middlesbrough is as follows:

1) Armstrong (1974) op cit p 181.

Table 71% of households with lodgers, by social class, 1851.

area	I	II	III	IV	V
Middlesbrough	0	4.17	11.11	13.79	17.50
York	5.1	29.9	19.6	22.3	21.4

Thus Middlesbrough exhibited the sort of symmetry that Armstrong missed in the case of York. He explained the "eccentric behaviour of Class II" by reference to two special characteristics in the case of York: the fact that many households in Class II were small businesses, and the resident apprentices appeared as lodgers; and the large proportion of single women or widows, in this class, with the consequent propensity to take in lodgers. As I have already noted, my data collecting method excluded this first characteristic and the social structure of Middlesbrough in 1851 excluded the second. The reason for the lack of symmetry in the Middlesbrough data for 1841, I have already discussed.

1) Armstrong (1974) op cit p 181.

3) The Lodgers

a) Distribution of ages, etc:

Of the lodgers analysed in detail, there was again a majority of males. This time the male proportion was 80.55% which represents a drop of 7.07%: consequently the female proportion went up from 12.38% to 19.45%. The average age of the lodger went up from 27.61 to 29.42 years. The spread of ages was as follows:

Table 72

	under 20	20 - 29	30 - 39	40 - 49	50 - 59	60+
number and percentage	1 (2.78)	23 (63.89)	9 (25.00)	0	0	3 (8.33)

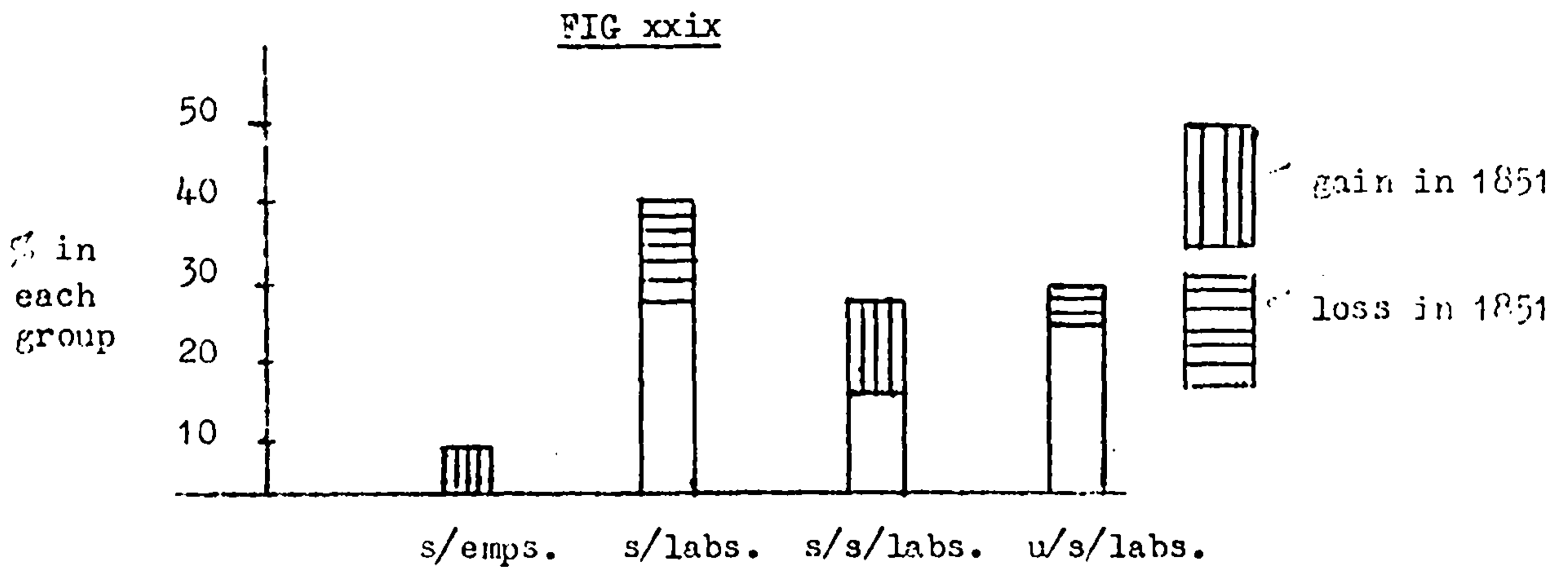
Thus the pattern set in 1841 is maintained, and in some respects the peak of the twenties becomes even more prominent. This prominence rests on an absence of lodgers in the forties and fifties, and is only slightly detracted from by the increase in the proportion of lodgers of sixty and over. Thus the picture of the young man as the typical newcomer to the town is maintained.

By social status:

Table 73

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
number and percentage	1 (2.78)	0	3 (8.33)	10 (27.78)	10 (27.78)	9 (25.00)	3 (8.33)

This table presents contrasts with the corresponding one for 1841. The main changes are increases in the proportions of small employers and semi-skilled labour, and a reduction in the proportion of skilled labour. The overall effect is to present a much more regular pattern between the social classes. The comparison appears as:



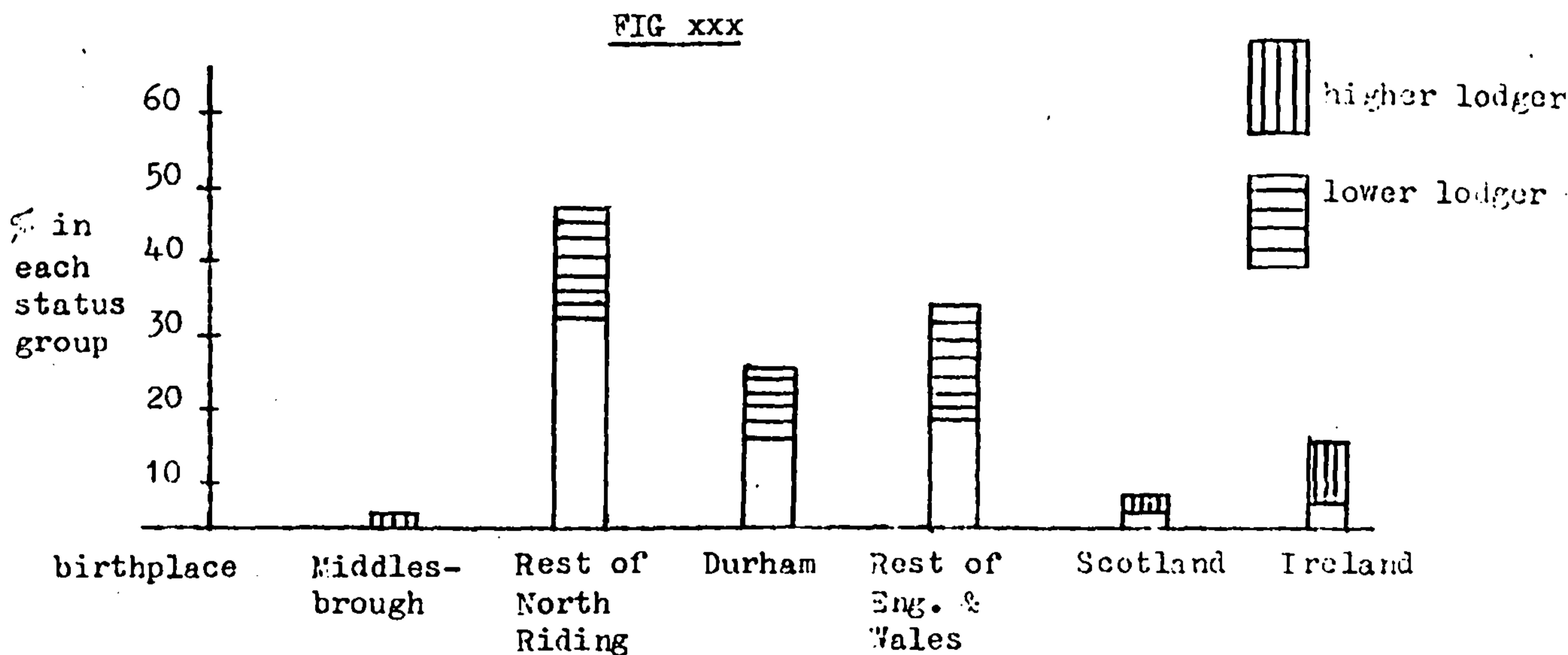
The 1851 pattern is much more like the sort of expectation one would have in making a comparison with household heads in that lodgers have smaller proportions in the higher status groups, and larger proportions in the lower groups. Thus, what appears as a basic anomaly in the 1841 data: the proportions between the two groups in regard to skilled labour, now disappears. Instead the lodgers lag behind heads in this particular social group by proportionately 4.95%.

By birthplace:

Table 74

	Middlesbrough	rest of North Riding	Durham	rest of Eng. & Wales	Scotland	Ireland	Foreign
number and percentage	1 (2.78)	12 (33.33)	6 (16.67)	7 (19.44)	3 (8.33)	6 (16.67)	1 (2.78)

The pattern that this table represents, reproduces that of 1841 in a more exaggerated form. The 1841 pattern showed fewer lodgers in proportion born in Yorkshire than the proportion for household heads; and a larger proportion correspondingly for lodgers born in England and Wales; similarly a larger proportion came from Ireland; and also a larger proportion came from Scotland which provides a slight contrast with the 1841 analysis. The difference between the two census years can be seen by comparing the following histogram with the corresponding one for the 1841 analysis.



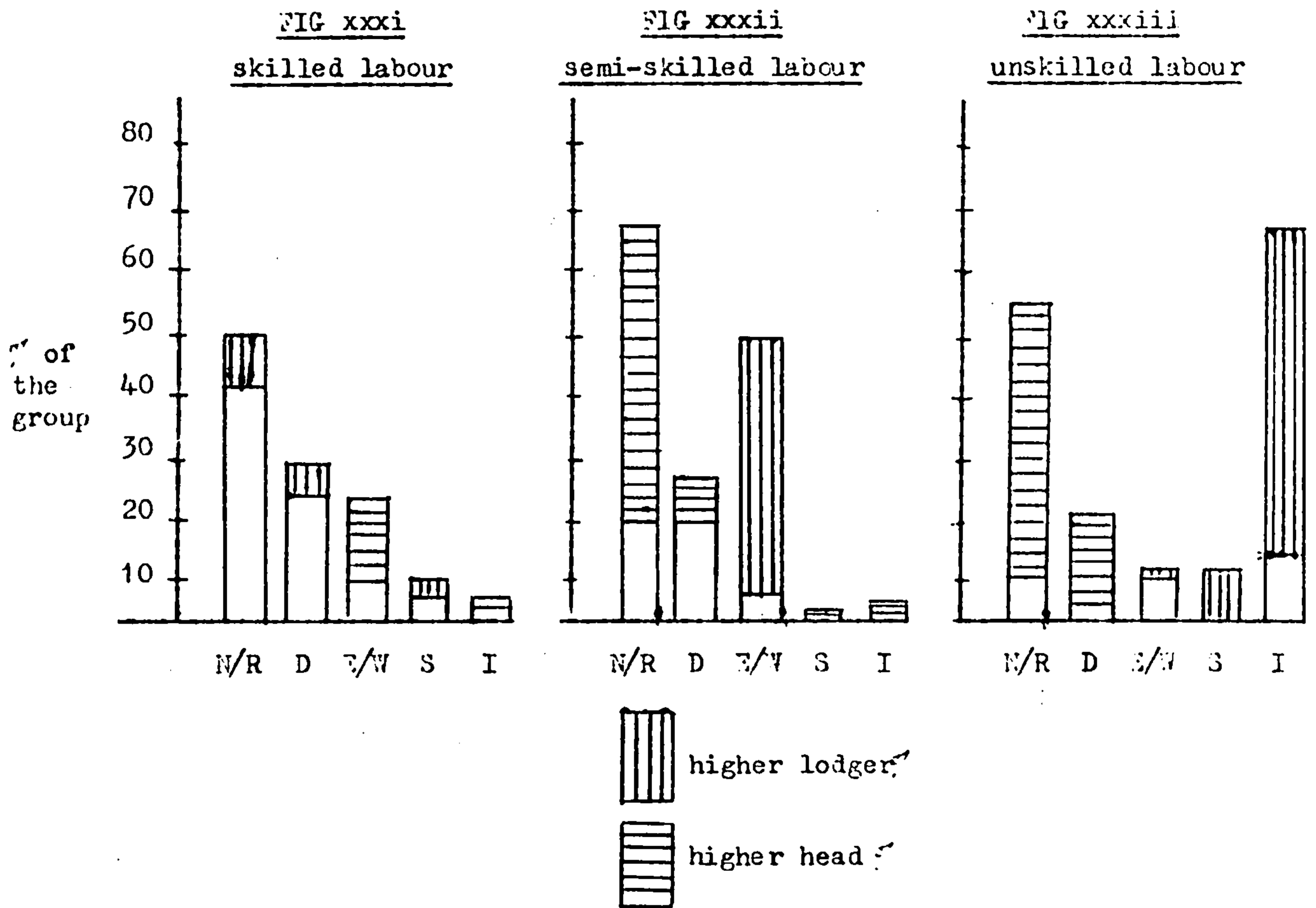
Thus whereas the change in emphasis in the 1841 data came with proportions born in the Rest of England and Wales, the corresponding change now comes with proportions born in Scotland, which is followed by a doubling of the proportion of lodgers born in Ireland.

b) Lodgers - 2 variable analysis; by social status and birthplace:

Table 75

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	0	0	0	0	1 (10.00)	0	0
rest of North Riding	1 (100.00)	0	2 (66.67)	5 (50.00)	2 (20.00)	1 (11.11)	1 (33.33)
Durham	0	0	0	3 (30.00)	2 (20.00)	0	1 (33.33)
rest of Eng. and Wales	0	0	0	1 (10.00)	5 (50.00)	1 (11.11)	0
Scotland	0	0	0	1 (10.00)	0	1 (11.11)	1 (33.33)
Ireland	0	0	0	0	0	6 (66.66)	0
Foreign	0	0	1 (33.33)	0	0	0	0

If one makes a distinction between those born locally (Middlesbrough, North Riding and Durham) and those from more distant places (Rest of England and Wales etc.) one can ask if the 1841 pattern is repeated in 1851. Then more heads were born locally than lodgers in the skilled and unskilled labour groups, while the proportions in the unskilled labour class were more or less even. In 1851 by comparison the proportions for skilled labour shift to a similar distribution, while the other two groups of labour provide situations of contrast in the same direction as was found in 1841. Thus the three groups appear:



The conclusion from these histograms is that although there is a greater tendency for heads to be born locally in the higher social status groups than lodgers, there is not always an absolute difference in every level of social status. Sometimes the emphasis will shift within the three groups of labour: although all the three histograms for the 1841 data follow the same pattern, the contrast for skilled labour presents a clear distinction compared with unskilled labour; while semi-skilled labour occupies a mid-way position. In 1851 this tendency is followed clearly by semi-skilled labour, and marginally by unskilled, but the histogram for skilled labour presents an exception, especially in regard to proportional births for England and Wales. Thus an area of sensitivity exists between levels of skill: this can be adequately explained, only by reference to data from later censuses.

Summary

Initially I will note some general demographic changes. Then I will highlight three parts of this 1851 analysis, which, when analysed, confirm or change the basic patterns established from the 1841 material. Also I will bring out the main comparisons made with York and Preston.

1) Aggregate Situation

The 1851 census marked the second decade of the life of urban Middlesbrough. Population increased at a rapid rate, but relatively this increase was far less impressive than that of the previous decade, and indeed of the two decades immediately succeeding. The economic explanation of this relative slowing down is the failure of the town to become the predominant coal port of the North-East, and instead see the initiative go to Hartlepool.

The comparative national and county increases were: ¹

Table 76

	1841	1851	% increase
England & Wales	15,914,148	17,922,768	12.6
Durham	324,277	411,679	27
N.Yorks	204,701	215,214	5
Middlesbrough	5,463	7,631	40.0

1) These figures from: Population Tables I, vol II, 1852 [1632] pp 12-13;
 Population Tables II, vol II, 1854 [1691 - II] pp 659, 743/7;
 Population Tables II, vol I, 1854 [1691 - I] p cxcii.

The age and sex data for 1851 compared thus:

Table 77

	under 20	over 20	% under 20	male	female	% male
England and Wales	8,111,012	9,816,597	45	8,762,588	9,150,180	48.9
Durham	195,041	216,638	47	207,088	204,591	50.4
N.Yorks	87,485	107,159	46	96,620	98,024	49.6
Middlesbrough	5,718	6,893	45 ²	4,000	3,531	52

By this census, growth rate comparisons between Middlesbrough and the rest of the table, have a value that was absent in the 1841 analysis. Whilst the North Riding paralleled the national experience of a drop in the rate of increase of 2%, Durham maintained the rate that it possessed in 1841, and so increased its comparative rate to well over twice that of the national figure. At the same time Middlesbrough showed a rate of increase of 40%, which was over three times the national figure. Thus even by the standards of rapid increase shown by Durham, the town of Middlesbrough was notable.

Turning to the age structure of the town's population, there is no striking change from that discussed in the 1841 analysis. All the areas tabulated show a slight fall in the percentage of the under-20's except the North Riding. There the population rose by 1%. This slight shift dislodged Middlesbrough from the mid-way position described in 1841, and placed the town on a parallel with England and Wales, and below both the immediate counties. Thus again the image of a spectacularly young town does not emerge.

1) For sources see f1, previous page.

2) These age figures apply to Yarm sub-district, of which 61% of the population resided in Middlesbrough township.

Finally, regarding sex structure, Middlesbrough showed a drop of nearly 2% in the male proportion of its population. Nevertheless the town remained ahead of all the other areas in the table, in spite of a 1% increase in the case of Durham. Thus the "masculine" image persisted.

2) The Family

This showed a drop of 0.15 persons compared with 1941, on average. This average of 3.84 persons in the Middlesbrough family put the town mid-way between York and Preston: the crucial difference between Middlesbrough and Preston was in the nature of the different economic bases: Preston provided an abundance of work for children in the textile mills, and so enabled children to remain at home till marriage. Conversely Middlesbrough provided almost no work for the female young, and consequently the census count lagged behind that of Preston.

The typical Middlesbrough head remained the married man, while the small proportion of other types remained the same in size, but became clearer in classification.

The average age of this head increased from the mid thirties to the very early forties, largely on account of the increased proportion of heads in the fifties. This hint of a more settled population is also reflected in industrial grouping and social status. The spread from skilled to unskilled labourer becomes much more even, and a small percentage of capitalists emerge; manufacturing industry rises, as agriculture declines, whilst the distribution category remains predominant.

Birthplace is hard to compare. There remains evidence of much short distance migration into the town, but to talk of a "typical" birthplace, one must first make allowance for the relative remoteness of the West and East Ridings, and the close proximity of Durham.

As with the head, the wife showed an average increase in age from the early to the later thirties. Unlike what seemed evident in 1841 however, the analysis of birthplace in this census suggests that 'woman was not a greater migrant than man'.

The proportion of households with children, and the average number of children was almost unchanged between the two counts. The first showed a marginal drop of 1.06% and the second the almost imperceptible drop of 0.09%.

In both of these counts Middlesbrough fell between York and Preston. I have already mentioned the peculiar economic situation in Preston, which gave rise to a large child count. In York such a situation did not exist, no more than it did in Middlesbrough, but the peculiar sex structure made for a low average of children in the household. Whereas Middlesbrough had a below average number of females per thousand males, York had a figure well above the national average: such differences were further magnified in the vital female age groups of 20 to 39 years.

The analysis of birthplaces of Middlesbrough children showed a further development of the same trend in 1841. Children were more likely to have been born locally than their parents, and youngest children more than eldest children. The proportion of eldest children born in England and Wales, excluding the North Riding and Durham, was as low as one-twelfth; while the proportion of youngest children

actually born in the town, excluding Durham and the rest of the North Riding, was almost two-thirds. In spite of higher average ages for both groups of children in the 1851 census, the actual span between eldest and youngest was almost unchanged, in that there was the slight increase of only 0.57 years.

Two variable analysis of the head showed much more variety in age analysis, but followed the 1841 pattern in industrial grouping analysis, and strengthened the pattern of birthplace analysis.

The only similarity in age structure was in the skilled labourer status; the other three main groups diverged. Small employers showed a downward slope from the thirties, instead of the plateau effect of ten years earlier. Semi and unskilled labourers showed a wave-like pattern in place of the more regular curve of 1841; thus the general trend towards larger proportions of this kind of labour in the older age groups could reflect the imposition of the sort of demands made by the infant iron industry. This was confirmed when industrial grouping showed not only the intrusion of the manufacturing group, but also made clear the increased demand for unskilled labour. Birthplace analysis strengthened the earlier pattern of higher status groups willing to migrate from further afield than those lower down. The Irish born were the exception, and here the suggestion is made that unfavourable conditions in former place of domicile had a repellent effect. This could apply to the general economic situation in Ireland in the 1840's, or to temporary economic setbacks in parts of England where Irish labour had moved to.

Two variable analysis of wives showed a similar pattern to the earlier age group analysis, but did not bear out the earlier impression that women were more migratory than men. Similarly two factor analysis of children did not confirm the earlier impression that the average number of children went up with lower social status of the family. In fact contrary to this impression, it was the small employer status group which had the highest average number of children: all the three groups of labour had lower averages; and of these, only skilled labour status showed a consistent average between the two counts.

Also in respect of children, not only was the pattern of children born locally confirmed, but some refinements appeared. Among eldest children, a more sluggish pattern of migration was evident in regard to Durham as compared with the North Riding; and among youngest children, the tendency to be born in Middlesbrough offered a stronger contrast between the two censuses the more one moved down the social status scale. Explanations of these two phenomena have already been offered: counter attractions in the former case, and anticipated rewards in the latter.

3) The household average dropped from 5.90 to 4.54, a difference of 1.36 persons per household. The household average now fell to only 0.70 more than the average nuclear family. The main question was therefore, from what area or areas was there a great drop in household members, outside the orbit of the nuclear family?

To take the four areas in order, the number of relations actually increased - both in possessing households and in average numbers. The nuclear family however remained typical, for the increase represents a small proportion compared with the former, very small proportion. The former 8.70% in possession, with an average holding of 1.00 increased to 18.18% and 1.53 respectively.

In spite of this increase, Middlesbrough had a smaller percentage of households with kin than either York or Preston. Nevertheless even this comparatively small percentage was far in excess of the figure for either Laslett's pre-industrial households, or the modern household in England and Wales. Middlesbrough also followed the York pattern of Class I and II households being most likely to include kin, while Class IV and V households were least likely.

Nevertheless this slight rise in the case of Middlesbrough takes us further away from an answer to our main question. Similarly the analysis of workpeople was unhelpful in this respect in that a minute proportion became less minute. The former 3.25 in possession of an average of 1.67 workmen, crept up to 4.85 and 1.75. This category was not shown separately in either the York or the Preston analysis.

The servant area showed a fall however, The former 17.39% in possession of an average of 1.25 servants dropped to 9.70% and 1.06. But this alone would do little more than offset the increases in relations and workpeople.

This fall in servant keeping households placed Middlesbrough well below York, and slightly below Preston. The social structure of York accounts for this great difference with Middlesbrough; while Dr. Anderson's inclusion of apprentices in this category inflated the Preston figure. If my category of workpeople is allowed for here, Middlesbrough would have shown a larger servant keeping propensity than Preston.

However it is to the lodger proportions in Middlesbrough that we must look for our answer. Here the drop was very considerable. The former 59.78% of households, possessing an average of 2.50 lodgers, fell to 12.73 and 1.71. Two reasons for this great difference have been suggested: the town's lean years of the 1840's being no longer an attraction for migrants on the scale of the 1830's; and the probably exaggerated figure for the 1841 analysis, where the enumerators failed to distinguish between visitors and lodgers.

In the household average, Middlesbrough came considerably behind Preston (4.5 compared with 5.4) and even fell short of the York figure of 4.7. The different methods of data collection could account for the low Middlesbrough count in this respect, quite apart from basic economic changes that I have already discussed.

Armstrong's households contained more than one "head" in some cases, because of his use of the "long line" demarcation;

and his households were further relatively inflated by his inclusion of visitors. Anderson included lodging houses in his count, whereas I dealt specifically with "normal" households, using a $K + 1$, $K - 1$ convention to avoid the lodging institution, and yet retain the 10% systematic sample. Without these inflationary aspects in the cases of York and Preston, Middlesbrough would have exceeded York in average household size and would have come much nearer to the Preston figure.

Two variable analysis of these four Middlesbrough household groups altered or refined the 1841 patterns. With regard to the presence of relations in households, 1851 produced a much more even spread than formerly. This meant a shift for the small employer status group from an extreme and unusual position to an explicable one. From dominating the relation-possessing households, this group became that with the lowest number of relations in possession, although the proportion in possession was comparable with the other main status groups.

Similar analysis of workpeople and servants more or less confirmed the earlier pattern. The amount of households with workpeople increased only slightly; households keeping servants showed some decline in proportions and averages, although the appearance of servants in the households of unskilled labour tends to suggest the phenomenon of temporary help rather than servants in the sense of a full time vocation.

4) Lodgers

Single variable analysis produced a much more simple pattern than formerly: 1851 indicated that the lower the social status group, the greater the number of lodgers. This had been true of the three groups of labour in 1841 but the small employers group had presented problems of interpretation. To account for both a large proportion of possessing households and a large average, a theory of middle-class lodger expectation was advanced. The 1851 analysis presents no such problem.

The explanation of an end to the visitor - lodger confusion seems all the more plausible here. It was not that small employer households had a lot of lodgers in 1841, whose loss had to be accounted for in 1851, but that in 1841 they had proportionately more visitors than the other social groups. Whilst not denying the fact that households of the three groups of labour may also have had visitors, it seems probable that their visitors would not be likely to stay overnight, whereas visitors to small employer households might. Obviously middle-class households would be better able to offer over-night hospitality than working-class establishments; similarly it seems more likely that middle-class visitors would be able to travel further to visit friends than their working-class equivalents. Thus middle-class culture embodied the notion of the over-night stay, whereas working-class culture did not.

Distribution analysis showed that the average age of the lodgers had increased by nearly 2 years. The former average of 27.61 years is replaced in 1851 by 29.42 years: the sex remained predominantly male.

The spread of status in 1851 is more explicable than the former position. There appears a smaller proportion of skilled labour, and a larger proportion of semi-skilled labour. Thus the spread is more even. In this respect the change shown by the analysis follows the same pattern as that for household heads.

Birthplace analysis follows the earlier pattern, but the comparison with heads moves further away from the native county concept. Whereas in 1841 a larger proportion of heads was born "locally" but a smaller proportion elsewhere, the "change-over" point came with the proportions born in England and Wales. In 1851 one has to wait for the respective proportions born in Scotland before this same point is reached. The comparative differences in proportions born in Ireland becomes particularly noticeable in 1851, in that whereas the proportion of heads moves up from 4.35% to only 5.45% between the two counts, that for lodgers moves from 8.58% to 16.67%.

Finally two variable analysis shows a shift in birthplace distribution between the labourer grades of lodgers. Whereas in 1841 the "typical" skilled labourer was born, outside Yorkshire, in England and Wales, the 1851 situation is that the typical skilled labourer was born in one of the immediate counties. Similarly the semi-skilled man came from the rest of England and Wales and the unskilled man from Ireland. Thus the pattern of

high level skill and willingness to migrate over long distances does not hold for lodgers in 1851: in fact the reverse situation begins to emerge.

The 1861 Census

This analysis follows the same basic pattern as that for 1851, except comparative work with York and Preston. Some reference is however made to Preston in the summary, where Anderson's 1851 findings are placed alongside mine for 1861.

1) The Family

The average size of the family was 4.19 persons and, of the household 5.23 persons. This was a rise of 0.25 on the former and 0.69 on the latter, compared with 1851. Thus the apparent trend of smaller households and families was reversed, and in both these respects Middlesbrough produced statistics almost identical with those of Preston in the previous census.

a) The HeadTable 78

By type	male			female			unspec if
	married	widower	unmarried	married	widow	unmarried	
number and percentage	284 (87.12)	17 (5.21)	5 (1.53)	2 (0.61)	17 (5.21)	1 (0.31)	0

As in 1851, most heads were married men. Although the proportion of widowers doubled, it remained only a small percentage. All the other main types fell, in that unmarried heads, both male and female, fell by a half, widows fell by a third, and married female heads were reduced to one twelfth of the former proportion.

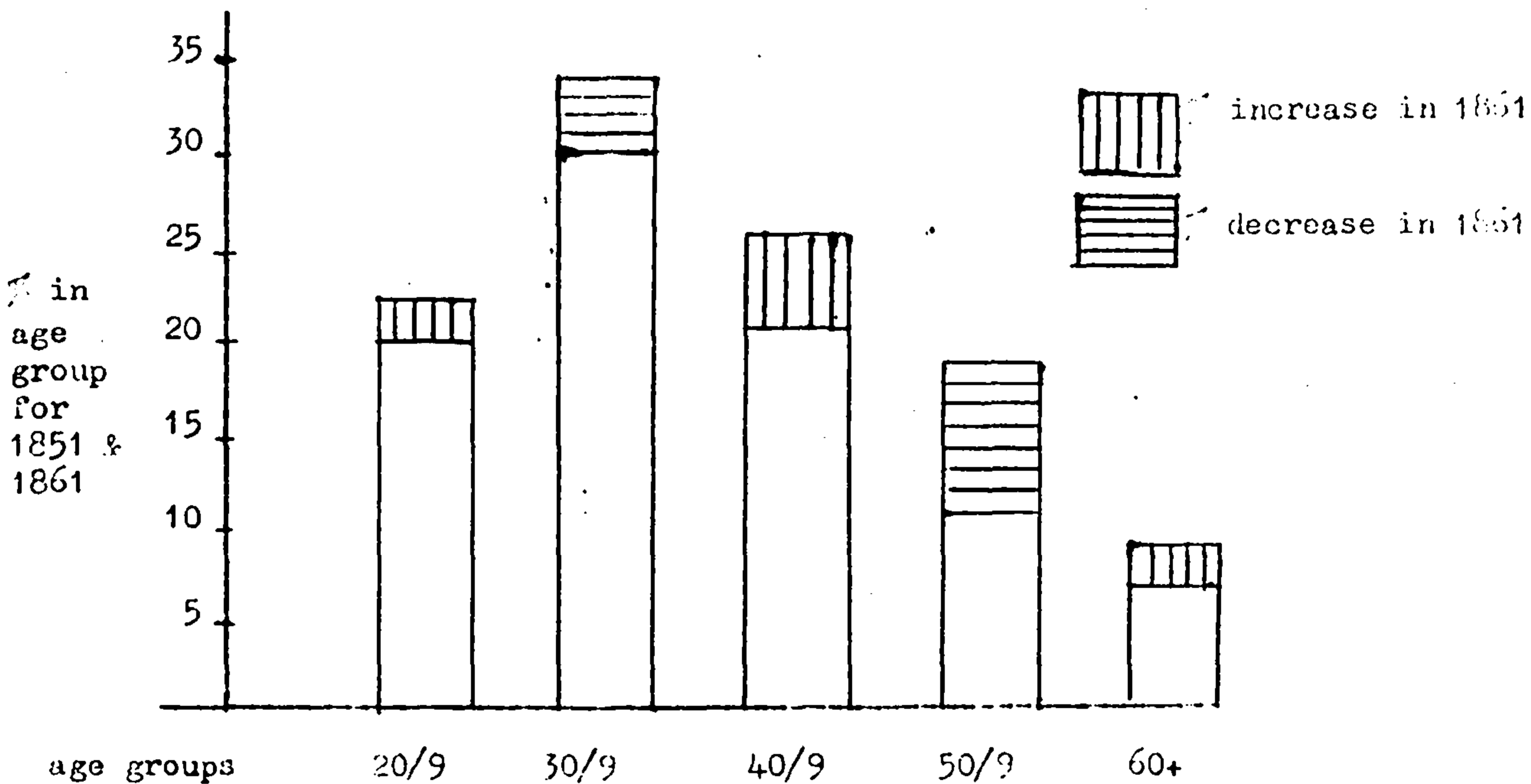
The average age of the head fell by 0.87 years to 39.54. Again this reversed the earlier trend. The age distribution was:

Table 79

	under 20	20 - 29	30 - 39	40 - 49	50 - 59	60 +
number and percentage		72 (22.09)	101 (30.98)	87 (26.69)	40 (12.27)	26 (7.98)

In spite of slight differences in all the age groups, the analysis resembles that of 1851, and confirms the comparative even spread of ages, as opposed to the dramatic pattern of 1841, with the peak in the thirties. The slight differences that do occur are thus illustrated:

FIG xxxiv



Industrial distribution:

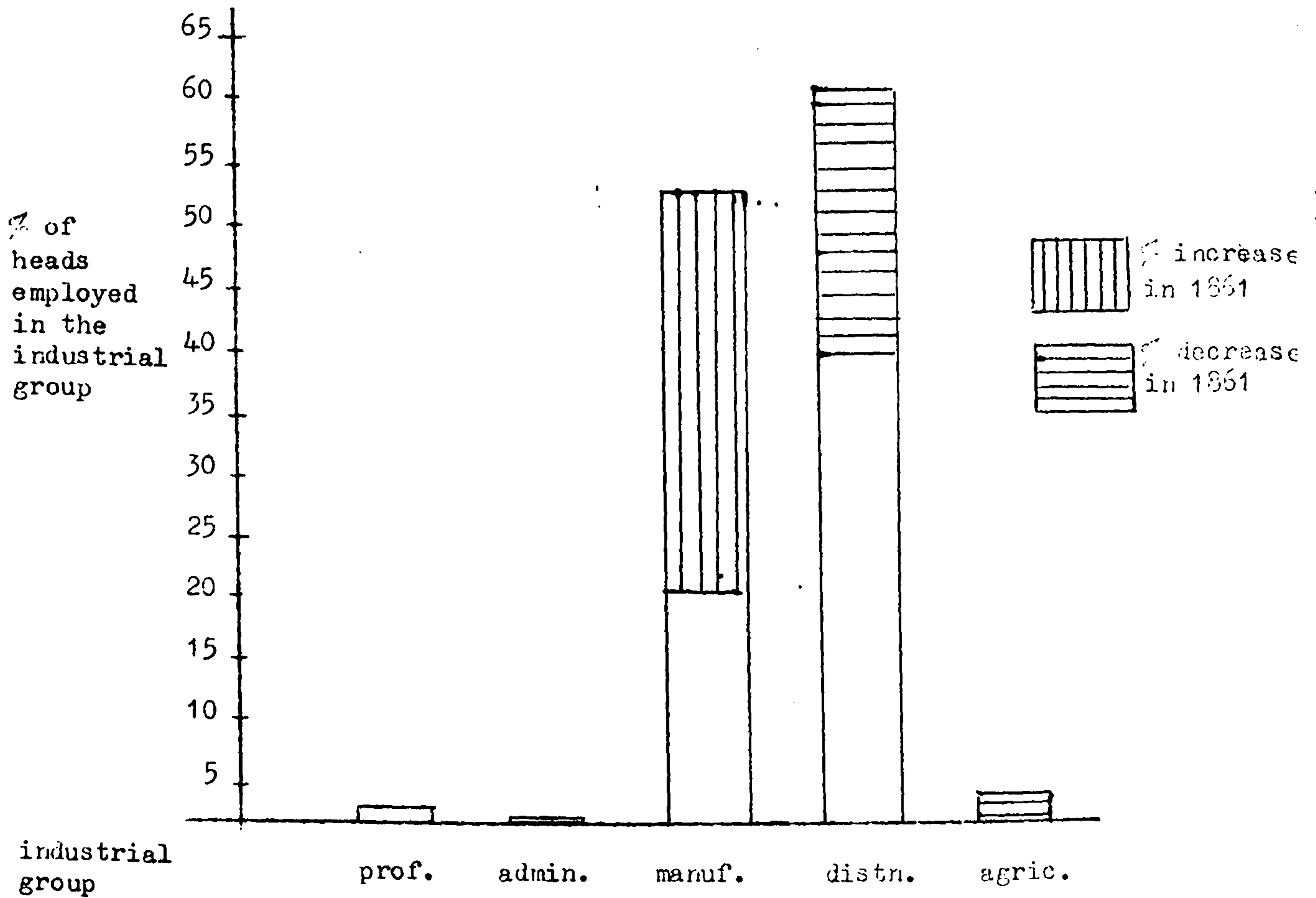
Table 80

not stated	prof.	admin.	manuf.	distn.	agric.	residual	not clear
8 (2.45)	4 (1.23)	3 (0.92)	172 (52.76)	130 (39.88)	4 (1.23)	5 (1.53)	0

The main change here is the reversal of positions between manufacturing and distribution. The dominant role of distribution is now taken over by the manufacturing group and this continues the trend already established in 1851; consequently distribution falls from well over one half of the proportion in this analysis to something over a third. At the same time the other three industrial groupings confirm the changing nature of the

town from a pioneer coal port to a slightly more established iron producing centre. The professional group shows a slight increase; the administrative group appears for the first time; and the agricultural group declines further, with a reduction by more than half. Thus the proportional changes between 1851 and 1861 appear thus:

FIG xxxv



By social status:

Table 81

not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	residual
8 (2.45)	2 (0.61)	27 (8.28)	173 (53.07)	33 (10.12)	78 (23.93)	5 (1.53)

There is one main change here: a great increase in the proportion of skilled labour. This reverts to the situation of 1841 when this status

group had by far the largest proportion of household heads. Apart from unskilled labour status, which remains at first under a question of the sample taken, all the status groups show a reduction, in contrast to the increase in skilled labour. Of the four status groups so far concentrated upon, that of small employers is reduced by nearly a half, and that of semi-skilled labour also by just under a half. The dominant position of skilled labour is shown by an increased proportion from just under a third to over a half. This shift tends to confirm that the industrial unit is growing in size, while the span of skill becomes more polarised.

By birthplace:

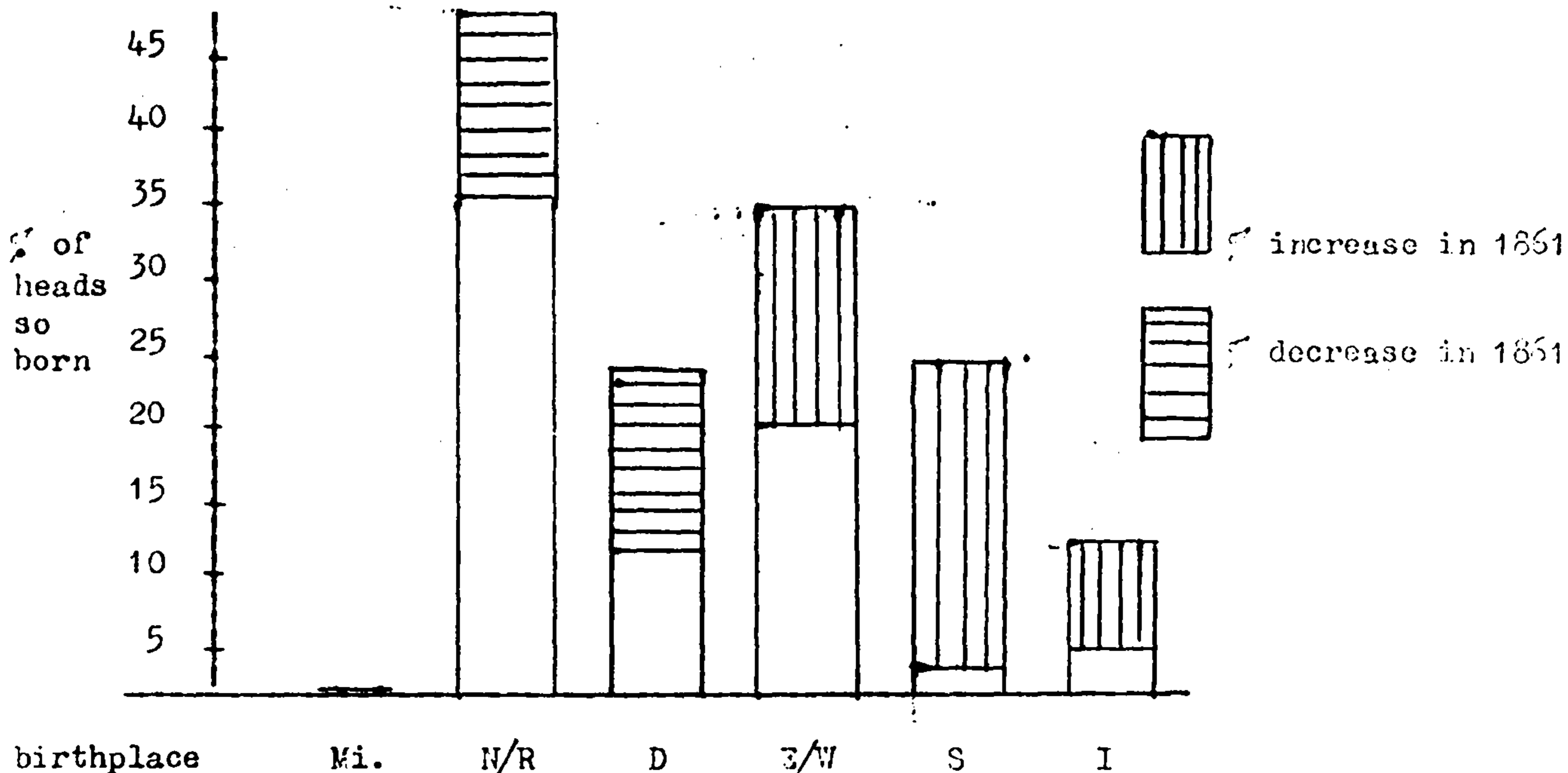
Table 82

Middlesbrough	Rest of North Riding	Durham	Rest of England and Wales	Scotland	Ireland	Foreign
3 (0.92)	116 (35.58)	43 (13.19)	115 (35.28)	8 (2.45)	40 (12.27)	1 (0.31)

Direct comparison can be made between this analysis and that of 1851.

This comparison shows a drop in birthplaces in the two immediate counties, Middlesbrough itself excepted, and an increase in areas further afield:

FIG xxxvi



The main shift here is a movement away from the 1851 situation, where almost three-quarters of the heads were born in the two immediate counties, to a situation where about half were so born, and the other half were from more remote parts. Of the two counties immediately adjoining the town, the North Riding contributed proportionately a quarter less, while Durham was almost halved; of the areas more remote, England and Wales increased by three-quarters, Scotland remained the same, Ireland more than doubled, and there was a small introduction of foreign born. In tabular form, the two counts can be compared thus:

Table 83

natives of	% in 1851	% in 1861	% increase or decrease
Middlesbrough	0	0.92	+ 0.92
Rest of N.Riding	47.27	35.58	- 11.69
Durham	24.85	13.19	- 11.66
Rest of Eng. & Wales	20.00	35.28	+ 15.28
Scotland	2.42	2.45	+ 0.03
Ireland	5.45	12.27	+ 6.82
Foreign	0	0.31	+ 0.31

It is interesting to compare the percentages for 1861 with the figures that Ravenstein produced in his comparison between 1851 and 1871. If one allows for the fact that Ravenstein was dealing with total population, and my figures are based on a sample of household heads, then the above percentages for 1861 are very similar to Ravenstein's percentages for 1871. Direct comparison can be made for Durham, where a difference of only 0.1 exists; and for Scotland where the difference is 0.4. Ireland shows the largest difference with 3.2, while foreign parts differ by 1.2. If we deduct my total for the North Riding from Ravenstein's for Yorkshire, and add the remainder to the rest of his percentages, then his figure for England and Wales is only 1.4 in excess of mine. From this comparison it is tempting to say that the sort of shift in birthplaces that he thought he detected between 1861 and 1871, in fact took place in the previous decade. If so then Ravenstein's remarks on Middlesbrough have to be adjusted accordingly.

b) The Wife

The average age was 35.78 years. This was a drop of 1.70 on the previous census, and represented a move towards the situation established in 1841.

The age distribution was:

Table 84

under 20	20 - 29	30 - 39	40 - 49	50 - 59	60+
4 (1.43)	97 (34.77)	83 (29.75)	60 (21.51)	22 (7.89)	13 (4.66)

This age spread follows the trend of 1851. There are no great changes in any of the age groups, but the largest group shifts from the thirties to the twenties. Not only is there this drop in the thirties, but also

one in the 60 & plus group; small rises occur in both the forties and fifties.

By birthplace:

Table 85

Middlesbrough	Rest of North Riding	Durham	Rest of Eng. & Wales	Scotland	Ireland	Foreign
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5 (1.79)	83 (24.75)	52 (18.64)	91 (32.62)	10 (3.58)	38 (13.62)	0
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As with heads of households, there is a shift in the birthplace of wives from the immediate two counties to further away, with the exception of the very small proportion actually born in the town itself. Compared with heads, the gains and losses show as follows:

Table 86

± increase or decrease

natives of	wives	heads
Middlesbrough	+ 1.79	+ 0.92
Rest of the North Riding	- 18.31	- 11.69
Durham	- 10.82	- 11.66
Rest of England and Wales	+ 15.57	+ 15.28
Scotland	+ 2.03	+ 0.03
Ireland	+ 9.74	+ 6.82
Foreign	0	+ 0.31

In every case the shift in birthplace of wives is in line with the same shift for heads. While the proportions for Durham and the Rest of England and Wales are very close, there are differences in degree with regard to the Rest of the North Riding and Scotland and Ireland. The

larger drop in the proportion from the former, and the larger increases from the latter two areas, suggest that in this ten-year period, wives, or at least future wives, were more willing than household heads to travel long distances in order to settle in Middlesbrough. There are also increases in Scotland and Ireland. This could also mean that wives were joining husbands who had taken some time to establish themselves in the town.

c) The Children

Of the 326 households in the sample, 263 recorded children, while 63 showed none. Thus 80.67% possessed children, and showed an average of 2.87 children per household. Both these amounts are larger than those for the previous census, and reverse the slight trend apparent between 1841 and 1851. The increase of households in possession of children is 6.73% and the increase in average number possessed is 0.09.

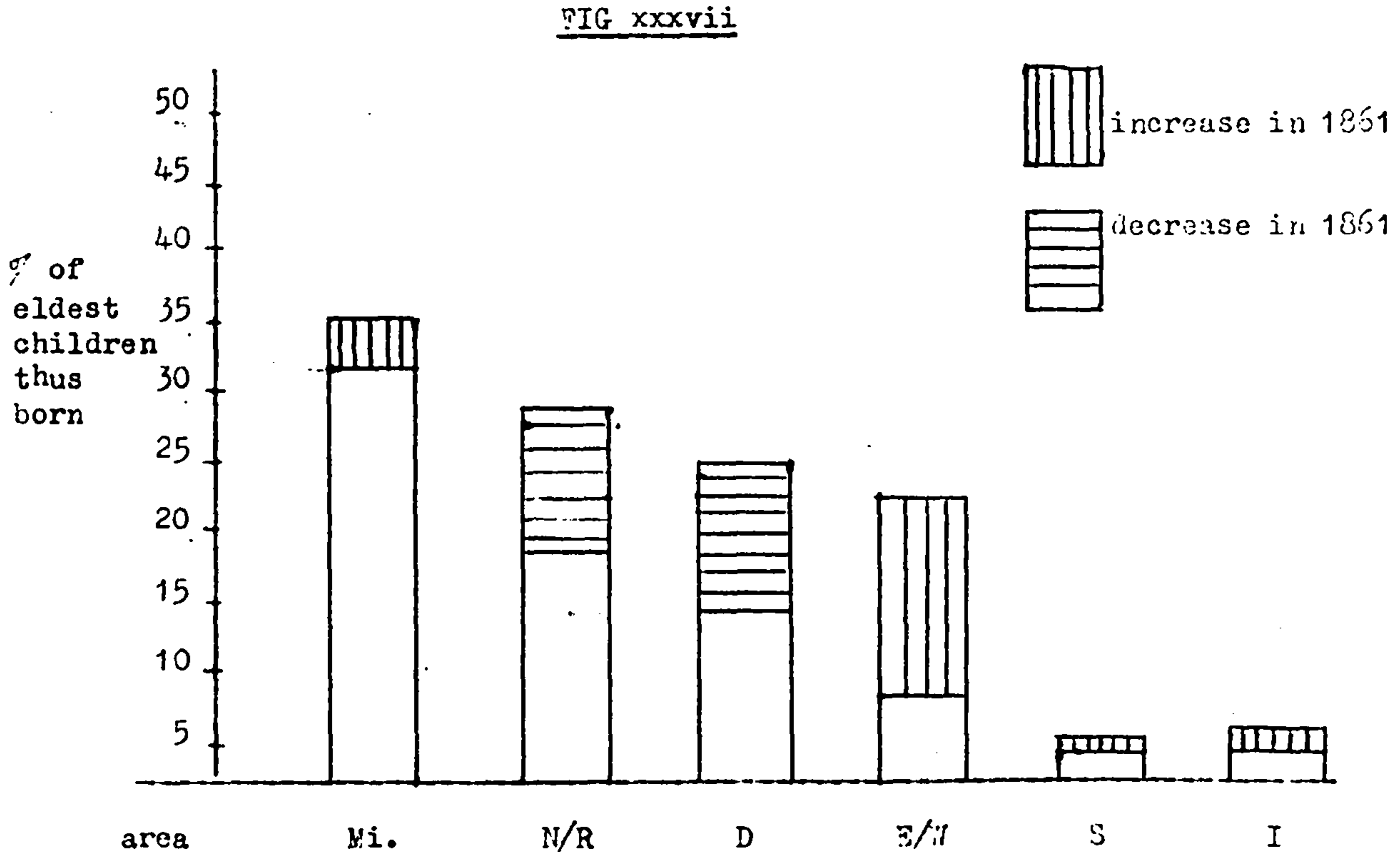
The average age of the eldest child was 12.11 years, a slight fall since the previous count. The spread of birthplaces of the eldest children was:

Table 87

Middlesbrough	Rest of North Riding	Durham	Rest of Eng. & Wales	Scotland	Ireland	Foreign
93 (35.91)	48 (18.54)	37 (14.28)	58 (22.39)	10 (3.86)	13 (5.02)	0

There are two main changes in emphasis over the last ten years. More eldest children are born in the town proportionately, but this does not extend to the two immediate counties. In both these cases there are falls; and conversely there are increases in the proportions born in

the other three relevant areas. The changes appear thus:



The obvious tendency for a larger proportion of children to be born locally as time goes on, is very apparent in the increase of those eldest children born in the town itself. However the decrease in those born in the immediate counties, and the rise in the other three areas, illustrate the new wave of migrants to the town with the extension in the size of the iron industry. Two trends are thus exhibited. A small element of evidence of a more stable, but decreasingly expanding, community recalls the trend of the years 1841 to 1851; but a stronger shift is towards expansion from outside which itself resembles the situation of 1831 to 1841. This latter trend follows the pattern already set from the birthplace analysis of heads and wives. The more stable nature of the town, apparent in 1851, was short lived. The town envisaged by the original planners of Middlesbrough gave way in the

rate of population growth, to a much larger scale industrial borough. The point of change can be seen from this set of proportions for the birthplaces of eldest children.

The average age of the youngest child was 4.72 years, a drop of 0.93 over the last ten years. The span between the two averages was 7.39 years, an increase of 0.62 years over the 1851 figure. Birthplace distribution for these youngest children was:

Table 88

Middlesbrough	Rest of North Riding	Durham	Rest of Eng. & Wales	Scotland	Ireland	Foreign
134 (68.37)	20 (10.20)	21 (10.71)	16 (8.16)	2 (1.02)	3 (1.53)	0

Although there is a slight tendency here for the birthplace pattern to follow that for eldest children, there is, at the same time, much less of a shift away from the 1851 distribution. In tabular form, the two kinds of comparison appear thus:

Table 89

children's birthplaces	% increase or decrease in 1861	
	youngest	eldest
Middlesbrough	+ 3.85	+ 3.42
Rest of the North Riding	- 3.78	- 9.78
Durham	- 1.12	- 12.38
Rest of Eng. & Wales	+ 0.63	+ 14.07
Scotland	+ 1.02	+ 2.20
Ireland	- 0.63	+ 2.53

The most significant differences here concern those born in Durham, and

the Rest of England and Wales. In both of these cases, the change in the 1861 proportions of youngest children is negligible, while the corresponding change for eldest children is considerable: a fall of over one-sixth for Durham, and an increase of over one-ninth for the Rest of England and Wales. Also prominent are the differences for the Rest of the North Riding, and Ireland. Eldest children show a decrease of nearly three times as much in the former case; and, in the latter case, a very slight decrease in the percentage for youngest children, becomes an increase of one-fortieth in the eldest child proportion.

The most likely explanation is that the greater part of the migration into the town in the 1850's took part in the second half of this decade. In this way, youngest children would still tend to be born in the town, while eldest children, who would have travelled with their parents, would illustrate the shift back to emigration from afar.

d) The Head - 2 variable analysis

By status and age:

Table 90

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
- 20	0	0	0	0	0	0	0
20 - 29	0	0	1 (3.70)	42 (24.28)	11 (33.33)	18 (23.08)	0
30 - 39	2 (25.00)	1 (50.00)	8 (29.53)	59 (34.10)	8 (24.24)	23 (29.49)	0
40 - 49	2 (25.00)	0	11 (40.74)	43 (24.86)	7 (21.21)	24 (30.77)	0
50 - 59	2 (25.00)	0	2 (7.41)	19 (10.98)	4 (12.12)	12 (15.38)	1 (20.00)
60 +	2 (25.00)	1 (50.00)	5 (18.52)	10 (5.78)	3 (9.09)	1 (1.28)	4 (80.00)

This table indicates some of complexity behind the shift from the transport to the manufacturing group. As expected, the manufacturing group claims the largest proportion in some of the status groups, but the lack of uniformity in this respect is interesting.

This predominance is evident among the skilled and unskilled labour groups, but not among the two other main groups. Even in regard to skilled labour, the transport group still claims just under a half of the total, although the manufacturing group takes almost all the unskilled labour.

Yet the evidence of the continuing importance of the transport group is clear to see. Among small employers, the decrease in this group between the two censuses is less than one tenth, and for semi-skilled labour, the decrease is less than one fifth. Thus the transport group remains predominant still, as regards the proportion of small employers; it having almost three-quarters of the total; and also among the semi-skilled labour group, having nearly two-thirds of the total.

No doubt the explanation for these two cases of continuing importance is that, in the first case, transport concerns, building and organised personal services tended to be relatively small scale; and the labour so employed tended to be semi-skilled; whereas the manufacturing group, represented mainly by the iron industry, was on a much larger scale, and offered employment at both more and less skilled levels than, say, the coal shipping trade. Thus this analysis shows that although on the surface, Middlesbrough had become an iron producing and finishing town, the

original elements built around the coal port concept remained important with at least two of the main status groups. The fact of course that Middlesbrough became a large scale market for the consumption of coal and ironstone, and a large scale exporter of its iron products, strengthened these original elements.

By status and birthplace:

Table 92

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	0	0	0	3 (1.73)	0	0	0
Rest of the North Riding	5 (62.50)	0	9 (33.33)	65 (37.57)	17 (51.52)	18 (23.08)	2 (40.00)
Durham	0	1 (50.00)	8 (29.63)	23 (13.29)	4 (12.12)	3 (3.35)	2 (40.00)
Rest of Eng. and Wales	0	1 (50.00)	10 (37.04)	71 (41.04)	9 (27.27)	23 (29.49)	1 (20.00)
Scotland	0	0	0	7 (4.05)	1 (3.03)	0	0
Ireland	0	0	0	4 (2.31)	2 (6.06)	34 (43.59)	0
Foreign	1	0	0	0	0	0	0

From this table we can ask if the trends apparent in 1851 are still evident.

These trends were of two kinds. First, that most labour came from the immediate area; and second, that as one descended the status scale, the absolute numbers in the sample declined for each particular area. The exceptions came from the status of unskilled labour, especially those heads who were born in Ireland. Not only are these trends often continued,

but even strengthened. The small employer class conforms more to the first trend, in that the two immediate counties both claim large proportions, representing increases of 4.16% in the case of the North Riding, and 12.96% in the case of Durham. Proportions from the Rest of England and Wales are accordingly reduced, while those from Scotland and Ireland are eliminated.

With regard to skilled and semi-skilled labour, the trend of locally born holds good if the two immediate counties are added together, but otherwise, although the proportions for the North Riding fall only slightly, those for Durham are halved in both cases. The proportions for the Rest of England and Wales are consequently higher in this latest count: an increase of two-fifths in the case of the North Riding, and a quadrupling in the case of Durham. This divergence offers part of the explanation for the shift to a fifty-fifty division between heads' birthplaces in the immediate counties and elsewhere. This was mentioned earlier in this analysis of the 1861 data, when single variable analysis of heads' birthplaces was discussed. The greater part of this shift can be accounted for in regard to unskilled labour.

Here the exception of 1851 becomes a new trend in itself in 1861. In 1851 the pattern of locally born was followed, with the exception of the Irish born; and, even here, the proportion in question, 15% as following 10%, instead of vice versa, was not very great. The main exception was in regard to the upward movement in absolute sampling amounts as one looks along the

rows of each birthplace area. Not only is this latter exception maintained in 1861, but the locally born trend is almost reversed.

In tabular form this becomes:

Table 93

∆ increase or decrease in 1861

Middlesbrough	0
Rest of the North Riding	- 31.92
Durham	- 16.15
Rest of England and Wales	+ 19.49
Scotland	0
Ireland	+ 28.59

The result is that this colossal increase in unskilled, Irish born labour, make this area the largest proportion for this status. The second largest is the Rest of England and Wales, with a much reduced proportion from the North Riding, and Durham down to a negligible proportion. Thus with the new dominance of the iron industry in the town, the Irish born element assumes an important social element among the lowest paid workpeople there.

e) The Wife - 2 variable analysis

The average age by social status of head:

Table 94

not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	residual
0	45.50	40.75	35.20	33.90	35.46	61.50

Apart from the very small sample of the capitalist status group, two of the main four groups, small employers and skilled labour, show little change over the last ten years. The other two groups show decreases; semi-skilled labour by 4.10 years and unskilled by 2.54 years. This is where the general average decrease can be most accounted for.

This breakdown into specific age groups, appears thus:

Table 95

	not stated	caps.	s/emp.	s/lab.	s/s/lab.	u/s/lab.	res.
- 20	0	0	0	4 (2.61)	0	0	0
20 - 29	0	1 (50.00)	1 (50.00)	54 (35.29)	14 (45.16)	27 (38.03)	0
30 - 39	0	0	9 (45.00)	45 (29.41)	9 (29.03)	20 (28.17)	0
40 - 49	0	0	7 (35.00)	32 (20.92)	5 (16.13)	16 (22.54)	0
50 - 59	0	0	1 (5.00)	12 (7.84)	2 (6.45)	6 (8.45)	1 (50.00)
60 +	0	1 (50.00)	2 (10.00)	6 (3.92)	1 (3.23)	2 (2.82)	1 (50.00)

Not surprisingly the changes came in the two lower status groups, capitalist and residual status excepted. Small employer wives have a larger proportion in the forties than previously, with consequent loss in the fifties; the pattern for skilled labour is changed very little. Semi-skilled status shows the greatest changes in that the proportion of wives in their twenties is more than doubled, while those in their forties is halved. The general pattern for this group follows that for heads, with larger proportions of wives under 40, and smaller above. Finally changes in the age pattern for wives of unskilled labour make the overall average age drop. There

are larger proportions in the twenties and the forties, but a smaller one in the thirties. All these changes each constitute about a 10% difference, thus although the general trend is towards a younger average, the actual changes are less dramatic than those for the semi-skilled. Unlike the semi-skilled also, the proportions of unskilled labourers' wives do not so obviously correspond with the equivalent for household heads. There is a much greater proportion in the twenties, then less in all groups except the sixty and over group. Of course, if we assume that unskilled heads tended to marry women much younger than themselves than did semi-skilled heads, then the cut-off age of 30 as compared with 40 would be understandable.

By status and birthplace:

Table 96

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	0	0	1 (5.00)	4 (2.61)	0	0	0
Rest of the North Riding	0	0	5 (25.00)	53 (34.64)	13 (41.94)	11 (15.49)	1 (50.00)
Durham	0	1 (50.00)	6 (30.00)	31 (20.26)	6 (19.35)	7 (9.86)	1 (50.00)
Rest of England and Wales	0	1 (50.00)	6 (30.00)	55 (35.95)	8 (25.81)	21 (29.58)	0
Scotland	0	0	1 (5.00)	6 (3.92)	3 (9.68)	0	0
Ireland	0	0	1 (5.00)	4 (2.61)	1 (3.23)	32 (45.07)	0
Foreign	0	0	0	0	0	0	0

This table follows the pattern already noted for this census that there is a general shift from those born nearby to those born from beyond the two immediate

counties. This shift occurs in all four major status groups, and, as with age distribution, the most dramatic evidence occurs in the two lower status groups. For the semi-skilled, the proportion of those wives born in the Rest of England and Wales increases from an insignificant percentage to over a quarter of the total; similarly with the wives of the unskilled, the proportion born in the Rest of England and Wales almost doubles, while the proportion born in Ireland shows almost a four-fold increase. This latter proportion, 45.07% is very much in line with the proportion of 43.59% for household heads in the equivalent table.

From this same table, a comparison can be made with that for heads in respect of short and long distance migration into the town. The 1841 analysis suggested that proportionately wives travelled further than household heads. The 1851 data rejected this pattern, with the single exception of the wives of unskilled labourers, and this only minimal. Tabular data of the 1851 comparison shows:

Table 97

Born outside the North Riding and Durham	s/emps.	s/labs.	s/s/labs.	w/s/labs.
% of wives	40.00	42.48	38.72	74.65
% of household heads	37.04	47.40	36.36	73.08
+ or - for wives:	+ 2.96	- 4.92	+ 2.36	+ 0.57

Thus there is a shift back to the position of 1841 in that three of the status groups show a greater proportion of wives than household heads. Yet the proportions are very small. The largest difference is in fact the group which provides the exception to this reverse trend and even

here we are dealing with a proportion of less than one-twentieth.

On the data analysed, one cannot draw a firm conclusion on the relative propensity to migrate between household heads and wives.

f) The Children - 2 variable analysis

The average number of children by the status of the family head was:

Table 98

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
number and percentage	20 (2.86)	2 (2.00)	78 (3.71)	384 (2.80)	61 (2.35)	207 (3.00)	4 (2.3)

As in the 1851 census, the pattern is uneven: there is no suggestion of the symmetry shown in the 1841 analysis. There are some similarities between this table and the 1851 equivalent. In both cases the small employer group shows the largest average of children - there is in fact an increase of 0.53 per household in 1861. Similarly the average for skilled labour remains fairly consistent, having an increase of only 0.16. The greatest change comes with the fall of 0.70 in the semi-skilled average, while the unskilled average shows an increase of 0.31.

It is possible to suggest some explanation from this table in that those who can most afford to have children, tend to have the highest average; while those who have least control over their lives tend to have more children than their neighbours who possess greater work skills, be they skilled or semi-skilled. Between these latter two groups, one would have to suggest that the skilled labour families had more children than families of the semi-skilled, on average, because they could better afford them. If the difference in the three averages for labour was

solely dependent on infant mortality, then the high average for the unskilled would not make sense, thus personal volition must be taken into account. This suggested pattern, however, is one far removed from the simple picture presented by the analysis of the 1841 data.

The eldest child by status and birthplace:

Table 99

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	2 (28.57)	0	9 (42.86)	52 (37.96)	10 (38.46)	20 (28.93)	0
Rest of the North Riding	3 (42.86)	0	2 (9.52)	22 (16.06)	8 (30.77)	12 (17.39)	1 (50.00)
Durham	1 (14.29)	0	6 (28.57)	21 (15.33)	3 (11.54)	6 (8.70)	0
Rest of Eng. and Wales	0	1 (100.00)	4 (19.05)	31 (22.53)	2 (7.69)	19 (27.54)	1 (50.00)
Scotland	0	0	0	7 (5.11)	2 (7.69)	1 (1.45)	0
Ireland	0	0	0	1 (0.73)	1 (3.85)	11 (15.94)	0
Foreign	0	0	0	0	0	0	0

Compared with 1851, the number of eldest children born in the town shows the greatest change in the unskilled labour group, with almost a doubling. The other three main groups all show a much smaller increase, varying between 0.5% and 11%. In respect of those born in the immediate counties, the general trend is for a decrease in the 1861 proportions. This would fit in with the general picture of a new wave of migrants from further afield. However there are two exceptions to this rule. In the first case, the

proportion of eldest children of small employers, born in Durham, shows a rise: in fact an increase of one-and-a-half times. This suggests attractions in the town at a high status level that prompted the flow of migrants from Durham to swell, whilst that from the North Riding was reduced by the same factor. This notion would agree with the earlier suggestion that counter attractions existed in Durham for industrial labour that were not present in the North Riding. At a certain level, in this case small employer status, the town would begin to draw migrants who otherwise would remain at home.

The second exception here concerns the eldest children of skilled labourers, who were born in the North Riding. In this instance, 1861 shows an increased proportion of over a half. This contrasts for example with the equivalent change in the Durham proportion which is a decrease to less than a half of the 1851 proportion. The explanation could be the same as the one offered in the previous paragraph, namely that skilled labour opportunities constituted an increasing draw up North Riding labour, which lacked the industrial counter-attractions of Durham.

This second exception confirms the sluggish nature of the movement of labour from Durham to Middlesbrough, as compared with the movement from the North Riding. However the first exception shows that the situation was somewhat more complicated, in that conditions could arise that would speed up migration from Durham in certain respects. Those conditions arose with the boom of the 1850's; and such conditions were denied the town in its relative decline in the 1840's, but had been present in the 1830's.

The youngest child by status and birthplace:

Table 100

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	3 (50.00)	1 (100.00)	11 (61.11)	72 (72.00)	16 (84.21)	31 (57.41)	0
Rest of the North Riding	2 (33.33)	0	1 (5.56)	7 (7.00)	2 (10.53)	8 (14.81)	0
Durham	1 (16.67)	0	5 (27.78)	9 (9.00)	1 (5.26)	5 (9.26)	0
Rest of Eng. and Wales	0	0	1 (5.56)	9 (9.00)	0	6 (11.11)	0
Scotland	0	0	0	1 (1.00)	0	1 (1.85)	0
Ireland	0	0	0	0	0	3 (5.56)	0
Foreign	0	0	0	0	0	0	0

As with the analysis of the earlier census, there is a larger proportion of youngest children born in the town than eldest children. In some cases the increase is almost a doubling. Similarly the substantial proportions of eldest children born in the Rest of England and Wales is not there in the case of youngest children. Such proportions are minute with the exceptions of skilled and unskilled labour, which show just under, and just over, one-tenth respectively. Apart from these two small proportions, this table suggests strongly that there was a lot of migration into the town towards the end of the decade. Given the build-up of the iron industry at this time one would expect increasing labour demands throughout the decades of the later nineteenth century.

2) The Household

a) The distribution of non-family members to the household was:

Table 101

	number of households		% with	average in the possessing household
	with	without		
relations	50	276	15.34	1.70
workpeople	3	323	0.92	2.33
servants	29	297	8.30	1.10
lodgers	94	232	28.83	2.22

There are some changes here compared with the table for 1851, but also some aspects of continuity. The analysis of relations shows a slight fall in the proportion of houses in such possession, a decrease of one-sixth, yet an increase in the average holding of one-ninth. This amounts to a slight move back towards the situation of 1841, but, by and large, there is no great change.

There is however a great change in the analysis of workpeople. Although the average holding rises by a quarter, the possessing percentage falls by four-fifths. Thus an element in the social structure of the town that was never prominent, now becomes almost extinct. Further evidence, no doubt, of the lack of both pre-industrial craft traditions, and a sizable middle-class market. There are slight changes in the position of servants in the town. These tend to be of the same kind as changes regarding relations. There is a slight increase in the average number in the possessing household, but also a compensating fall in the proportion of such households. The fact that this element in the town's social

structure remained static, or nearly so, can be attributed to causes similar to those suggested in the previous paragraph.

Finally we can look at lodgers. Here the change is considerable, with an increase of nearly a third in the average holding, and well over a doubling of the households in possession. As with other pieces of data in the analysis of the 1861 census, this represents a move back towards the apparent situation of 1841. The simple explanation of this change is the boom in the iron industry, and the consequent attraction of labour unable or unwilling to become householders.

b) Relations - 2 variable analysis:

Table 102

status of household	number of households		% with	average in the possessing household
	with	without		
not stated	4	4	50.00	1.25
caps.	0	2	0	0
s/emp.	7	20	25.93	2.43
s/labs.	25	148	14.45	1.76
s/s/labs.	4	29	12.12	1.50
u/s/labs.	6	72	7.69	1.33
residual	4	1	80.00	1.25

This table offers a great contrast to the 1851 equivalent, in that it presents an even pattern with regard both to households in possession and to average holding. This has involved a number of changes between the two counts.

In the first place there have been losses in households in possession in all but the small employer group; in the second there has been a great gain in the small employer average, and a moderate loss in that of unskilled labour. In tabular form this appears:

Table 103

relations	s/emps.	s/labs.	s/s/labs.	u/s/labs.
1851	25.00	18.52	20.69	12.50
1861	25.93	14.45	12.12	7.69
1861 difference +	0.93	- 4.07	- 8.57	- 4.81
1851 average	1.33	1.60	1.50	1.60
1861 "	2.43	1.76	1.50	1.33
1861 difference +	1.10	+ 0.16	-	- 0.27

The result of these changes means that there was a direct correlation between social status and the number of relations in the household. Not only does the small employer group have the largest proportion of households with lodgers, but also this group have the highest average holding. Both amounts decrease as one descends the social scale until the unskilled labour group is reached. This group has the smallest proportion of possessing households and the smallest average in possession. Thus it appears that in the town in 1861 there was a propensity to have relations if the family could provide the accommodate; thus the higher up the social scale the family found itself, the better could it provide accommodation, and the more likely was it to include relations in its household structure.

c) Workpeople - 2 variable analysis:

Table 104

social status of household	number of households		with	average in the possessing household
	with	without		
not stated	0	8	0	0
caps.	0	2	0	0
s/emp.	2	25	7.41	3.00
s/labs.	1	172	0.58	1.00
s/s/labs.	0	33	0	0
u/s/labs.	0	78	0	0
residual	0	5	0	0

It has already been noted that this element in the town's social structure has become almost extinct. The two status groups that possessed workpeople in the 1851 census are still the only groups in possession, and both show a percentage decrease of households in possession. Proportions decline by almost three-quarters in the case of small employers and over two-thirds for skilled labour. There is however a sizable increase in the average holding for small employers by over one-third, whilst that for skilled labour remains at the minimum of 1.00. Thus in spite of the almost general picture of decline in this area, those concerns which remained in the town seem to have grown in size, in spite of the obvious general lack of demand for such establishments.

d) Servants - 2 variable analysis:

Table 105

social status of household	number of households		with	average in the possessing household
	with	without		
not stated	0	8	0	0
caps.	1	1	50.00	2.00
s/emps.	10	17	37.04	1.10
s/labs.	13	160	7.51	1.08
s/s/labs.	3	30	9.09	1.00
u/s/labs.	2	76	2.56	1.00
residual	0	5	0	0

This table shows some interesting changes compared with 1851, but these changes are within the general context already noted: the overall position between the two counts was not radically altered. The capitalist status group show a large proportion in possession, but the sample size is very small, and in fact a larger percentage than fifty would be expected from a larger sample. What remains is a "reshuffling" of servants among the other social groups.

The largest change is the elimination of servant-keeping by the residual class: a sign of the shift from a young out maturing town to the young "frontier" town once again. The other significant decline is seen with the unskilled labouring group who experience a halving of the proportion of households in possession. This leaves us with the three intermediate groups. Here the small employers remain almost the same: losses in both proportional and average respects are minimal; while skilled and semi-skilled labour experience gains: on both counts

in the case of skilled labour, and similarly in the case of semi-skilled labour in that servant-keeping appears for the first time with this group.

Thus the elements evident in the 1851 analysis remain here. The relative prosperity, if increased by servant keeping, of 1841, remains checked; while sectors of the labouring groups become servants keeping, albeit on a small scale, and maybe also in a non-permanent capacity. The actual increases in this latter respect amount to just over a third in possessing proportion for those of skilled labour status, and at the same time a slight increase also in the average in possession: a move of 0.08 above the base minimum. For the semi-skilled group, they increase from zero to just under a tenth in possession, with the minimum average.

e) Lodgers - 2 variable analysis

Table 106

social status of household	number of households		% with	average in the possessing household
	with	without		
not stated	5	3	62.50	1.40
caps.	0	2	0	0
s/emps.	6	21	22.22	2.33
s/labs.	38	135	21.97	2.05
s/s/labs.	16	17	48.48	1.81
u/s/labs.	27	51	34.62	2.81
residual	2	3	40.00	2.50

Compared with the 1851 analysis, all classes of household experience a larger proportion of lodger holding in 1861, and all but one experience a higher average number in possession. This exception is that of small employers which shows a fall of 0.67. The harmony of the 1851 analysis is however lost, where the proportion of households in possession increased as one descended the social scale. Here, instead, is the more ragged situation that recalls the 1841 analysis.

If the two criteria that determined the lodger analysis are applied here, as in the two previous censuses, one must make as many exceptions as rules. If we account for the fact that over a fifth of the small employer households have lodgers by reference to the status expectation of middle-class lodgers then it becomes difficult to fit the households of skilled labour into a category. We can say that the three groups of labour are subject to the rule of need, where the poorer the household the greater the attraction of rent or board from lodgers. This would conveniently apply to the analysis if we had to deal only with skilled and unskilled labour. Then we would have just over a fifth of the skilled households having lodgers, with an average holding of just over two, compared with the unskilled proportion of over a third with an average of nearly three. However we have, intervening, the group of semi-skilled labour households with a larger proportional holding than the status group below them (nearly a half compared with just over a third). Yet having also a smaller average holding than the group above them (a difference of 0.24 lodgers).

It becomes impossible therefore to apply our two criteria to this analysis unless we treat semi-skilled households as a complete exception. Even if we try to apply both criteria in different degrees to each social group, there ought still to be evidence that the criterion of lodger-demand applies at the top of the social scale, and decreases in importance as one descends this scale; and conversely that the criterion of income-need applies most clearly at the bottom of the scale and decreases in importance as one ascends. The analysis of semi-skilled labour confounds both these criteria however, and prevents a simple analysis of the situation.

3) The Lodgers

a) Single variable analysis:

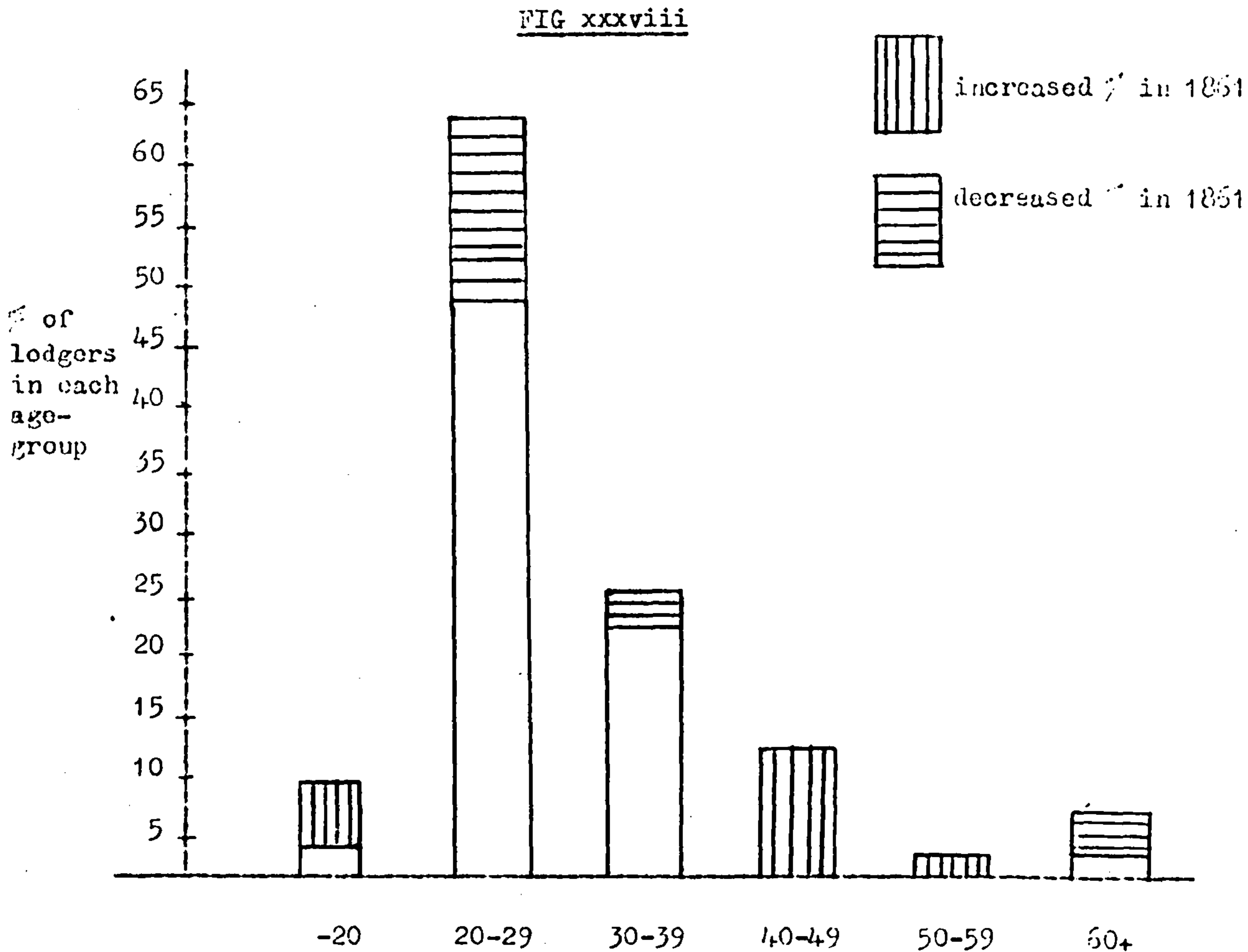
The male proportion of this group went up to 92.86%, so consequently the female proportion dropped from 19.45% to 7.14%. At the same time the average age increased from the 29.42 years of the 1851 to 29.80. Thus the idea of the average lodger being male and young is maintained in the 1861 analysis.

The spread of ages was:

Table 107

	- 20	20 - 29	30 - 39	40 - 49	50 - 59	60+
number and percentage	16 (9.52)	82 (48.81)	39 (23.21)	21 (12.50)	5 (2.98)	5 (2.98)

Here the main question must be, is the pattern of the previous census maintained, where the majority of lodgers were in their twenties? The answer is no, in spite of the very close average between this analysis and the former one. Although the twenties age group still has the largest proportion by far, this proportion nevertheless drops below a half of the total for the first time. In the spread of the other age groups, this analysis produces the symmetry of the 1841 analysis, and thus contrasts strongly with that of 1851. This contrast is seen thus:



These changes suggest that the attractions of the town for lodger migrants in the 1850's in some way resembled those of the 1830's and contrasted

with those of the 1840's. The simple explanation is that the relative decline of the 1840's attracted only the most mobile of potential lodgers, in this case the male in his twenties. The relatively boom decades of the 1830's and 1850's made the much wider appeal to men also in their thirties, and in early middle age. However even this appeal does diminish as the age group increases. Yet even this is in total contrast to the lack of lodgers between 40 and 59 in the 1851 analysis.

By social status:

Table 108

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
number and percentage	11 (6.55)	0	2 (1.19)	74 (44.05)	16 (9.52)	65 (38.69)	0

Again the pattern resembles 1841 and contrasts with 1851. The evenness of the 1851 analysis between the three labour groups disappears with the relatively small proportion of semi-skilled labour in this analysis.

However what was seen as a basic anomaly in the 1841 analysis, viz. that there were proportionately slightly more (0.74%) lodgers in the skilled labour group than heads, does not recur in this 1861 analysis. Instead the proportion of skilled labour among lodgers lags the equivalent proportion among heads by nearly a tenth.

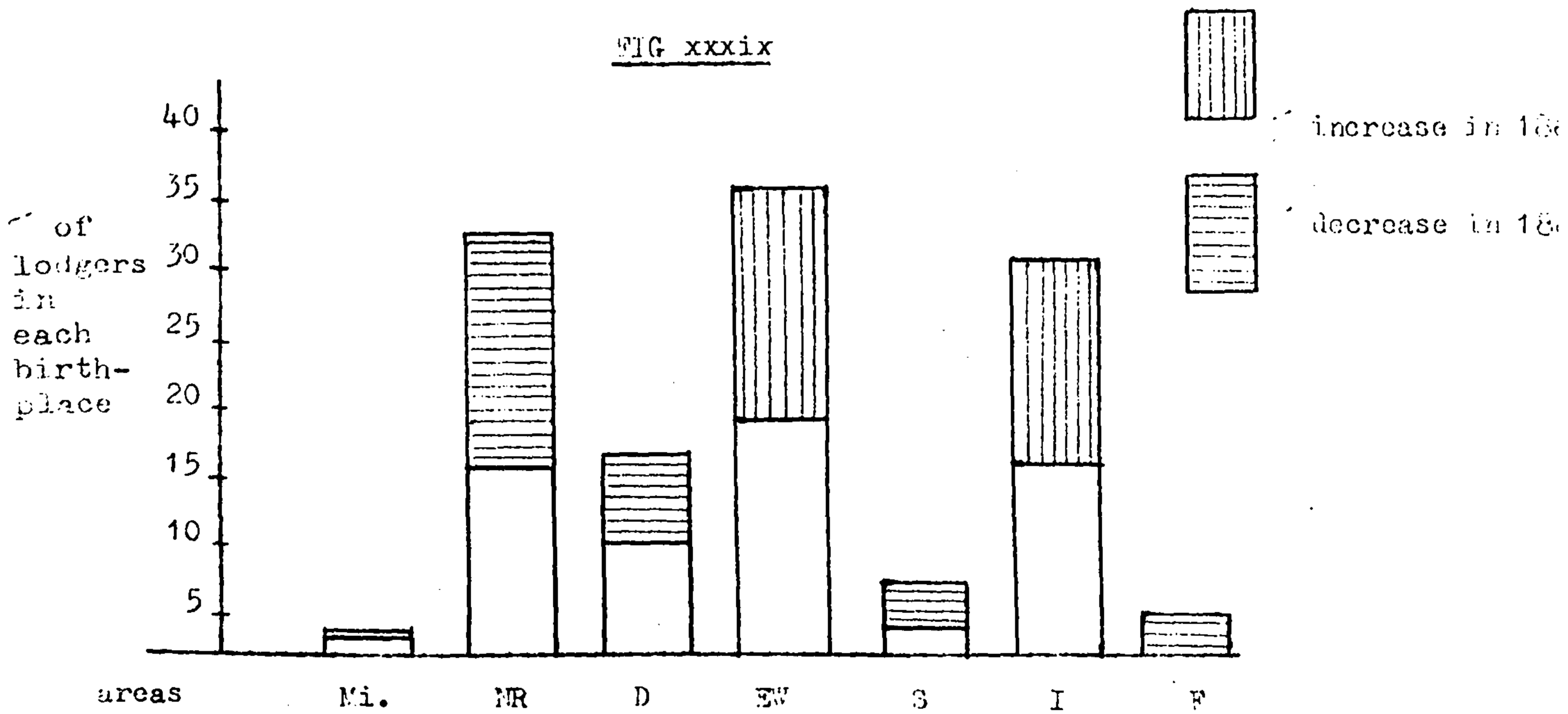
By birthplace:

Table 109

	Middlesbrough	Rest of N.Riding	Durham	Rest of Eng. & Wales	Scotland	Ireland	Foreign
number and percentage	4 (2.38)	27 (16.07)	17 (10.12)	62 (36.90)	6 (3.57)	52 (30.95)	0

This table again shows a move back to the result of the 1841 analysis. Then the comparison between the birthplace of heads and those of lodgers showed the shift to lodger majorities to begin with those born in the Rest of England and Wales; this situation was pushed back to Scotland and Ireland with the analysis of 1851. With the 1861 analysis, this change-over once more occurs with the Rest of England and Wales (the small proportions actually born in Middlesbrough itself excepted).

The general position is a movement in the last ten years away from the immediate two counties, and towards more distant birthplaces, particularly Ireland. These changes appear thus:



These changes illustrate the wider appeal of the town to potential migrants, that developed in the 1850's. This appeal was particularly strong in the Rest of England and Wales, and for those born in Ireland. This same appeal however did not extend to Scotland, for whereas England and Wales and Ireland doubled their respective proportions, Scotland

experience a halving. As would be anticipated in these circumstances, the proportions from the North Riding and Durham were also reduced: The former by over a half, and the latter by over a third.

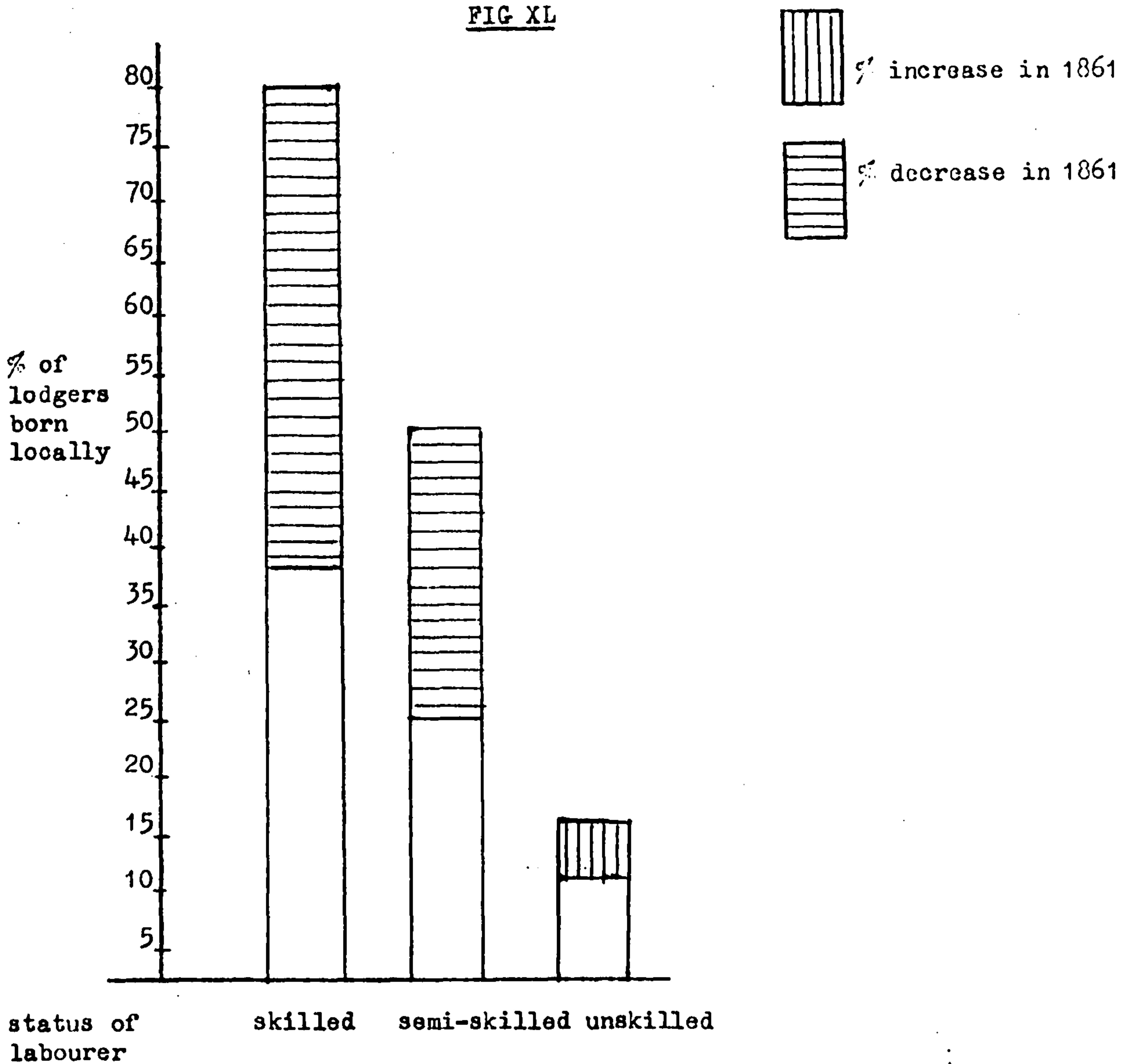
b) Lodgers - 2 variable analysis by social status and birthplace:

Table 110

	not stated	caps.	s/emp.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	1 (9.09)	0	0	2 (2.70)	1 (6.25)	0	0
Rest of the North Riding	3 (27.27)	0	0	15 (20.27)	2 (12.50)	7 (10.77)	0
Durham	0	0	1 (50.00)	11 (14.86)	1 (6.25)	4 (6.15)	0
Rest of Eng. and Wales	3 (27.27)	0	1 (50.00)	34 (45.95)	8 (50.00)	16 (24.62)	0
Scotland	0	0	0	5 (6.76)	1 (6.25)	0	0
Ireland	4 (36.36)	0	0	7 (9.46)	3 (18.75)	38 (58.46)	0
Foreign	0	0	0	0	0	0	0

The general trend has been seen as more even migration in 1861 compared with 1851. This has meant a reduction of proportions of those born in the immediate counties, and an increase from further afield. This table follows this general trend, so we can therefore look at the three groups of labour that were discussed at this stage in the 1851 analysis, and ask, are there any notable differences in this respect between the three groups, and how do they compare with the 1851 data. We can do this by comparing, first, the proportions born in the town and the two immediate counties, and then make comparisons with the data for the 1851 census. The comparisons thus appear:

FIG XL



First, there is an even decline down the social scale in the proportions of those born locally. By locally here, I mean the aggregate of the proportions for Middlesbrough, the Rest of the North Riding and Durham. Thus, the less the skill, the less likely was the lodger to have been born nearby. Secondly, with the intercensal comparison, there is an inverse relation between the same social groups, in the two counts. For the skilled, the proportional loss by 1861 was over a half; for the semi-skilled the loss was exactly a half; and for the unskilled there

was a gain of nearly a half. Thus with regard to long-distance migration of lodgers, the skilled appear as the most sensitive to the changing fortunes of the town; and unskilled the least sensitive.

Summary

In the analysis of the 1861 data, I have been mainly concerned to make comparison with the trends and exceptions shown in the 1851 analysis. As in the last summary, I will give a brief account of the aggregate situation in 1861 and make comparisons with both 1841 and 1851. No detailed comparisons can be made with York and Preston however as the research in these areas has not yet been done. Dr. Armstrong has recently written in regard to his work on York that, "it would have been possible to extend this study to span the censuses of 1861 and 1871, for which the enumeration books are now available. I have deliberately chosen not to do this in order to leave the way open for a subsequent study of York".¹

1) Aggregate Situation

The main element of change that can be seen from the 1861 analysis is the establishment and growth of the iron industry in Middlesbrough. This element had many social repercussions. Not only did the rate of migration into the town once more reach titanic proportions, but many of the elements noted in 1841 once more emerged, after the partial eclipse in the 1851 analysis. Some of the economic elements of the town's first decade were given a new boost by the growth of the iron industry. It would not be fanciful to suggest that the 1850's gave rise to a second "frontier" phase in Middlesbrough's very brief history. Comparisons with the immediate counties and the county at large are as follows:

1) Armstrong (1974) op cit p 199.

Table 111

	1851	1861	% increase
England and Wales	17,922,768	20,066,224	12
Durham	411,679	508,666	30
N.Yorks	215,214	245,154	14
Middlesbrough	7,631	18,992	150

The main trends of the 1851 analysis are confirmed in the above table with the one exception of the North Riding. Here the comparative fall-off seen in 1851 was more than compensated for by the county's rate for the first time. Durham once more had a rate well in advance of the national figure and once more the Middlesbrough performance was remarkable in this respect. The already high rate of increase of 46% shown in 1851, now becomes the phenomenal one of 150%, whereas in 1851 the town had seen its original economic base eroded by the growth of Hartlepoons, it now experienced the rapid expansion of the iron industry. This second economic phase of the town's growth gave Middlesbrough not only the local pre-eminence that the founding fathers had sought through the coal carrying trade, but laid the basis for a world wide reputation.

1

The age and sex structure compared thus:

Table 112

	under 20	20 & over	% under 20	male	female	% male
England and Wales	9,135,396	11,146,191	45	9,938,259	10,289,965	49.5
Durham	245,509	263,157	48	258,297	250,369	52
N.Yorks	96,218	114,891	46 ²	122,465	122,689	49.9
Middlesbrough	11,681	13,398	48 ³	10,326	8,666	54

1) Information for this and the preceding table taken from these volumes: Population Tables, vol I 1862 [3056] p 149, Population Tables, vol II, 1863 [3221] pp 680 & 750, General Report, vol III, 1863 [3221] pp 5,85 & 107.

2) These figures refer to the registration county.

3) These figures refer to Yarm sub-district, whose population of Middlesbrough residents had risen to 77% of its total.

Taking age structure first, one could say that the image of "young" Middlesbrough emerged clearly for the first time. Not only does the town show a larger proportion of the under 20's than that for England and Wales for the first time, but this same proportion is larger than that for the North Riding, and equal to Durham. This latter in spite of a 1% rise in the Durham proportion. It is possible of course that my age statistics for the Yarm sub-district in 1851 and 1861 mask the true Middlesbrough situation, but the printed census volumes allow no closer check. However in that the trend for Middlesbrough in these years follows the 1841 statistics very plausibly, (in 1841 there are separate printed statistics for Middlesbrough), and also in that the Middlesbrough pattern resembles that of Durham rather than that of the North Riding, it does not seem likely that the Yarm statistics are misleading.

Turning finally to sex structure, we can see the image of "masculine" Middlesbrough even more prominently than in the two earlier censuses. As with many other aspects of the social structure of the town that I have remarked upon in my sample analysis, the 1841 pattern seems to reassert itself.

As in the earlier summaries, I will next deal with my sample analysis, under the headings of family, household and lodgers. Unless stated otherwise, all my comparisons are between this census of 1861 and the 1851 findings.

2) The Family

1861 showed an increase in the average size of the family. This increase of 0.25 persons per family brought Middlesbrough extremely close to the Preston figure for 1851:

Table 113

	average family size
Middlesbrough 1851	3.84 persons
Preston 1851	4.2 "
Middlesbrough 1861	4.1 "

Thus something new in the Middlesbrough situation now compensated for lack of child labour that was referred to in the 1851 analysis. Both the age structure of the population and the new levels of work available, which are discussed next, lead towards an appreciation of this particular novelty.

The average age of the household head fell slightly, and the general spread of age-groups was more even than in 1851. The typical head now became a skilled labourer in industry, but whose birthplace was no longer likely to be Yorkshire.

Similarly the average age of the wife fell, and the general distribution of age and birthplace was more widespread compared with 1851. Once more there is tentative indication that she was more migratory than her husband.

Her children assumed a higher average number and also the proportion of families likely to record children increased. They were more likely to have been born in the town than in previous analysis, although there was some fall-off in those born in the two immediate counties.

The analysis of the head by status and age-group showed little change except that the distribution for small employers was more widespread, and the unskilled reached a peak in the forties in place of the earlier variable pattern. Predictably the typical head now became a worker in the manufacturing group instead of transport etc. Yet this applied most obviously to skilled and unskilled labour; for those of small employer and semi-skilled status the transport group remained most important. In respect

of birthplace, the earlier trend of status and the propensity to migrate continued with Ireland remaining the exception. So strong was this exception in respect of unskilled labour that it became a new trend in itself.

For the wife, two variable analysis showed that in age the wives of small employers tended to be older; those of skilled labourers changed little; while the wives of the unskilled were younger. Her birthplace showed a greater spread of areas.

Similar analysis of her children produced some changes. Instead of the single criterion of family income accounting for the various averages, a second criterion of lack of control over one's destiny, had to be introduced to account for the high average of the children of the unskilled. Analysis of birthplace of both eldest and youngest children suggests two main things regarding migration into the town. First, in regard to the immediate counties, it seemed that the relatively sluggish element in movement from Durham did not apply at small employer level. In contrast to this, the continuing and stronger flow of skilled workmen from the North Riding was noted. Second, regarding migration more generally, it seemed that the flow into Middlesbrough increased towards the end of the decade.

3) The Household

The average size of the Middlesbrough household showed an increase of 0.69 persons. As with the family, this increase put Middlesbrough in a similar position to Preston of a decade earlier:

Table 114

	average household size
Middlesbrough 1851	4.54
Preston 1851	5.4
Middlesbrough 1861	5.23

But it is in the similarities and differences in the actual make up of the comparative households that the most interesting aspects are to be found.

The composition of the 1861 Middlesbrough household showed similarities for two groups and changes for two others.

The similar groups were relations and servants; while changes took place with workpeople and lodgers. However this covered only average distribution; within each group there were also discernible changes.

Regarding relations, larger amounts of both percentage and average were shown for the small employer group, and smaller amounts for the three groups of labourer. The result was that a direct correlation emerged showing that the higher the social status, the more likely the living-in relation. With servants, there was a reshuffling among the three groups of labourer.

The more radical changes took place with workpeople and lodgers. The former became almost extinct while the latter were augmented. Although there was a general increase in the keeping of lodgers all round, it was impossible to apply the two previously used criteria to cover the position satisfactorily. The non-conforming group was

that of semi-skilled labour, having both too large a proportion of households in possession and too small an average holding.

As I remarked earlier in this section of my summary, the most interesting aspects of comparison with Preston concern the constituent parts of the household. Servants show little change and Middlesbrough retains similar low percentages to Preston:

Table 115

total households with servants

Middlesbrough 1851	9.70
Preston 1851	10
Middlesbrough 1861	8.90

Middlesbrough's fall in the workpeople element similarly has little significance here because, as I have previously noted, Dr. Anderson did not isolate this group as a separate category. With lodgers and relations, however, the analysis is most significant.

Middlesbrough's increased lodger element not only made up for the relative dearth in 1851, but left the Preston figure behind:

Table 116

total households with lodgers

Middlesbrough 1851	12.73
Preston 1851	23
Middlesbrough 1861	28.83

Whilst it would be more interesting to have the Preston figure for 1861 in order to make comparison, this leap on the part of Middlesbrough is remarkable. All the more so when one takes account of the difference in data collection between Dr. Anderson and myself: a difference which is bound to inflate the Preston figure in comparison with Middlesbrough. Moreover the obvious importance of the Middlesbrough lodger that this comparison shows justifies my treatment of this element as a very special case.

Finally, with regard to household kin, the Middlesbrough comparison tends to detract from Dr. Anderson's general thesis on kinship cohesion in industrial society:

Table 117

% total households with kin

	% total households with kin
Middlesbrough 1851	18.18
Preston 1851	23
Middlesbrough 1861	15.34

I noted the comparatively low kinship proportion for Middlesbrough in the 1851 analysis, and remarked that nevertheless the 18.18% for the town was still well above that for both pre and post industrial communities. However the 1861 proportion moves further away from the Preston percentage of 1851, and more towards the 10.1% of Laslett's pre-industrial household. This suggests that Anderson's thesis has to be further refined to embrace industrial societies during peak immigration phases, or to concede more validity to the "sociologist's" account of the effects of industrialisation on existing kinship groups.¹

1) Anderson (1971) op cit p 1.

4) Lodgers

The former analysis of the typical lodger being a man in his late twenties was strengthened by this current analysis. There was however a greater spread of age groups than had occurred earlier.

Three other changes were also noted in respect of the Middlesbrough lodger. Instead of the decline in the proportion of skilled labour and the increase in semi-skilled labour as noted in 1851, there was now an increase in skilled labour, and unskilled also. This increase in skilled labour however did not push the lodger percentage above that for household heads, which had seemed so odd in the 1841 analysis. Similarly there was a shift back to the 1841 situation wherein lodgers tended to come from beyond the two immediate counties. In this respect the position of those born in Ireland assumes more and more significance.

Finally, in the two variable analysis of lodger status and birthplace, it was seen that the domination of skilled labourer born in Durham or the North Riding no longer held. In spite of a decline in status as one moved away from the immediate counties, there was a large increase in unskilled labour and consequent losses in skilled and semi-skilled proportions. This change is in line with the relative decline in those locally born vis - a - vis the increase in those lodgers from more distant parts.

The 1871 Census

This analysis follows the pattern for 1861. My main concern is to test the 1861 changes. I would anticipate that these continue into 1871. Otherwise Middlesbrough development at this time will be very hard to explain.

1) The Family

Average family size was 4.33 persons and the household was 5.33 persons. There were slight rises in 1861: 0.14 for the family and 0.10 for the household. This continued the 1861 trend of larger domestic units.

a) The Head

By type:

Table 118

	male				female			
	married	widower	unmarried	unspecified	married	widow	unmarried	unspecified
number and percentage	319 (86.45)	14 (3.79)	3 (0.81)	0	1 (0.27)	31 (8.40)	1 (0.27)	0

As in 1861, the dominant type was the married man. Widowers accounted for a smaller proportion, while the proportion of widows increased but still remained a small percentage of the whole.

The average age of the head fell to 39.20: a slight drop of 0.34 years.

This continued the 1861 trend. The age distribution was:

Table 119

under 20	20 - 29	30 - 39	40 - 49	50 - 59	60+
1 (0.27)	81 (21.95)	125 (33.88)	90 (24.39)	46 (12.47)	26 (7.05)

This spread is very similar to that of 1861, thus the pattern of an even distribution is confirmed. There is a small increase in the thirties, 2.90%, but this is compensated for by a drop of 2.30% in the forties. On either side of these two main age groups, the proportions are almost identical.

Industrial distribution:

Table 120

not stated	prof.	admin.	manuf.	distn.	agric.	residual	unclear
18 (4.88)	3 (0.81)	4 (1.08)	206 (55.83)	137 (37.13)	1 (0.27)	0	0

Compared with 1861, the dominant role of the manufacturing group becomes more pronounced, whilst distribution declines by about the same proportion: around 3%. Changes in the groups, other than these two principal ones, are even less pronounced. There is a fall in the professional and agricultural groups, and a rise in the administrative one. The smallness of all these differences however indicates that the trends evident in 1851 are established and have become basic to the town: what was formerly a coal trade port dependant on West Durham, has by now become an ever growing iron centre, whose industry can draw on vast amounts of Cleveland ironstone.

By social status:

Table 121

not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	residual
19 (5.15)	2 (0.54)	22 (5.96)	206 (55.83)	32 (8.67)	87 (23.58)	1 (0.27)

As in 1861, skilled labourer status forms the largest group, while unskilled

labour forms the only other large group. All the other groups form less than 10% in each case, and show little variation in the ten years down to 1871. This lack of dramatic change confirms the impression of uniformity given in the industrial distribution data.

By birthplace:

Table 122

Middlesbrough	Rest of North Riding	Durham	Rest of Eng. and Wales	Scotland	Ireland	Foreign
10 (2.71)	89 (24.12)	64 (17.34)	134 (36.31)	12 (3.25)	56 (15.18)	4 (1.08)

This table follows the same pattern as that for 1861, and so confirms the contrast with the 75.25 situation of 1851. The differences between the 1861 and 1871 are as follows, and these differences can be compared with the appropriate table for 1851 and 1861:

Table 123

born in	% in 1861	% in 1871	% + or - in 1871
Middlesbrough	0.92	2.71	+ 1.79
Rest of the North Riding	35.58	24.12	- 11.46
Durham	13.19	17.34	+ 4.15
Rest of England and Wales	35.28	36.31	+ 1.03
Scotland	2.45	3.25	+ 0.80
Ireland	12.27	15.18	+ 2.91
Foreign	0.31	1.08	+ 0.77

Thus the basic shift from 75:25 to 50:50 took place in the 1850's, and not the 1860's, as Ravenstein thought. This new proportion was

confirmed in the 1871 material, and moreover, the shift was continued very slightly if one uses my analysis of immediate counties, rather than Ravenstein's analysis of the whole of Yorkshire as being the native county.

Thus a position of approximately 44:56 is arrived at. Such a shift is mainly accounted for by a drop of one third born in the Rest of the North Riding; and the shift would have been more extreme if Durham had followed the same trend: instead this county showed a rise of a third. Thus although the movement from Durham into Middlesbrough was more sluggish than that of the North Riding, it was at the same time less volatile. All the other areas show small increases, especially Ireland with an increase of nearly a quarter on the 1861 proportion.

b) The Wife

The average age was 35.92 years. This was a slight increase of 0.14 years on the 1861 figure. In this way, the trend towards a younger average set by the head was not followed.

The age distribution:

Table 124

- 20	20 - 29	30 - 39	40 - 49	50 - 59	60 +
2 (0.63)	101 (31.76)	105 (33.02)	75 (23.58)	23 (7.23)	12 (3.77)

There are no appreciable differences here compared with the 1861 spread. The small shifts that do occur are falls in the first age group followed by rises in the next group. This happens in pairs through all six age ranges. This pattern of slight change results in the thirties once more becoming the predominant group.

By birthplace:

Table 125

Middlesbrough	Rest of North Riding	Durham	Rest of Eng. & Wales	Scotland	Ireland	Foreign
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20 (6.29)	88 (27.67)	51 (16.04)	101 (31.76)	10 (3.14)	40 (12.58)	8 (2.52)
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Here the general distribution follows the pattern of 1861. The only change of any size is a trebling of the Middlesbrough born proportion, although this is from a very small initial percentage. The differences over the last ten years compare with those of the heads as follows:

Table 126

born in	+ or - in 1871 compared with 1861	
	wives	heads
Middlesbrough	+ 4.50	+ 1.79
Rest of the North Riding	- 2.08	- 11.46
Durham	- 2.60	+ 4.15
Rest of England and Wales	- 0.86	+ 1.03
Scotland	- 0.44	+ 0.80
Ireland	- 1.04	+ 2.91
Foreign	+ 2.52	+ 0.77

One conclusion from the comparisons of loss and gain between 1851 and 1861 was that wives (or at least potential wives) were less willing to move from the North Riding into Middlesbrough, but were more willing to move from Scotland and Ireland. We can now ask whether this trend continued with the 1871 results, and the general answer is no.

The big change for heads, as had already been noted, was the large drop in the North Riding proportion and the increase in that from Durham. Wives on the other hand show no great changes on a comparable scale. There was some increase in those wives actually born in the town; and, as on the previous comparison, this increase is greater than that for heads, but the amounts are small. All the other changes for wives are even smaller in proportion. Whereas heads show a large drop in the North Riding born, wives show just over 2%; and in the case of Durham, the heads' increase has to be compared with a drop of just over 2½% for wives.

Thus two things emerge from these comparisons. First that once more, wives appear as less migratory over long distances than husbands; and secondly, wives appear less volatile to change in this sense than household heads.

c) The Children

Of the 369 households in the sample, 298 showed children in the family, while 71 showed none. Thus 80.76% had children, which is almost identical with the 80.67% of 1861. The average number of children of those families in possession was 3.06, which is an increase of 0.19 children per possessing household on the 1861 average. This average increase is only slightly in excess of the 0.09 of 1861; and so the trends set then of larger families continues in 1871, although what is being measured is of course not completed families, but only those families who showed children resident on the night of the census.

The average age of the eldest child was 11.83 years, which is a slight drop of 0.28 on 1861. The birthplace distribution for the eldest child was:

Table 127

Middlesbrough	Rest of North Riding	Durham	Rest of Eng. & Wales	Scotland	Ireland	Foreign
120 (40.27)	55 (18.46)	37 (12.42)	66 (22.15)	6 (2.01)	11 (3.69)	3 (1.01)

In 1861 two changes were apparent: a growing proportion of town-born eldest children, yet also a shift away from those born in the two immediate counties to those born further afield. Do such changes continue in 1871? The answer is yes, but to a greatly reduced degree. In tabular form, the two sets of changes appear:

Table 128

eldest children born in	gains and losses by	
	1861	1871
Middlesbrough	+ 3.42	+ 4.36
Rest of North Riding	- 9.78	- 0.08
Durham	- 12.38	- 1.86
Rest of England and Wales	+ 14.07	- 0.24
Scotland	+ 2.20	- 1.85
Ireland	+ 2.53	- 1.33
Foreign	0	+ 1.01

The changes indicate further growth in those eldest children born in the town, and a further fall off in those born in the two immediate counties, but the continuing trend stops at this point. There is no increase in the proportions from the three more remote areas, foreign born excepted.

Instead there is slight decreases in all cases. Thus the conclusion is that the number of eldest children born in Middlesbrough continued to increase appreciably, whilst all the other areas of birth showed little change.

The average age of the youngest child was 4.34 years, being a drop of 0.38 on 1861. The span between the eldest and youngest averages was thus 7.49 years, an increase of 0.10 years since 1861. Both these changes followed the trend of 1861.

Birthplace distribution for youngest children was:

Table 129

Middlesbrough	Rest of North Riding	Durham	Rest of Eng. & Wales	Scotland	Ireland	Foreign
167 (72.61)	16 (6.96)	16 (6.96)	26 (11.30)	2 (0.87)	1 (0.43)	2 (0.87)

In the analysis of 1861, youngest children showed less dramatic changes than eldest children. Mainly this meant a smaller fall in those born in the immediate counties, and a smaller increase of those born in more distant parts. This same trend was not followed in 1871, when, with little exception, the changes reverted to the more dramatic, with larger drops for the two immediate counties, and larger shifts from other parts. In tabular form, the differences are:

Table 130

children's birthplaces	% + or - in 1871	
	youngest	eldest
Middlesbrough	+ 4.24	+ 4.36
Rest of the North Riding	- 3.24	- 0.08
Durham	- 3.75	- 1.86
Rest of England and Wales	+ 3.14	- 0.24
Scotland	- 0.15	- 1.85
Ireland	- 1.10	- 1.33
Foreign	+ 0.87	+ 1.01

Thus once more the pattern of a decrease in the trend of immigrants from the immediate counties showed a fall, whilst the trend for those born in the Rest of England and Wales rose. Scotland and Ireland however showed falls, although to a lesser extent than those for eldest children.

d) The Head - 2 variable analysis:

By status and age:

Table 131

	not stated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
- 20	0	0	0	0	0	1 (1.15)	0
20 - 29	0	0	4 (18.18)	54 (26.21)	10 (31.25)	13 (14.94)	0
30 - 39	4 (21.05)	0	7 (31.82)	79 (38.35)	10 (31.25)	25 (28.74)	0
40 - 49	3 (15.79)	0	6 (27.27)	48 (23.30)	5 (15.63)	27 (31.03)	1 (100.00)
50 - 59	6 (31.58)	2 (100.00)	4 (18.18)	13 (6.31)	5 (15.63)	16 (18.39)	0
60 +	6 (31.58)	0	1 (4.55)	12 (5.83)	2 (6.25)	5 (5.75)	0

Two main aspects emerge from a comparison with the 1861 findings: there is a larger proportion of small employers in the twenties age group; and also there is a smaller proportion of unskilled labour in this same age range. This variation is then reflected through both these status groups by small gains or losses. On the other hand there is very little variation for skilled and semi-skilled labour. The only significant shift within any of the status groups, is for the small employers who show a peak in the thirties, whereas in 1861 there had been a pronounced peak in the forties. By status and industrial group:

Table 132

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
unstated	18 (94.75)	0	0	0	0	0	0
prof.	0	2 (100.00)	1 (4.55)	0	0	0	0
admin.	0	0	3 (13.64)	1 (0.49)	0	0	0
manuf.	0	0	3 (13.64)	112 (54.37)	15 (46.88)	75 (87.36)	0
trans.	1 (5.26)	0	15 (68.18)	93 (45.15)	17 (53.12)	10 (11.49)	1 (100.00)
agric.	0	0	0	0	0	1 (1.15)	0
res.	0	0	0	0	0	0	0

The comparison between the 1851 and 1861 data showed that although the relative importance of transport etc. compared with manufacturing had declined, nevertheless this group retained some important elements. Especially a predominance in the small employer group; and also among the semi-skilled; the first embraced almost three-quarters of the total; the second almost two-thirds. Explanations

have already been suggested for these phenomena. With regard to the 1871 data, we can now ask if the same, ostensibly unexpected, trends continue. The answer seems to be yes, but to a diminished degree.

The transport group still retain a majority of small employer status, but the three-quarters of 1861 becomes just over two-thirds in 1871; at the same time, the proportions of both the administrative and the manufacturing groups showing this status have doubled. Similarly although the transport group retains a majority of semi-skilled labour, the former two-thirds now becomes just over one half. The former majorities possessed by the manufacturing group among the skilled and unskilled labourers, are both increased, although not dramatically in either case. Thus the remarks made in regard to the 1851/61 comparison remain valid in 1871, but carry less weight. The factors which helped to retain something of the pre-1851 economic basis of the town, are now operating to a lesser degree as the purely manufacturing elements of the town become more and more significant.

By status and birthplace:

Table 133

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	0	0	0	7 (3.40)	2 (6.25)	1 (1.15)	0
Rest of the North Riding	8 (42.11)	0	8 (36.36)	46 (22.33)	6 (18.75)	20 (22.99)	1 (100.00)
Durham	4 (21.05)	0	7 (31.82)	40 (19.42)	6 (18.75)	7 (8.05)	0
Rest of Eng. and Wales	3 (15.79)	1 (50.00)	5 (22.73)	88 (42.72)	14 (43.75)	23 (26.44)	0
Scotland	0	1 (50.00)	1 (4.55)	7 (3.40)	1 (3.12)	2 (2.30)	0
Ireland	4 (21.05)	0	0	17 (8.25)	3 (9.73)	32 (36.78)	0
Foreign	0	0	1 (4.55)	1 (0.49)	0	2 (2.30)	0

The analysis of the 1841/51 data showed two trends: the dominance of the immediate area, and the descent down the social scale with regard to long distance migration; the only real exception was the unskilled Irish. 1861 confirmed both aspects: trends and exception; and so we can ask the same questions of the 1871 analysis as we did of the 1861 findings.

This table shows that only the small employer status group retained the immediate area dominance: in fact strengthen for both the immediate counties when compared with 1861. For the rest, however, the majority is to be found from beyond the immediate area.

Skilled labour has nearly 55% from beyond the immediate area; semi-skilled nearly 57% and unskilled nearly 68%. Thus the exception of 1851, which became pronounced for unskilled labour in 1861, now becomes almost a general rule for labour by 1871: namely that the town was drawing more of its population from beyond the two immediate counties than it was drawing from the North Riding and Durham. The other trend, whereby absolute numbers declined as one descended the social scale, showed the same pattern in 1871 as in 1861.

e) The Wife - 2 variable analysis

Average age by social status of head:

Table 134

unstated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	residual
0	51.50	35.18	35.05	35.08	38.14	0

From the average age of the aggregate, the trend of a slightly older wife has been seen, although only by a very small amount. What emerges from the above breakdown is that some appreciable differences exist between social groups. Wives of the capitalist status group show a higher average age, although the same was small. This group apart, a pattern emerges whereby the main differences appear at the social extremes in that there is a drop of nearly 5 years for small employer wives, and an increase of nearly 3 years for unskilled labourer wives. Away from these extremes, the wives of skilled labourers showed an almost negligible fall, and those of the semi-skilled a rise of not much more than 1 year. This contrasts with the situation of 1851/61 when the average for the wives of small employers was almost unchanged, while that for the unskilled had shown a decline. These changes can now be seen in more detail.

By specific age groups:

Table 135

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	w/s/labs.	res.
- 20	0	0	0	0	0	2 (2.56)	0
20 - 29	0	0	8 (36.36)	68 (35.42)	7 (29.17)	18 (23.08)	0
30 - 39	0	0	6 (27.27)	69 (35.94)	10 (41.67)	20 (25.64)	0
40 - 49	0	1 (50.00)	7 (31.82)	37 (19.27)	5 (20.83)	25 (32.05)	0
50 - 59	0	1 (50.00)	0	9 (4.69)	2 (8.33)	11 (14.10)	0
60 +	0	0	1 (4.55)	9 (4.69)	0	2 (2.56)	0

If we exclude the small capitalist group, we can then compare shift in emphasis with the analysis of the 1851/61 data. First there is a proportional shift in the small employer group from the thirties to the twenties. This seems to be part of a trend towards youth in that the predominance of the thirties in 1861 was weaker than that in 1851.

Among the groups of labourers, the emphasis shifts very slightly from the twenties to the thirties, and this also follows the pattern of the 1851/61 analysis. The shift for the semi-skilled is closely parallel to this, except that the change represents a reversion to the 1851 proportions. Finally, the unskilled show the biggest shift of all, in that the emphasis moves from the twenties to the forties. No pattern is discernible here, in that the 1851 data shows the thirties as the largest proportion.

By status and birthplace:

Table 136

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	w/s/labs.	res.
Middlesbrough	0	0	2 (9.09)	14 (7.29)	2 (8.33)	2 (2.56)	0
Rest of the North Riding	0	0	6 (27.27)	58 (30.21)	7 (29.17)	17 (21.79)	0
Durham	0	1 (50.00)	6 (27.27)	31 (16.15)	6 (25.00)	7 (8.97)	0
Rest of Eng. and Wales	0	1 (50.00)	5 (22.73)	64 (33.33)	7 (29.17)	24 (30.77)	0
Scotland	0	0	1 (4.55)	7 (3.65)	0	2 (2.56)	0
Ireland	0	0	0	13 (6.77)	2 (8.33)	25 (32.05)	0
Foreign	0	0	2 (9.09)	5 (2.60)	0	1 (1.28)	0

Two aspects were noted in 1861 when compared with 1851: the greater spread of birthplaces beyond the immediate counties, and the slightly higher propensity on the part of wives to migrate, compared with household heads. Again we can ask how the 1871 analysis compares. First in regard to the birthplace distribution, there is no appreciable difference for small employers, skilled and semi-skilled labourers simply in the local / remote proportions; there is a significant change, however, in this respect in regard to the unskilled. Nevertheless even in those three status groups where the basic proportions remain the same, there are interesting variations within the two main birthplace groupings.

The proportion of small employers status born in the vicinity shows a slight increase on 1861. This represents an increase in the town born proportion, while the rise in North Riding born is compensated for by a fall in the Durham born. With the analysis of this 1871 data, the town born element, although not yet large in any status group, begins to emerge as a general phenomenon in all the four main status groups for wives.

Among the wives of skilled labourers there is a slight fall in the locally born. As with the small employers, there is an increase in the town born, but this is more than offset by falls in both the North Riding and the Durham born.

The semi-skilled show a very slight increase in the locally born; and the fact of over one-twelfth born in the town, as opposed to none in 1861, alongside an increase also in the Durham born, is almost wholly offset by a substantial fall in the North Riding born.

Yet it is the unskilled who present the most significant change. The locally born proportion of one quarter in 1861 increases to one third in 1871. This shift is accounted for mainly by a fall in the Irish born from nearly one half of the total in 1861 to just under one third in 1871. Thus on the whole the 1861 balance between the locally born and the rest is maintained in 1871 apart from the unskilled status wives, who show a slight reverse trend because of the fall in the proportion of Irish born wives.

Our second aspect concerns the comparison of wives and heads in regard to the distance of migration. In 1841 it seemed that wives were more migratory, then less so in 1851, then more so again in 1861. Does the 1871 data continue the 1861 trend, or does it simply confirm what seems to be a pendulum type motion? A tabular layout shows the 1871 data thus:

Table 137

Born outside the North Riding and Durham	s/emps.	s/labs.	s/s/labs.	u/s/labs.
% of wives	36.37	46.35	37.50	66.66
% of heads	31.83	54.86	56.60	66.82
+ or - for wives	+ 4.54	- 8.51	- 19.10	- 0.16

In spite of the exceptional case of the \nearrow gain in the small employer group, there is no equivocation in the general tendency shown by this table. Wives appear far less migratory than household heads. Thus no trend emerges here that was only temporarily interrupted in 1851; instead the pendulum type motion is confirmed whereby sometimes wives appear to be more migratory than heads but not at other times.

f) The Children - 2 variable analysis

Average number of children by status of family head:

Table 138

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	w/s/labs.	res.
number and average	38 (2.71)	2 (2.00)	71 (3.38)	493 (3.01)	52 (2.82)	246 (3.28)	1 (1.10)

Here the patterns of 1851 and 1861 are repeated. If we take the four main groups as in the two earlier analyses, then the small employer status group once more has the highest average number of children. This average is closely followed by that for unskilled labour. Of the two middle groups with lower averages, those of skilled status show a larger average than those of semi-skilled status. Thus the generalisations put forward in this point in the 1861 analysis hold also for 1871, namely that two factors seem to operate in regard to family size: financial standing, and, at the other end of the social

scale, no attempt to control one's destiny. This last aspect seems even more significant in 1871 in that while the average for unskilled labour has risen by 0.28 years, the other averages have produced a shorter span when compared with 1861. This has been achieved by a drop in the small employer average, and a slight rise among the semi-skilled labourers.

The eldest child by status and birthplace:

Table 139

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	7 (50.00)	0	11 (52.38)	58 (41.46)	9 (40.91)	25 (33.33)	0
Rest of the North Riding	2 (14.29)	0	6 (28.57)	30 (18.29)	2 (9.09)	15 (20.00)	0
Durham	3 (21.43)	1 (100.00)	1 (4.76)	18 (10.98)	7 (31.82)	7 (9.33)	0
Rest of Eng. and Wales	1 (7.14)	0	1 (4.76)	40 (24.39)	3 (13.64)	20 (26.67)	1 (100.00)
Scotland	0	0	1 (4.76)	3 (1.83)	0	2 (2.67)	0
Ireland	1 (7.14)	0	0	3 (1.83)	1 (4.55)	6 (8.00)	0
Foreign	0	0	1 (4.76)	2 (1.22)	0	0	0

The main trends shown in 1861 continue in 1871. There is a general increase of those eldest children actually born in the town; and of these, one group shows a much larger increase than the rest, but whereas in 1861 this increase had accrued to the unskilled, in 1871 the exceptional increase went to the small employer status group.

In regard to those eldest children born in the immediate counties, there are some interesting changes in the shifts between the North Riding and Durham. In 1861 the general tendency had been to find a proportional drop in eldest children born in these two counties, with the exception of rises of the small employer group from Durham, and the skilled labour group from the North Riding. In 1871 the picture is more complicated.

Here the 1861 position regarding the small employer group is reversed, in that there is a large rise in the North Riding born contingent, and an even larger fall in the Durham born proportion. Thus the generalisations advanced in the 1861 analysis have to be amended. Skilled labour follows the 1861 pattern, while unskilled labour shows little change. There is, however, a big change for semi-skilled labour in that those born in the North Riding show a large proportional drop, while those born in Durham show an equally large increase.

Youngest children by status and birthplace:

Table 140

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	5 (50.00)	1 (100.00)	12 (80.00)	99 (77.34)	11 (73.33)	39 (63.93)	0
Rest of the North Riding	1 (10.00)	0	1 (6.67)	8 (6.25)	1 (6.67)	5 (8.20)	0
Durham	2 (20.00)	0	1 (6.67)	4 (3.12)	4 (26.67)	5 (8.20)	0
Rest of Eng. and Wales	1 (10.00)	0	1 (6.67)	13 (10.16)	0	11 (18.03)	0
Scotland	0	0	0	1 (0.78)	0	1 (1.64)	0
Ireland	0	0	0	1 (0.78)	0	0	0
Foreign	1 (10.00)	0	0	1 (0.78)	0	0	0

This pattern resembles that of 1861. Larger proportions of youngest children are born in the town than eldest children. Similarly the proportions from beyond the two immediate counties remain very small. The suggestion is that the migration patterns of 1861 were continued in 1871.

2) The Household

a) Distribution of household members outside the nuclear family:

Table 141

	number of households		with	average in the possessing household
	with	without		
relations	65	304	17.62	1.49
workpeople	9	360	2.44	1.44
servants	36	333	9.76	1.22
lodgers	100	269	27.10	2.10

The general comparison with 1861 shows no great changes. Relations move back towards the 1851 position, with a rise in the households in possession and a fall in the average possessed. Both changes however are very slight.

Similarly with workpeople. Possessing households increase but the possessed average falls. This also represents a move back to the 1851 situation, but again the changes, although significant comparatively, arise from extremely same amounts initially.

Servants and lodgers show little change in both proportion and average. The former remains relatively small and the latter relatively large.

b) Relations - 2 variable analysis:

Table 142

status of household	number of households		% with	average possessed
	with	without		
not stated	5	14	26.32	2.40
caps.	0	2	0	0
s/emps.	3	19	13.64	1.00
s/labs.	39	167	18.93	1.28
s/s/labs.	5	27	15.63	2.00
w/s/labs.	12	75	13.79	1.75
residual	1	0	100.00	1.00

Here the symmetry of 1861 is not maintained. Neither the percentage of possessing households, nor the average of possessed fall evenly, as one descends the scale of social status. The greatest difference concerns small employer status with a drop from highest percentage and average to the smallest in both cases. Some resemblance of the 1861 pattern nevertheless remains with the even fall in households in possession from the skilled to the unskilled. But the averages do not correspond. The highest comes in the middle, with the semi-skilled showing an average of 2.00; next the unskilled, and last the skilled. Thus once more the neat generalisation advanced for the 1861 analysis has to be amended.

c) Workpeople - 2 variable analysis:

Table 143

household status	number of households		% with	average possessed
	with	without		
unstated	0	19	0	0
caps.	1	1	50.00	2.00
s/emps.	4	18	18.18	1.25
s/labs.	4	202	1.94	1.50
s/s/labs.	0	32	0	0
u/s/labs.	0	87	0	0
residual	0	1	0	0

Some increases occur here, in comparison with 1861. Looking at the two larger groups which possess workpeople, one sees an increase for small employers in the percentage with workpeople, but a proportional drop in possessed average. Skilled labour status however shows increases in both respects, but this is from very low amounts initially. In spite of such changes, however, the 1871 analysis underlines the point made in the 1861 analysis that households possessing workpeople played a very small part in the social structure of the town.

d) Servants - 2 variable analysis:

Table 144

household status	number of households		with	possessed average
	with	without		
unstated	1	18	5.26	1.00
caps.	1	1	50.00	1.00
s/emp.	12	10	54.55	1.67
s/labs.	17	189	8.25	1.00
s/s/labs.	4	28	12.50	1.00
u/s/labs.	1	86	1.15	1.00
residual	0	1	0	0

Compared with the changes noted in the 1851/61 analysis, the changes tabulated above do indicate some increase in all-round prosperity, although some of the increases are small.

Apart from the capitalist status group, where the sample once more is very small, all the groups show percentage-in-possession increases except the unskilled labourers. The most dramatic of these increases is the proportional increase experienced by small employer households from over a third to over a half of the total. Alongside this, there is an average increase of just over half as much again. In spite of these increases, the other status groups do not represent an important element in the servant-keeping element of the town. Nevertheless this element has increased slightly, and must represent some increased wealth on the 1861 position.

e) Lodgers - 2 variable analysis:

Table 145

household status	number of households		with	possessed average
	with	without		
unstated	11	8	57.89	2.00
caps.	0	2	0	0
s/emp.	2	20	9.09	3.00
s/labs.	45	161	21.84	1.80
s/s/labs.	12	20	37.50	2.33
u/s/labs.	30	57	34.48	2.43
residual	0	1	0	0

This table shows changes from 1861. As in 1851, the largest average holding was among the small employer households; although a large decline in the proportion of possessing households has also taken place compared with 1861. This taken into account, the changes between 1861 and 1871 are less than in the two earlier comparisons.

If we account for lodger keeping in the small employer status group by a combination of house size and lodger expectation, then the other three main groups fall into a discernible pattern. As one descends the social scale, lodger holding becomes more common. This situation has been apparent also in earlier analyses. A slight exception occurs in that the semi-skilled percentage is higher than that for the unskilled, but this is compensated for in the difference in the averages.

Thus my suggested two criteria that determine lodger holding seems to apply in 1871 as in earlier censuses. However the emphasis seems to shift somewhat between the two, and the criterion

of financial need on the part of the household seems a much stronger factor than the criterion of lodger expectation.

3) The Lodgers

a) Single variable analysis:

185 lodgers were men and 5 were women. Thus the 97.37% which represents the male proportion of the "vital" lodger element is an increase of 4.51% on 1861, and further consolidates the masculinity of the town. At the same time the average age of the lodger increased from the 29.80 years of 1861 to 30.27. This slight increase continued the trend from 1851, so the basic image of the typical Middlesbrough lodger remains unchanged.

The age distribution:

Table 146

	- 20	20 - 29	30 - 39	40 - 49	50 - 59	60 +
number and percentage	16 (8.42)	94 (49.47)	46 (24.21)	18 (9.47)	11 (5.79)	5 (2.63)

No changes of any significance are apparent between this table and that of 1861. There are slight shifts from the under twenties to the twenties, and from the forties to the fifties. The twenties remain the largest age group by far, with just under half the total.

By social status:

Table 147

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
number and percentage	1 (0.53)	0	2 (1.05)	80 (42.11)	19 (10.00)	88 (46.32)	0

Again there is no significant change when compared with 1861, except a small shift in proportion from skilled to unskilled labour status group makes the latter the largest proportion of lodgers. Otherwise the pattern remains the same, and also, as in the 1851/61 comparison, the lodger proportion of skilled labour lags that of household heads' proportion.

By birthplace:

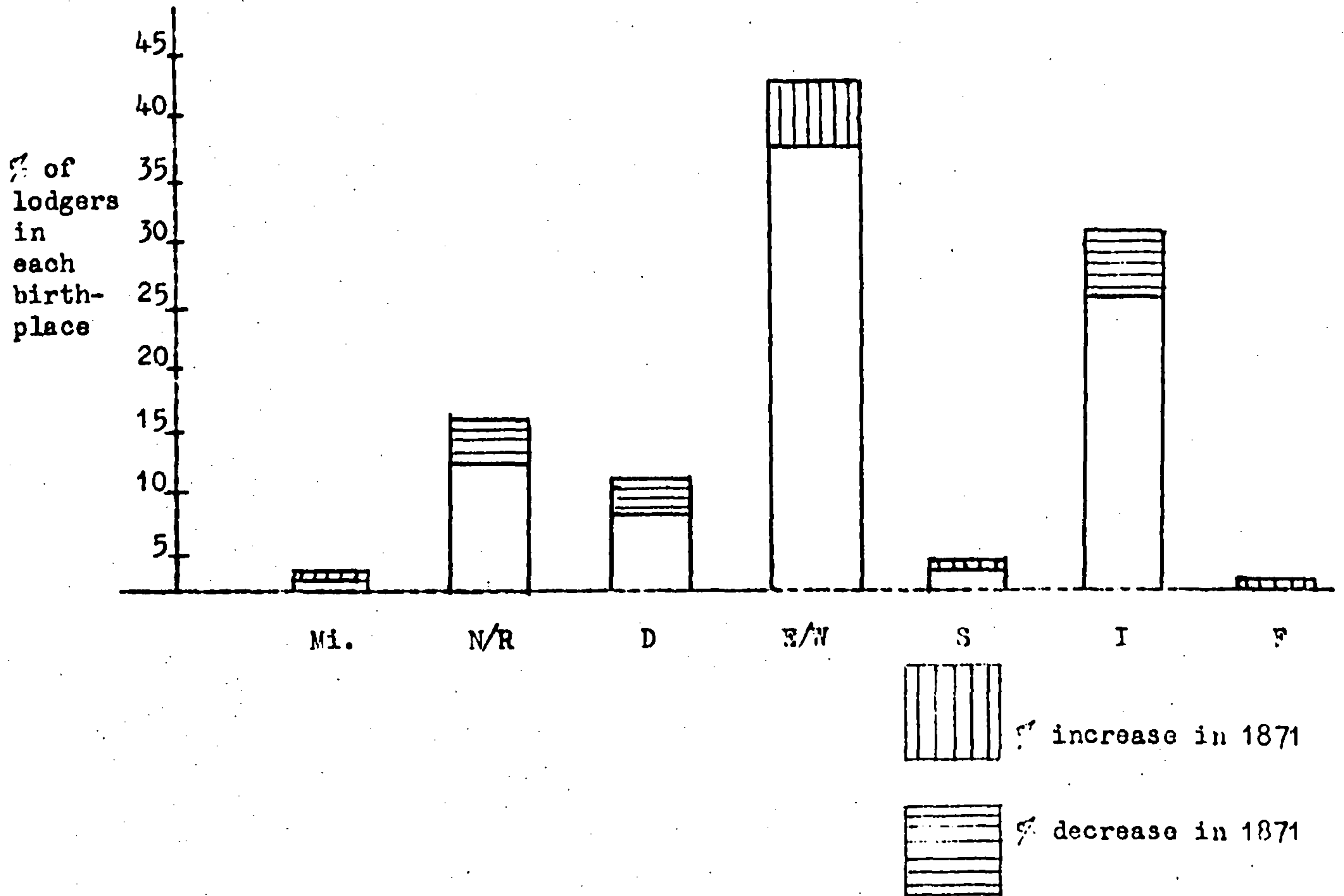
Table 148

	Middlesbrough	rest of North Riding	Durham	rest of Eng. & Wales.	Scotland	Ireland	Foreign
number and percentage	5 (2.63)	27 (14.21)	14 (7.37)	82 (43.16)	9 (4.74)	50 (26.32)	3 (1.58)

The trend of 1861 is continued in this table, with only minor deviations, Yet the changes away from the locality, in favour of the more distant places, does not show the dramatic changes of 1861. This therefore reinforces the earlier comments in relation to the 1840's: not a turning point, but an interruption in a long term pattern of migration.

This confirmation of a tradition can be seen by comparing the differences between the census of 1861 and 1871, with the differences between those of 1851 and 1861. The following histogram shows the percentage losses and gains for the various lodger birthplaces in 1871 compared with 1861.

FIG XLi



b) Lodgers - 2 variable analysis by social status and birthplace:

Table 149

	unstated	caps.	s/emps.	s/labs.	s/s/labs.	u/s/labs.	res.
Middlesbrough	0	0	0	1 (1.25)	1 (5.26)	3 (3.41)	0
Rest of the North Riding	0	0	1 (50.00)	16 (20.00)	3 (15.79)	7 (7.95)	0
Durham	1 (100.00)	0	1 (50.00)	5 (6.25)	3 (15.79)	4 (4.55)	0
Rest of Eng. and Wales	0	0	0	43 (53.75)	8 (42.11)	31 (35.23)	0
Scotland	0	0	0	6 (7.50)	0	3 (3.41)	0
Ireland	0	0	0	9 (11.25)	3 (15.79)	38 (43.18)	0
Foreign	0	0	0	0	1 (5.26)	2 (2.27)	0

There are no great changes here compared with 1861. The even spread of birthplace continues, and an analysis of the three grades of labourer shows that, the Irish apart, the skilled are more willing to travel than the less skilled. In all these cases however, those born beyond the immediate counties proportionally outnumbered those from nearby birthplaces.

Summary

This summary mainly concerns the comparison between the analysis of the 1861 and 1871 data.

1) Aggregate Situation

With few exceptions, the data for the 1871 census presents a logical continuation of the trends established in 1861. The continuing growth of the local iron industry furthered all the main changes established in the 1861 analysis and detracted from the patterns of 1851. We can look first at comparative growth rate.

Table 150

	1861	1871	% increase
England and Wales	20,066,224	22,712,266	13
Durham	508,666	685,089	35
N.Yorks	245,154	293,278	20
Middlesbrough	18,992	39,563	109

All these rates of growth, except that for Middlesbrough, are an increase on the comparative data for the earlier decade. Durham continues to grow at an impressive rate, while the North Riding begins to exhibit industrial growth rate features. Obviously here, Middlesbrough's exploitation of

- 1) This and the following table derived from:
 Population Tables, vol I, 1872, C.676, pp 200 & 437.
 Population Abstracts, vol III, 1873, C.872, p xii.
 General Report, 1873, C.872 - 1, pp x - xiii.

Cleveland ironstone had a direct effect on population growth in North Yorkshire. However, even as the exception to increasing rates, Middlesbrough's growth remains remarkable. We know, however, in retrospect, that Middlesbrough's growth rate had in 1871 passed its peak, and this percentage for 1871 marked the downward trend to the present day.

Age and sex structure compared thus:

Table 151

	under 20	20 & over	% under 20	male	female	% male
Eng. & Wales	10,382,453	12,329,813	46	11,058,934	11,653,332	48.8
Durham	335,679	349,410	49	353,117	331,972	51.5
N.Yorks	108,649	126,168	46 ¹	148,771	144,507	50.7
Middlesbrough	18,713	20,850	47	21,515	18,048	54

The percentages of the under 20's follow a similar pattern to the changes in growth rates. The North Riding shows no change however, while Middlesbrough is the only area to show a relative fall. This fall means that in comparison with (say) Durham, the image of "young" Middlesbrough somewhat recedes: but it ought to be borne in mind that this particular image has emerged clearly only once in my analyses of four censuses.

Turning to sex structure, the other main image, "masculine" Middlesbrough, remains as prominent as ever. Even Durham shows a fall-off in this respect, but the North Riding shows a slight rise. However the Middlesbrough male proportion of 54% matches the proportion of the previous analysis, and remains higher than any other proportion in all those that I have tabulated over all four censuses.

1) These figures refer to the Registration County.

1) The Family

For the most part, the 1871 analysis confirms the patterns that were detectable in 1861. Thus we can generally say one of three things in aspects of comparison. Either that the situation was virtually unchanged, or that small changes simply emphasised the apparent pattern, or that the few changes that were not in conformity with the pattern nevertheless did not amount to a new pattern.

In respect of the family as a social unit, and also in respect of the constituent parts, all three of the above remarks apply. Most details are almost identical for the head, the wife, and the children. Trends are further emphasised in some details, such as the relative decline in importance of the transport industrial grouping, and in the continued wider spread of birthplaces. Wives seem once more to be less migratory than heads; and a larger proportion of children are town born.

2) The Household

From a proportional aspect, the 1871 analysis closely follows that of 1861. The only differences occur within each particular category, where there is less symmetry than previously. This suggests that earlier generalisations have to be scrapped, or made more comprehensive.

3) The Lodgers

Again the 1871 analysis follows the findings of 1861. All the earlier basic patterns are reproduced, with the Irish elements providing the only significant exception to the suggested generalisations.

Chapter 5Assessments of Early Middlesbrough1) Introduction

I have already drawn on much received comment in respect of early industrial Middlesbrough. Nevertheless I feel that it is still useful to arrange more of this kind of material in some sort of methodical way in order to focus on the main elements of opinion. One big problem of course is where to draw the dividing lines for any methodology: should the divisions be based on subject matter or on the period of comment. I have used the latter.

In order to illustrate the main elements of opinion on the early developments of the town I have drawn on a wide range of examples. Having decided to base my division on the period of comment, I could almost have concocted a five-fold arrangement whereby each generation of writers would be taken into account, between the time of the start of industrial Middlesbrough and now. However for the sake of readability, I have decided on a two-fold division of Victorians and Moderns: mainly I have in mind those writers who were at work when the early days of Middlesbrough were within living memory, and those who had to consult some kind of record in order to proclaim their opinion.

In this present short chapter I have omitted all reference to the demography of the town: my focus is upon the urban entity. In the early part of Chapter 4 I covered sufficient ground on past work on the town's population. Moreover I will return to this subject in my conclusions where I will go over my findings in some detail.

Even having restricted myself thus, I find a wide range of

possibilities available. An even narrower constraint would be to concentrate solely on the Pease Plan, and even here diversity arises.

Often these diverse comments are so bound up with later developments that it is difficult to disentangle approval from condemnation, especially regarding the plan as simply an idea. I will limit these preliminary remarks to four representative examples covering contemporary and later writers, as well as local people and outsiders.

First there is praise for the plan, both as an idea, and for what it bodes for the future. This sort of comment tends to come from mid-Victorians, often from those in residence in Middlesbrough who also have some sort of established economic position. William Taylor provides such an example.¹

His father was an owner in the coal shipment trade at Stockton from 1828 whilst the son was still at school in York. For a time in 1832 William travelled from Stockton to work with the railway company in Middlesbrough, but after some time came to live permanently in Middlesbrough at the corner of Stockton and Commercial Streets. In describing the streets as they fitted into the plan he says, 'it gives us some idea of what the promoters thought it might attain to, with its fine streets, East, West, North and South, meeting in the square in the Market Place.' There is no hint of doubt in his remarks on the plan, only optimism for the future.

A much later commentator was W.W. Tomlinson; also a transport man, but not local.² He was mainly concerned with a long detailed

1) William Taylor's Notes on Middlesbrough - These were written in 1876, and later transcribed by the then borough librarian, Baker Hudson, in 1923, p 26.

2) Tomlinson's North Eastern Railway - 1967 reprint of the 1915 edition, p 190.

history of the North Eastern Railway, but the creation of Middlesbrough was an integral part of such a history. As with Taylor there is a thought provided for the future, but from the point of view of the past not the present. As an adjunct to the opening of the Middlesbrough coal staithes Tomlinson notes, 'Near to Port Darlington, on the Middlesbrough Estate, a new town had been planned, which the local press, at least, believed would soon become a place of great trade and opulence.'¹

The writer does not say so overtly but his impression of what Middlesbrough became, or at least of what the original town became, must have prompted him to transfer optimism for the future to a press report, while reserving his own judgment. Nevertheless he adds, 'In the square area of 32 acres laid out as the site of the new town - the first to owe its existence entirely to the railway - the first house had been built in April 1830 ...'

A much later commentator still is William Lillie, Borough Librarian of Middlesbrough from 1926 to 1951.² His book was commissioned by the local authority to commemorate the demise of the County Borough of Middlesbrough, on the eve of the inauguration of the County Borough of Teesside. The writer tends not to see any mistakes in the unfolding of Middlesbrough history: there are merely problems, some huge, but solutions are always found.

Impressed by speed of development, Lillie notes, 'Almost overnight Joseph Pease's dream came true'; and in reference to the partners as a whole, 'Their plan for the new town was the simple

1) Although there was no local press till 1853 Tomlinson here refers to the Durham Chronicle, 1st January 1831.

2) W.Lillie, op cit p. 57.

one of a central square with roads radiating to the four cardinal points - North, South, East and West Streets.'

Finally there is the outside view that constitutes a complete condemnation of the Pease Plan. Such an example is offered in the comparative study by Colin and Rose Bell.¹ Having categorised Middlesbrough as being among the 'feudal plantations of a new aristocracy', along with Crewe, Swindon, Eastleigh and Barrow, the writers add that it was 'a very special example of the town-building of the 19th century'. Yet this example, that constitutes 'Joseph Pease' invention high on an empty marsh', did not endure in any acceptable way after the mid 1840's. Whilst Pease spoke in Parliament on social and political reform, his town remained 'relatively unmarked by the great tide of utopian community-planning which was rising throughout England at the time'.

Although the Bells admit that 'in urban planning, Middlesbrough demonstrated unexceptional taste for the regular and symmetric,' they add that the grid-iron pattern represented the wrong kind of uniformity, along with red bricks and no grass. The fact that the grid-iron pattern continued south of the old town during the expansion related to the iron industry, makes the Bells all the more critical of the unimaginative uniformity of the original town.

These remarks by the Bells could also be used for any attempt to present a range of opinion based narrowly on the Pease Plan: such an attempt would be too rigid and leave out closely related and essential matter. I have therefore decided to broaden my comments to cover not only the plan, but also its implementation, and the

1) Colin & Rose Bell - op cit passim.

impression that the early town had on a range of people: contemporaries, those living in the later nineteenth century, and more modern writers. As I have mentioned on the first page of this introduction, the arrangement is in two parts: First the work of Victorian writers, followed by the comments of twentieth century critics.

2) The Victorian Critics

In looking at contemporary comment there is an uneasy proximity of opinion. With very little exception two main groups of opinion emerge. First, and by far the larger of the two, is the unequivocal praise of the Pease town. The only variation here is where the admirer chooses to place most stress. A second view is one that describes some aspect of Middlesbrough life at this time without a definite view of the town. Often here however is an implied admiration.

A common view in the first category is one that approves of the appearance of the town. Already we have seen some of the views of Turnbull¹ in his address to the civil engineers; and in the same year J.W.Ord wrote a local history which included the development of Middlesbrough.²

After referring to the purchase of the estate from Chilton, Ord describes the 'vast design' and goes on, 'A handsome, well-built, commodious town speedily sprang up, diverging at right angles in well-formed streets from a large square in the centre, used as a market-place, where court-houses and spacious covered buildings for traffic are now in course of erection.' Even if Ord was referring only to the appearance of the town in the 1830's his praise does not flag when he makes reference to the early 1840's: the public buildings attract him (opening of St. Hilda's Church, the market, and the Exchange Hotel). Yet a very recent

1) Geo. Turnbull - op cit. See p 105 of the thesis.

2) J.W.Ord - The History and Antiquities of Cleveland (1846). Reprint 1972 with new introduction, p 536.

assessment of Ord underlines his passion and powers actually to¹
observe those things he writes about.

Besides the appearance of the town, praise has been found
for its unique aspects. Turnbull thought that the Owners of the
Middlesbrough Estate had conceived 'the bold and in this country²
novel project of creating a new town'. Yet the speed of development³
usually excited even more comment. Both Head writing in the 1830's³
and Edward Pease in the 1840's⁴ noted the rapid development, and
Joseph Pease himself commented on this, but more from an economic
view in 1838.

It was in this year that Middlesbrough received its first
royal visitor, the Duke of Sussex; though it seems very likely
that the visit was primarily to see Lord Dundas at Upleatham Hall
and that Middlesbrough was conveniently nearby. Nevertheless an
occasion was made of the visit, and among the guests was Joseph Pease.

Pease, along with other main guests, made a speech at the
banquet for the royal visitor. In this speech he chose to
associate himself with Middlesbrough in a political rather than
any other way; 'almost a part of the county he had the honour
to represent', was the manner in which he claimed the link with
the town. Yet having chosen this very odd way to associate himself
with the town of his own personal creation, he then went on to

1) In an introduction to this reprint, written in August 1972, Robert Wood, a local historian, stressed this aspect of Ord's work by saying among other things that he 'cannot refrain from leaving his writing desk to view the world about him'.

2) Turnbull - op cit p 249.

3) Head - op cit. See thesis p 120.

4) Pease - op cit. See thesis p 125.

sing its praise by citing the rising greatness of Middlesbrough and saying, 'If any one rejoiced at its prosperity, he more. If any one formed lively anticipations, he feelingly.'¹ Here there is a strong suggestion that Pease had something on his mind regarding his town. Already there was ample evidence that things had gone wrong: Pease accordingly chose to associate himself with the town as an M.P. for the neighbouring South Durham, and wished (or maybe he passionately willed) that the town would prosper.

In 1881 Middlesbrough celebrated its jubilee of 50 years of existence. Again as with Pease etc. there were references in both formal speeches and in commemorative articles to the speed of its growth. Although it is sometimes difficult to disentangle praise for the growth in the second half of the century from remarks related to the original town, two examples at least can be used.

²Isaac Wilson in replying to a toast as part of the jubilee celebrations said that his acquaintance 'with the town dates back to 1831' and after remarking on the number of churches and chapels built, adds that, 'We have made extraordinary progress in the town'.³ At the same function the Archbishop of York reminded his listeners that he was 'older than this young thriving town' and went on to express a theme that has become commonplace in one view of Middlesbrough; it was he said 'the most remarkable place on this side of the globe. Perhaps in America it may have found a parallel.'

Yet there were other currents of opinion around that maybe

1) Quoted in Northern Echo memoir - op cit p 23.

2) Ironmaster and local M.P.

3) Quoted in H.G.Reid (ed) - Middlesbrough and its Jubilee (1981) pp 252/4.

did not fit into this group. If we regard those opinions already noted as being 'establishment' voices, or at least supporters of such, then we can ask what of working class opinion? It has been seen already from Ranger's findings that the worst aspects of the flaws in the Pease Plan fell on the less wealthy: not of course that this causes any surprise. Yet there is some evidence of working class opinion in Middlesbrough at this time, although not in the abundant and almost single-minded way that other opinion is available.

In 1844 a Mechanics Institute was formed in Middlesbrough. Although some of the town's leading citizens were its inaugurators and in fact served on the original committee, e.g. Henry Bolckow, there is evidence that there was a body of opinion amongst the working men that was not influenced entirely by the employers. The institution was avowedly non-political of course, and had as its main aim the promotion and diffusion of useful knowledge among working men by reading and lectures.¹

Thus from this time there were available for working men, books, and newspapers, as well as informed speakers. In the entry for 10th November 1845 the minutes show that the newspapers available were increasing. Already the Institute were obtaining the Illustrated London News, the Yorkshireman, and some periodicals; this stock was to be added to by Bolckow's provision of the Durham Chronicle, the Gateshead Observer, and the Newcastle Courant; Isaac Wilson's provision of the Examiner; and William Taylor's of the Chronicle. The committee were also asked to buy

1) Minutes of the Middlesbrough Mechanics Institute, 1844/8.

the Leeds Mercury, and to obtain the Times and the Chronicle second-hand.

From this sort of provision there were ample opportunities for the members (of whom initially there were 104) to know about the world outside Middlesbrough. They, and the people with whom they had contact, were not subject only to the dictates of their 'city fathers'. An example of their independence of action appears in the minutes of 8th August 1848 when the committee turns down an offer of a lecture on Shakespeare yet decide to obtain for their library a copy of the 'Autobiography of a Working Man'. Yet they were not completely free of restriction. In the same minutes it is noted that the recently obtained cricket equipment is not to be used on Sundays. It seems that such equipment had been used on Sundays without the authority of the committee, and henceforth a member was given special responsibility to make sure that this did not recur.

Maybe the outlook of working men did not stretch as far as their housing conditions at this time. Possibly they were imbued with a kind of fatalism regarding overcrowding and lack of sanitation. Certainly at least two incidents that did not suggest that working men in the area were completely passive occurred at this time: but neither concerned housing conditions or the general state of the town.

1

Richmond notes that in 1839 there was some Chartist activity in the area, and in 1840 there was labour trouble in the construction of the new dock; it is interesting to compare this work with Taylor's

1) Thos. Richmond - op cit pp 182 & 185. The writer claims that from an early age he had been in the habit of taking notes of events in the neighbourhood, but it is not clear whether or not he was eyewitness to these particular events.

1
 accounts of the same events. The former that the Chartists caused considerable alarm between May and August 1839. He refers here to Stockton, and reports the presence of two companies of the Enniskillens billeted in the town, and the arrest of Byrne, a national figure in Chartism, as well as Owen, the Stockton chairman. The labour trouble, which took place in March 1840 he described as a riot. This in consequence of Irishmen taking over the work of Englishmen, who wanted higher pay. Prison sentences for some of the English followed arrest for assault on the Irishmen.

The latter reported both instances as an eye-witness. The activity of the Chartists is reported as taking place in Middlesbrough over the years 1836 to 1839, and violent speeches taking place by a 'well-known character'. Whilst of course it is possible for both accounts to be accurate, given they are reporting on different places, it is nevertheless surprising that Richmond does not mention Middlesbrough in this connection, especially as the activity continued for at least three years. Regarding the labour riot, Taylor goes into more detail. The Englishmen of Richmond's account become Lancashire men; he sees the cause as an attempt to prevent the Irishmen from working, and reports that some prison sentences resulted from the disturbance. However he sees the intervention of Railway Company police as crucial, and the economic result as being the introduction of Irish labour
 2
 in the dock construction project.

Whilst the evidence of these two events during the formative years of early Middlesbrough have no direct bearing on an attitude

- 1) William Taylor - op cit pp 51 & 53. Not only does this writer closely identify himself with both the early town and its economic and social life, but also collects material bearing on past events: this collection he calls Taylor's Miscellany, which is a collection of newspaper cuttings in 16 vols.
- 2) See final section of Chapter 3.

towards housing and the town generally, they do at least show that there were opinions not only felt but acted upon that were not in accord with the town's creators and governors. Given the sort of evidence that Ranger records, and given a later period in Middlesbrough's history when mass opinion could be discovered, there seems little doubt that the general picture of approval by those living in the 1830's and 1840's was not unanimous.

Some glimmerings of such attitudes can be found occasionally in parts of the nearby press, but such accounts seem uncannily rare, and tend to be in the early 1850's, rather than in the two earlier decades. An example of such an account appeared in a Sunderland newspaper in the Autumn of 1853, but this was a much fuller piece of writing than I have normally come across in this respect.

The paper takes 'The Sanitary Conditions of Towns' as the heading, and proceeds to place Middlesbrough into a general context. Three main elements are stressed: the threadbare paternalism of the Owners of the Middlesbrough Estate, the opportunities lost, and the conscious manipulation of the local property market by the Owners.¹

After describing briefly the shock of the 1831 cholera outbreak the paper noted that 'Middlesbrough (was) built wholly on property purchased from the Middlesbrough Owners, and almost wholly since the epidemic of 1831 read its fearful lesson of reproof and warning against filthy habits and crowded localities.' Thus the paper could rightly comment that 'the proprietors of the Middlesbrough Estate ... had a noble opportunity offered them of constructing an English town that might have been the model of good sanitary arrangements,

1) Sunderland News and North of England Advertiser, 1st October 1953.

and have combined all the advantages which science and benevolence have suggested'.

The newspaper did not see this opportunity as an exercise in idealism or even normal Quaker behaviour, but as a course that was wholly to be expected in the circumstances. Thus: 'a little liberality on their part (the Owners of the Middlesbrough Estate) ... would have done much to have secured a wholesome ventilation of all the crowded parts of the town. Common humanity dictated the doing of this much'. Noting of course the lack of such humanity, the newspaper went on, 'especially might it have been expected ... when 10 to 40 times the original price of the land was being obtained for building sites'¹.

At this point the newspaper returned to the theme of model urban development thus: 'The genius of Howard and Elizabeth Fry, how you would have rejoiced over such an opportunity! But a noble ambition was not found in the men to whom the opportunity presented itself'. Instead one had 'an abuse of property rights'; and in refuting the "inevitability" apologetic, the newspaper returned once more to land and its selling price.

'We are told' noted the newspaper 'that it (the corruption of the Pease Plan) cannot be helped; yet the land was put on the market just when the O.M.E. chose, and at their price. So it still is'. Moreover 'notwithstanding that prices of from £1,000. to £3,000. an acre have been given'¹ ... it has not been the price of public property'. Having thus presented the case, the newspaper completed its attack in almost Carlylian terms in denouncing the narrowly utilitarian purposes to which property was developed, in that such property cannot 'be used as a bleaching green, a place for drying clothes, for the recreation

1) Compare these rates and prices with my discussion in Chapter 2 of the profits made by the O.M.E. The two sets of possibilities that I present lie at either side of the newspaper figures.

of its inhabitants, or for any one of the thousand purposes for which such places are found to be useful in other towns'.¹

Two years later, another nearby newspaper took up the attack with the streets of Middlesbrough as the specific target. In looking for improvement under the "Health of Towns Act", the newspaper commented that some of the private streets in the town 'are kept in a disgraceful state. Gosford St, portions of Lower Feversham St, and some of the small streets leading off Feversham St have been some time almost impassable.' In particular, the writer singled out Garbutt St as having 'never been put into a proper state; thus more appropriately it should have been called Garbage St.'²

As in 1853, the newspaper looked behind the situation for human causes, and once more found Pease and his colleagues. Noting that the proposed width of Bridge St was to be cut from 60' to 36' by the owners, the O.M.E., the newspaper commented, 'Really, the faith of our rulers in sharp men must be unbounded ... Surely some of our property owners will take up this question of the Middlesbrough Owners aggression. How can they expect to sell and keep their land at the same time?'

Yet as I said at the start of this section, such observation as that of these two nearby newspapers was very exceptional, albeit accurate. The vast majority of the comment was full of praise, either for the whole general concept of the Pease Plan, or at least for some specific part of the early urban development.

1) Sunderland News and North of England Advertiser, 1st October 1853.

2) Stockton and Hartlepool Mercury, 18th August 1855.

When one turns to the comments of later Victorians, the general impression gained is little different from that given by the earlier writers. Appearance, speed of development, and unique aspects (if not apparent, then contrived) are all stressed. Writing in 1863, Praed concerned himself mainly with the appearance of the town.¹ After giving statistics concerned with industry, urban area, and population, he says of the town, 'it is substantially built, decently laid out, and is now a gracefully expanding town'.² Nevertheless he has some criticisms that are not voiced in the pioneering stage of a generation earlier.

Particularly here he complains of the lack of amenities in the form of no co-operative store and no Turkish bath: an odd combination. More fundamentally he complains of smoke pollution. Both smoke and soot he sees as '... being a necessity of the local trade, nobody wonders at it; but it is surprising not to see the fact more taken into account in the social policy of the town'. He also complains of the lack of rail facilities for leisure travel on Sundays.

It seems odd that a writer with some social conscience should accept the urban fabric of the town so readily. Not only this but he seems to stifle any possible criticism by stressing also the speed of growth: this becomes at the same time an excuse for any failure in the layout and building, and a reason for local pride at the sheer vigour shown in the construction. Praed

1) Landor Praed - History of the Rise and Progress of Middlesbrough (1863). A reprint of material previously published in the Newcastle Daily Chronicle.

2) Ibid p 21.

makes comparison with the towns in the United States by describing Middlesbrough as having been built 'at three month's notice' and then goes into more detail respecting this American similarity in the case of 'the manufactured town'. The point is thus made, 'Cincinnati and Chicago are perhaps the best specimens of American made towns with which Middlesbrough can be compared; but these do not equal in self-sustaining vigour of rapidity of growth the Pease founded colony on the banks of the Tees.'

Using other examples, all from 1881, both these themes appear again. In an impossibly eulogistic article the Graphic begins its description of Middlesbrough by stating that, 'Hopefulness has from the beginning been one of the leading characteristics of Middlesbrough', and goes on: 'There are no crooked lanes in Middlesbrough; and it becomes at once evident ... that the greater part of the town had like the City of Eden, been sketched on paper before it was built.' The only criticism here is the absurd one that the 'early architecture was ... somewhat fanciful', but even this nonsense is compounded by adding that 'later efforts have compensated, and Middlesbrough now possesses more handsome buildings than any other town of a similar size'.

The other theme, speed, is taken up by Reid in a fairly lengthy work. After making reference to the Middlesbrough of the early 1840's he says that it, 'was an insignificant town of about 4000 inhabitants ... made up principally of coalheavers' dwellings,

1) Ibid p 3.

2) The Graphic - Middlesbrough 1831-81 (8th October 1881).

3) H.G.Reid (ed) - op cit pp 117/9. Reid (subsequently knighted) had settled in Middlesbrough three years previously, having purchased, or at least intending to purchase, parts of the local press. He has the distinction of pioneering the first half-penny evening paper in the U.K. - the North Eastern Daily Gazette first published in 1869.

in the middle of a country of marshes and quiet farm lands ...'

This is compared to what Middlesbrough became in a very short time;

and on the subject of urban growth, although referring also to

the mushroom towns of the iron mining industry, he used the phrase,

'A little has been made all in an hour - we might almost say ...'¹

Yet, similarly to Praed, there seems to be an after-thought, kept

almost beneath the conscious surface. Having extolled the new

urban developments of Middlesbrough and the nearby Tees communities,

Reid adds, 'Great are the responsibilities of those who, in the

enormous power which they have happened to possess, have been

the cause of the being, not simply of their children, but of a

community'.

Reid is not laying down an obligation that can be fulfilled

by civic speeches, for he goes on, 'Their relation to it is full

of tremendous duties. They are not to be discharged by the arts

of patronage, or by giving alms to the poor.' Although he

maintains this kind of high-minded tone and refuses to be specific,

he adds that the obligations are to be 'fulfilled in far more

profound ways'. Possibly with a sense of history, or maybe some

unease about urban developments so far, Reid uses a number of

phrases to close this particular passage, including, 'and it is

only now, as time rolls on, and they are seen ... in the distance,

that the average mind fully comprehends ... the man whose career is

well worthy of record and imitation.'

Yet the older kind of eulogy also persists. Among the guest

speakers at the Jubilee celebrations was Joseph Cowen² who, during

1) Ibid p 119.

2) Radical politician and owner of the Newcastle Chronicle.

the banquet formalities, made a long speech in which he referred to Pease and his associates as 'those six broad-fronted, broad-bottomed, broad-brimmed Quakers who prospected the place, and their associates and successors, who were shrewd enough to avail themselves of the vantage ground cleared by those pioneers'.¹ The point concerning shrewdness was not missed by an article in the Illustrated London News² in commemoration of the Jubilee.

Having given a brief outline of the civic development of Middlesbrough in its early years, the author then talks of buildings and motives. In describing the very first development in the urban enterprise, he says that, 'The first house of the new colony was erected in 1830 by Mr. George Chapman, a builder from ... a neighbouring town'. Mr. Chapman's motives for making the move to Middlesbrough were given as his belief that, 'he would find ample scope for his business'; and adds that, 'He was not mistaken'.

The writer described this first house³ as a neat looking cottage near the river side in what later became West St. This main thoroughfare was later seen as a street 'lined on both sides with houses and shops'. Yet it is the inadequacy of this early town that engages the writer at the end of his article. An inadequacy not of the standard of building but of scope: the newer town demanded a much grander civic layout.

1) Quoted in H.G.Reid - op cit p 262.

2) Illustrated London News, 8th October 1881, p 358.

3) See photograph of this house in appendices, plate 15.

3) Modern Critics

Even very recent views of the Pease town sometimes show elements of the earlier attitudes. Maybe this is not too surprising as often past attitudes can have a strong influence in determining present views. Yet at the same time there are quite marked differences between the views of writers in the mid-twentieth century and those of Victorian times, even those of the very late nineteenth century. Whereas in the views of the mid-Victorians, criticism seemed only to creep into their accounts, and even so to be far out-weighted by a lot of praise, the later writers have almost reversed this tendency. Here the credit has to be sought; the criticism is clear enough.

Of course some quite modern writers still find a lot to admire in the early town, mostly of course the idea of the town, but one has to go back towards the beginning of the twentieth century in order to get the Victorian type eulogy. Maybe the only main exception here is the local booster historian and the writer whose main emphasis is geographic rather than historic. On the other hand the sort of criticisms made of early Middlesbrough vary: some condemn the Pease Plan, some consider it an idea that went wrong, and some ignore its existence.

First, examples favouring the early town. The Victoria County History offers a good example. Here Myra Curtis has both ¹ fulsome praise for the Owners of the Middlesbrough Estate and

1) Victoria History of the County of York (North Riding) 1968 reprint of the 1925 edition, vol II. The work on Middlesbrough by Myra Curtis was in fact done in 1913.

amazement for their town. The approach is an example of the 'no questions asked' type of history. She first described the area before the Pease purchase, 'a dreary and swampy expanse', and then, having mentioned the Middlesbrough Owners, she describes, 'Their success as phenomenal,'¹ as 'streets radiating from a large square space designed as a market-place began to spread themselves over the vacant ground'. Looking back at the town after its completion the author, having described railway lines to both north and south, notes that here, 'lies the earlier part of the town, which is unique among English towns of its size in the uniform modernity of its buildings.'² Then having mentioned the main thoroughfares and their location, she ends this part of her work showing a relation between this old town and what followed, thus, '... the rectangular arrangement so begun has been followed with modifications in the further extension of the town'.

Writing five years later Fletcher³ used a similar approach, although he coupled praise for the Owners with wonder at the speed of development. Starting with 1830 he wrote that 'a group of far-seeing men ... purchased 500 acres of land ... on 32 acres of this they build the first streets and the houses of the town'; and having got the dock constructed, there were no limits to this far-seeingness: 'henceforward the prosperity of town and port increased by leaps and bounds. Money was spent upon its development with amazing generosity, and while it still wears the aspect of

1) Ibid p 269.

2) " p 270.

3) J.S.Fletcher - The Making of Modern Yorkshire 1750-1914 (1918) p 77.

newness, its buildings are worthy and handsome.'

It is this element of speed of growth that attracts a much more recent example. Looking at north-eastern development from a geographic point of view, a group of writers¹ wrote of Middlesbrough that (in 1830) it 'consisted of a few houses on the banks of the Tees. By 1850 its population had increased to 7000. From a hamlet to a small town in twenty years was a remarkable change ...' Yet later in the book, when the authors are classifying the towns and ports of the north-east, they couple Middlesbrough with Consett as towns which owed their growth to a single industry. In reference to the iron and steel industry they actually state that, 'this industry created Middlesbrough and has been the foundation of its prosperity ever since.'²

The great weight of modern opinion is however critical of this early urban development. Some, such as the Bells,³ see the whole thing as a mistake. The heroic aspects of the Middlesbrough Owners disappear and only their Quakerism saves them from further condemnation. Thus, 'Pease and his follow-owners were not especially philanthropic. Although as Quaker gentlemen, they were a great deal more humanitarian than some of their contemporaries - and successors - they were relatively unmarked by the great tide of utopian community-planning which was rising throughout England at the time ...'

From a different angle, but having the same goal, Gordon Cherry looks at the early buildings in the context of factors

1) H.G. Bowling, Coombes & Walker - The Land of the Three Rivers (1958).

This publication was sponsored by the North-East Industrial Development Association for Schools, p 151.

2) " p 217.

3) Colin & Rose Bell - op cit p 135.

in the development of Victorian cities, having first taken Barrow as an example of single-minded development. Middlesbrough he sees as having common characteristics with Barrow in its early stages, but having quite different results in the longer run.

Having described the railway extension from Stockton to Middlesbrough with its '9½ kilometres' advantage downstream from Stockton, Cherry looks at urban Middlesbrough. 'In 1830' he says 'a grid-iron town was built on 13 hectares, centred on a church and market, and in due course development of no great quality² filled in the available plots'. Yet Cherry does not see the fact "of no great quality" as stemming from the pressure of economic development, which he sees as coming eventually with the iron industry. He states that 'in 1850 ... rapid urban growth began to take place under the stimulus of iron manufacture. By this time the old town had grown to a population of 5,500, but with the³ arrival of the iron masters a dramatic rise occurred'.

Clearly then the poor, or at least mediocre, building was not as a result of population pressure, but had become a fact before this population pressure really became dramatic. The result of such pressure was to spread the town rather than to over-fill it.

Going to another extreme there are those writers who behave as if there had never been a Pease Plan in the first place. In

1) G.E.Cherry - Urban Change and Planning (1972).

2) Ibid - p 80.

3) Here the population figure for 1841 and not 1851 is used, but this does not invalidate my argument: the town was already spilling over the original peripheral roads, and the big increase comes late, e.g. the 1861 figure for population is 18,992.

a book similar to that of Cherry, and written seven years
¹
 previously, Ewart Johns uses Middlesbrough as an example in an
 examination of transitional town styles. By this he means towns
 that show both Classical and Romantic form in the way he defines
 these characteristics. He sees Middlesbrough as a 'boom town
 of the nineteenth century', and as being a record of town planning
 notions of the 1860's and 1870's. Town planning that is, for
 industrial workers. Although he concerns himself with speed of
 development vis-a-vis industry, and the 'stiff', gridded system
 of the Middlesbrough streets', he nowhere mentions any development
 before 1850. This system of grid-iron development he sees as
 nothing new, and goes on to show that there were subtle distinctions
 in the facades of the houses in streets that appear otherwise
 completely uniform. Here however he is concerned with developments
 that did occur shortly after the old town was built, rather than
 with the old town itself. Interestingly enough Johns missed a
 good example in his own argument regarding the mixed (i.e. transitional)
 town in his ignoring the old town, for here were many 'classical'
 (in that the design was modest) characteristics as opposed to the
 romantic (in that the design was grandiose) characteristics in the
²
 'new' town of the 1870's and onwards.

This technique of not seeing an important historical fact,
 albeit an unsuccessful development, is even more clearly shown
 in a work that was written 'on the ground' so to speak, at the end
 of the nineteenth century. The local Independent Order of Odd-

1) Ewart Johns = British Townscapes (1965), pp 116 & 119.

2) Johns is not unique in this respect: there is no mention of
 Middlesbrough in V.H.G. Armytage's study of utopian experiments
 in England 1560-1960, Heavens Below (1961).

Fellows, Manchester Unity, Friendly Society published a history and guide to Middlesbrough in 1889 which was revised ten years later. In this, Paling¹ wrote a guide and description of Middlesbrough in which he commented on the urban development, the most prominent buildings, and the social aspects of diverse areas of the town.

In a perambulation of the town he looks at first the newer town, then the old town, and finally the industry, but in his description, with historical interjections, he mentioned neither the role of Joseph Pease nor his town. Pease' name occurs in relation to a fountain in the centre of Albert Park: but this gift on the part of Pease is well away from the old town; Albert Park in fact really marks the southern boundary of the newer town. Having inspected the town to the south of the railway he then proceeds to 'examine the places of interest in the older portion² of the town on the North side'.

This examination is more interesting for what is missed out than for what is included. All the main streets are mentioned that appear on the Otley plan, as also is the central square, but absent is the relation of these parts to each other, and therefore no reference that there had ever been an overall scheme of development. Having visited the ferry opposite Port Clarence he enters the core of the old town thus: 'Returning by Durham Street as far as East Street, a turn to the right takes us to the Old Town Hall and Market Place.' There is no hint

1) Jas. Paling - Guide and Description of Middlesbrough, (2nd ed 1899).

2) Ibid p 93.

here that he is traversing one of the four main thoroughfares of the original plan; nor is any more awareness shown in his reference to the central square: 'The Market Place itself is a large square, enclosed for the most part by business premises.'¹ It could be argued that the original grid was no longer apparent by the end of the century but this is not the case; although distorted somewhat, this pattern was clearly there until well after the Second World War. Paling's lack of information is difficult to understand.

Finally a very recent local history takes a determinist line to human history and completely dismisses any suggestion of the pioneer in Pease and his associates. By implication, any uniqueness in the urban development, intended or actual, is also brushed aside.² Taking a long-term look at Middlesbrough's development (albeit in a book aiming to bring out the uniqueness of Stockton's history) Tom Sowler writes: 'Maybe when events have moved out of the twentieth century, the mushroom growth of Middlesbrough will be seen for what it really was - not the creation of a new metropolis by a few visionaries, as people at this point of time are apt to claim, but the natural movement of³ the industries and port of Teesside closer to the river mouth'.

Yet the majority of modern criticism takes neither of these approaches that I have already dealt with. Most do not dismiss the Pease Plan as a bad idea, nor do they pretend that an idea

1) Ibid p 94.

2) Tom Sowler - A History of the Town and Borough of Stockton-on-Tees (1972).

3) Ibid p 193. Sowler's assertion regarding present day claims would have been appropriate in the nineteenth century but not today.

never existed in the first place; rather they accept that there was an idea but that either it was not as unique as some people like to think or that it went wrong for certain reasons. Before the local government house rebuilding scheme removed much of the evidence of the old lay-out in the later 1950's, the artist John Piper visited the town.

The drama of the industrial landscape fascinated Piper but the old urban settlement horrified him. He approved of the original scheme in this way, 'This town was planned on sensible and spacious lines, gridiron-fashion, like an American town, the streets crossing each other at right-angles, main streets debouching on the square'.¹ Of course Piper saw the original town under very bad circumstances in that it had become one of the main slums in the larger urban area. Yet when he described it as looking 'as if a plague had visited it; he also looked for the cause of this desolation: he was not content to recoil in horror: 'This is not the effect of depression, or of war and bombs (Middlesbrough was little bombed), but the result of the rapid and uncontrollable growth of the place ...' The longer term result is then shown in that this growth 'induced the running up of subsidiary rows of houses in parallel streets between the original ones, so that the whole district developed into an uninhabitable slum, and has now ceased to be the centre of population.'

Piper takes no delight in his criticism of early Middlesbrough; rather there is a strong note of regret. Where he can find things

1) John Piper - 'Middlesbrough', a chapter in his book 'Buildings and Prospects' (1948). This chapter was a reprint of an article in The Cornhill (December 1945). A permanent reminder of Piper's attitude to the industrial landscape of this area can be seen in his painting 'Middlesbrough from the Slag Tips'. This painting was made during the same visit which gave rise to the above quoted comments.

to praise he does not hold back, such as his statement that 'A striking feature of the streets of central Middlesbrough is the richness and elaboration of the public-houses.' Going as far as saying that 'its pubs deserve a monograph' for 'nowhere could the Victorian public-house style be better studied in a small area'¹.

At about the same time as Piper visited Middlesbrough, the mayor, Mr. R.R.Kitching, gave a more prosaic version of the distortion of the old plan. Writing in an official capacity he observed that 'the first plan for the layout of the town had some quite good points, worthy almost of present-day town planning, but unfortunately, with the extremely rapid growth of the town ... almost all thoughts of planning disappeared in the rush of providing houses for the steadily increasing numbers of workers'².

Of course the mayor had a particular point of view and a particular task at that moment. He had to preserve some sort of local confidence in the past whilst paving the way for the urban planning euphoria that came out of the experience of the Second World War. Yet his analysis comes over almost as blandly as that of Sowler³ in his 'patriotic' history of Stockton. Yet even more academic theses echo this same analysis, often however with at least a note of regret, if not righteous anger.

Writing a decade after Piper's visit William Ashworth used Middlesbrough as an occasional example in his broad thesis on

1) Ibid p 132.

2) Architect's Journal, vol 10, 2nd August 1945. This was an issue mainly devoted to Middlesbrough town planning. Quote p 78 under heading, 'a message from the mayor'.

3) See thesis p 474.

the development of urban planning in this country. ¹ Having seen Middlesbrough as one of the only two towns to be the creations of the mid-nineteenth century, ² he looked at the Pease Plan but not in any precise way. Seeing Saltaire as a model that had not been copied, ³ he saw Middlesbrough as an exception to the general rule that 'the principal towns of the country were already in existence and urban development was almost entirely based on established centres'. ⁴ The time element here was the mid-nineteenth century; and although Middlesbrough 'occasionally showed signs in the early stages of ... growth, of more orderly arrangement', large scale growth occurred and as 'scale increased, the manifestations of order diminished' ! The final outcome of this distortion is seen as resulting in the features of the town having 'more and more in common with those of other industrial towns'. ⁵

A similar judgment came from two members of ⁶ the Geography Dept. at Durham writing six years after Ashworth. They saw the original town of Middlesbrough as 'a small but substantial town centre ... with the main streets focussing upon an open market square'. Yet after describing the initial dimensions of the

- 1) Wm. Ashworth - The Genesis of Modern British Town Planning (1954), pp 10-12 + 129.
- 2) The other being the Rhondda Valley, yet a comparison here with Tees-Side as a whole would have been more realistic.
- 3) As Middlesbrough pre-dated Saltaire this cannot apply here.
- 4) Ibid p 129.
- 5) Yet this nullifies the opinion which stresses the grid-iron uniqueness (in sheer amount) of Middlesbrough. An opinion which is almost legion.
- 6) J.W.House and B.Fullerton - Tees-Side at Mid-Century (1960).

building plots, they soon detected a diversion: '... but at an early stage in development the 200 foot plots were subdivided, and back-to-back houses were often built in the courts within the reduced plots, or in the alleys leading onto the main streets.'¹ The story is not left there. A reason has been given for the manner in which the original plan was distorted, but not the reason for the original corruption. Nevertheless judgment is passed, on the results of the distortion: 'This' (the alleys and courts) 'represented the worst form of residential development on Tees-side', and with final regret, 'but all too frequently formed a pattern to which subsequent building showed little improvement.'

Yet even where the grid-iron plan has been recognised without the qualifications of the distortion, criticism has still arisen. Writing in the Architect's Journal of August 1945, which contained a lot of material on the Max Lock Plan, Astragal (the author of 'Notes and Topics'; short snippets before the main articles)² commented on his recent visit to Middlesbrough. After noting that the town had several unique characteristics, he said of the form, 'As far as I know, for England, its grid-iron plan is unique', and later went on, 'It gives the town a strange atmosphere, slightly American small-town'. But the matter was not left there. In the tail, the writer put a sting, no doubt meaning to show the comparison to have limited use, by adding, 'although probably only to those who have never been to America.'

1) Ibid p 398.

2) Architect's Journal, op cit p 76.

Two years later Max Lock¹ echoed a similar judgment. After emphasising that one of Middlesbrough's two outstanding characteristics² was its grid-iron street pattern, compared this with America by saying that 'the street plan of Middlesbrough is perhaps the closest approach to an American grid-iron layout that we have in this country', and again refraining from leaving the matter there adds, 'but although for the most part the streets themselves are wide, they are laid out on a smaller and less generous scale than American examples.'

Thus not only is the initial plan criticised, but the later influences of that plan are seen as meagre compared with trans-Atlantic examples. It seems that the logical outcome of stressing the distortion of the form of the plan, is to write off any value that the plan may have had in the first place. In fact Lock does this in the same article as discussed above.

Talking first of economic and social decay in Britain's cities, Lock cites Middlesbrough as an example of the economic past lying too heavily on the cultural needs of the inhabitants. He emphasises that Middlesbrough 'has grown up in the mad rush of Victorian industrial expansion; where its chief characteristic³ has been improvisation for immediate advantages'. The outcome being that 'Middlesbrough ... requires the diagnostic ... treatment of planning, it has no pretensions to architectural merit; it has an alleged ugliness.'

- 1) Then, Town Planning Consultant to Middlesbrough Corporation.
- 2) The other being its natural zoning of industry.
- 3) Here Lock shifts the characteristics to suit his own argument.

With this Lock judgment the argument seems to have gone full circle. Lock does not ignore the fact of an early plan; he sees the emphasis on grid-iron development in the town, but in estimating the distortion to the Pease Plan, he sees the circumstances of exception as making a new rule. It is the ability to improvise that comes uppermost: not the plan. This ability does not take place within a planned concept, or what Cherry defines as adaptive (as opposed to static) planning;¹ it really ignores the whole idea of the plan, and so wrecks the whole pattern of development. For what is needed in the end is another plan to overcome the distortions to the original one.

1) G.E.Cherry - The Spirit and Purpose of Town Planning: a Historical Approach (Journal of the Town Planning Institute, vol 55, No 1, January 1969), p. 15.

Conclusions

I have arranged my conclusions in three unequal parts. First I will deal with the urban plan from a number of viewpoints. Starting with the plan itself, and including population forecasting, I will go on to consider the planners, and end with some remarks on the social effects of the failure of the plan. Secondly I will return to the demography of the town by highlighting my main findings from the sampling of enumerators' books. Finally I will conclude with a few remarks on the current prospects for writing local history in this area.

1) The Pease Plan

a) Origins and Parallels

There can be little argument against the view that the plan was neat, yet having said this two things at once have to be considered. First is the fact that the plan did not constitute a complete square: the peripheral street on the west side, Stockton St. did not constitute the building limit.¹ The limit of the land of the Owners of the Middlesbrough Estate extended slightly beyond this line to meet the estate of Thomas Hustler, and in the shallow bow so formed, 13 additional building plots were laid out. Yet even this respects only the initial intention: when the 1853 O.S. map is referred to, this bow provides land for three (and in the southernmost bit four) narrow streets. So even in the theoretical stage the plan was never completely symmetrical. The opportunities and fortuities of land ownership over-ruled neatness.

The other point to consider is the whole idea of the grid-iron in the first place. It has been said very often that the Middlesbrough experiment was unique, and that even the planned towns of the eighteenth

1) See appendices, Otley plan, in the map section.

century was nowhere as complete in their scale as the Pease Plan. This idea cannot be sustained. It has been shown that the fact of the grid-iron town goes back far beyond the ideas of Joseph Pease and his companions. Stanislawski has shown that the idea goes back at least to the first half of the third millennium before Christ. Referring to Mohenjo-Daro he says that 'this city was not casually built; the precision of its plan could not have been accidental. It was a well rounded concept designed to fit the needs of a highly organised urbanized people'.

Nor have these excavations at New Delhi proved to have been an ancient example, rarely followed. For many reasons it was an ideal design, from both a planner's and a manager's point of view. It could be planned even with crude instruments of measurement; it was controllable in a way a town with tortuous streets was not. The main requirement was openness: it could not be superimposed on an existing town; it was most suitable with a virgin scheme. Yet it could also be extended once inaugurated; subsidiary blocks can be constructed around it, yet all the time the planner must have an overall view of development. 'This pattern', emphasises Stanislawski, 'is not conceivable except as an organic whole. If the planner thinks in terms of single buildings, separate functions, or casual growth, the grid will not come into being ...'

Here we are up against the relation between the Owners and

1) Dan Stanislawski - The Origin and Spread of the Grid-Pattern Town (Geographical Review, January 1946), pp 108-9.

the builders: was there any major flaw in either the rules or the supervision? I will return to this relation shortly but meanwhile a comment by Stanislawski showed that the Middlesbrough experience was not only not unique in intention, but neither in the failure of that intention: 'History is replete with examples of the patternless, ill-formed town that has been the product of growth in response to the desires of individual builders.'

This writer has gone on to stress that once the advantages (he also acknowledges disadvantages) of the grid pattern were appreciated the idea spread and 'is now standard throughout much of the world', and that no-one should accept that such an idea would 'spontaneously (have) recommended itself to the town builder whoever or wherever he might be'. Yet even the Bells, writing nearly a quarter of a century after Stanislawski, tend to stress an idea of uniqueness (albeit disastrous in its consequences) of this plan by saying in their final paragraph on Middlesbrough that it was 'built ... on an engineer's ideal of urban management'². Ultimately Middlesbrough loses both in lack of uniqueness in conception and in failure of execution once the idea had been drawn up.

In considering the actual location of the town two aspects appear. First there is the economic one of being near the main means of employment: in fact the economic aim brought the town into being. Much of the work on urban Middlesbrough soon slips over into considering the economic functions of the place, and

1) Ibid p 108.

2) Colin & Rose Bell - op cit p 146.

the ups and downs of those functions. From the point of view of a piece of land for building the choice was a bad one. The river was liable to overflow its shallow banks at this point, and civil engineering could not cope with this problem in regard to the houses without careful and sustained forethought on the part of the builders. It is true that the town was built upon a slight mound which represented the highest point in the immediate area, but this is not saying a great deal. The area as a whole was unsuitable for this sort of development: if things had been otherwise there would most likely have been some kind of urban settlement long before Middlesbrough was ever thought of.

There has in fact been a suggestion that the Owners of the Middlesbrough Estate did not want land for a town in the first place. In an article commemorating the 50th anniversary of the town¹, there appeared this statement, in relation to the six purchasers. 'The Gentlemen acquiring the land had no use for so large a quantity. They merely required a strip by the river² side for shipping purposes, but Chilton would only part with the whole of the estate. Consequently the six Quakers ... obtained possession of land which in a few years was destined to become the site of a busy town.'

If this is true then even the town plan itself becomes a matter of hurried improvisation. Not only is the foresight and inspiration of Joseph Pease undermined, but the whole development of the urban area becomes almost a matter of sleight of hand in

1) Illustrated London News - op cit p 358.

2) William Chilton bought the estate from the Hustler family in 1808 for £15,750.

that there had never been any intention to plan a town in the first place. This leads directly on to the sort of reasoning that went into the population forecasting for the early town.

The Owners calculated a population of 5000 for their new town. This figure seems at first reasonable when compared with nearby urban centres and the coal trade expectations. The last census reports before the planning of the town were those of 1821, and then Stockton had a population of 5006: uncannily near the estimate for the completed Middlesbrough. Darlington had a similar sized population, and the growth rate for both had been steady for a generation; in 1801 Stockton stood at 4177 and Darlington at 4570. Possibly it seemed reasonable that Middlesbrough should have a similar experience, and then stop at around 5000, but the figures for 1831 do not bear out this possibility: Stockton had grown to 7763, and twenty years later was over 10,000. It is possible to look at trade forecasting here, but already the forecasts of pre-1825 for Stockton had proved totally inadequate (thus the need for Middlesbrough in the first place), and the forecasts for Middlesbrough although proving too modest, nevertheless did not so continue after the late 1840's. At this point the coal trade begins to fall off.¹

Even if one accepts the figure of 5000 as a reasonable forecast we have to ask how the town as planned could accommodate all these people. It has been suggested that the plan was in fact based on some of the ideas of Robert Owen. Praed actually states

1) See thesis p 126.

that the '... streets diverge at right angles through the sides of the market square, after the plan of the late Robert Owen's parallelogram towns.¹ Yet here there are snags.

If we take the Praed statement at its face value we can ask how many people an Owenite parallelogram town was designed to house.² Owen himself gives an answer; and he also gives a very clear idea of the urban lay-out. Describing his drawings of the ground plan, he says that the system is based upon squares of buildings 'surrounded by a quantity of land, from 1000 to 1500 acres. Within the squares are public buildings, which divide them into parallelograms', the squares being 'sufficient to accommodate about 1200 persons ...' In this particular report, Owen actually repeats this estimate of the numbers to be accommodated in each unit.

This estimate is a far cry from 5000. It could be argued that the Pease Plan was a very much enlarged version of the Owen idea, but to such an extent that it seems of little value to bring in the comparison with Owen in the first place. The very thing that the Pease Plan lacked was flexibility: when change was required the plan was not amended or enlarged; it was ignored.

It could of course be argued that the Middlesbrough idea was copied on the Owen scheme but that the parallelogram town³ as envisaged by Owen was itself a non-starter. Cherry implies

1) Landor Praed - op cit p 13.

2) Robert Owen - Report to the Committee for the Relief of the Manufacturing Poor (March 1817), *pp 160-2 (Eveningman Ed)*.

3) G.E.Cherry - Influence on the Development of Town Planning in Britain (Journal of Contemporary History, vol 4, No. 3, 1969) p 49.

this in the context of industrial settlements although not with Middlesbrough in mind when he says that subsequently Owen's proposals 'were amended to merely agricultural villages'.¹ Yet even in this respect both the initial proposal for the parallelogram communities and its amendment were before Middlesbrough was actually begun, and not on either side of the Pease Plan: if Owen had been an influence in this way, then most certainly his amendment had no effect on any subsequent loss of confidence on the part of the founders of Middlesbrough.

Finally here, the discrepancy between town plan, population forecast, and actual housing can be considered. Given a figure of 5000 in the first place (irrespective of whether this was real or imaginary) we can ask: just what sort of buildings were going to house them. Here the dictates (if that is the right word) of the Middlesbrough Owners do not help much: if ever such help was intended. They lay down rules regarding uniformity only to a very limited extent, and only in regard to the fronts of the main thoroughfares: far too much is left to goodwill or chance. Certainly the impression can be derived from the early documents and also from early descriptions of the place that a spacious town of gracious houses was going up, but this belies both common sense and actual developments. This was to be a coal export town,

1) Cherry here refers to Owen's remarks in part 3 of the Report to the County of Lanark (May 1820), but he omits to say that Owen's amendment was the result of economic depression at the time, not a loss of faith in the ideal urban community. Owen even recommends the use of the spade instead of the plough in part 2 of the Report for the same reason: self sufficient communities during a time of work shortage. The fact that the hastily, unsuccessful experiment at Orbiston followed, seems irrelevant to this argument. The Middlesbrough city fathers may have heard of Owen but they most certainly were not following all attempts to implement his principles.

not a second Bath; yet when the number of building sites are placed alongside the population forecast a very odd fact emerges, and one that has never been previously mentioned. Each site would have to accommodate 40 people. So either Owenite type tenements would have to be built,¹ and even the most ardent upholders of the intentions of the Owners have never claimed this degree of social commitment, or infilling of some kind with possible overspilling of the periphery was inevitable. Yet the fact must never be forgotten that the population of the original area has never exceeded 5000 inhabitants: so one is left with the sort of building that actually took place within the original town to accommodate the initially forecast population.

2

Here the evidence of Ranger cannot be ignored: later apologists for the town may either gloss over its imperfections or pretend that they never existed, but here was a man, in spite of his unwillingness to upset local opinion, who pin-pointed the failure of the Pease Plan. His evidence suggests that the attempts to build a town of reasonable symmetry had been completely undermined, and there is also the strong feeling that even the rules themselves were totally inadequate: Improvement Commissioners had to replace the Owners in this capacity, and a Town Council had to replace the Commissioners. It is not enough for Cherry to say that 'by 1871 ... the old town was engulfed in a sea of shoddy development',³ because even the old town itself was already partly

1) Here I have in mind the Nursery Buildings built in 1810, while noting that Owen's 'additions to the mills and housing stock were negligible, but are a concrete expression of his social views' as Butt, Donnachie & Hume remark in Robert Owen of New Lanark 1771-1858 (Industrial Archaeology, (8), no 2, May 1971).

2) See thesis pp 110/16.

3) G.E.Cherry - Urban Change and Planning, op cit p 80.

rotted by shoddy development even worse than that of the surrounding area.

As many writers have shown however, even in this aberration Middlesbrough was not unique. Other towns in this same period had fine schemes, quite apart from Owenite ideas, that never reached fruition. In an article referring to 'a forgotten phase of urban growth', Robin Chaplin¹ notes that a great burst of new town founding reached a peak 'probably in the 1840's or possibly a little earlier'. This dating coincides exactly with the Middlesbrough urban take-off; and in the four towns that are dealt with only one was a success: two were bad failures and the fourth a complete failure.

Hillfields, near Coventry, and Aston, near Birmingham, offer similar cases to the Middlesbrough experience. The former began in 1828 based on a 'traditional grid pattern' and where the founder also made provision for the 'important basic ingredients for a self-contained township'. By the later 1830's two and later three terrace houses began to be crammed on the plots intended for one villa. Not surprisingly the occupants were not the sort of people who normally occupied a villa, but Coventry weavers.

Aston was started in the 1830's, and by 1851 all the sites had been sold. Yet it was in this final year that the last reference to the earlier ideas for an ideal town was publicly made, and thenceforth the town turned out to be 'a departure which never arrived; or rather which arrived at a quite different destination from that originally intended'.

Initially posters advertising the first land sales boasted

1) Robin Chaplin - Discovering Lost New Towns of the Nineteenth Century (Local Historian, vol 10 (4), 1972), *passim*.

a view of the old parish church but soon such a claim could no longer be made: successive tracts of open parkland were built upon to such an intense degree that even the word 'villa' had to be dropped by the land agents. As in the case of Middlesbrough a last attempt at urban dignity was made in 1852 when the plots were described as 'suitable for private residence', but this even had to be dropped because the development now had 'back-to-back¹ houses and later, hovels jammed in the courts behind them'. The final outcome was that Aston could eventually claim to have had more infilling than even Hillfields; and both, with Middlesbrough, could claim to have been the victims of the speculative builder and the incompetent or insincere planner.

1) Ibid p 192.

1) The Pease Planb) The Planners

In my conclusions here, I will concentrate on two aspects: the planners themselves, especially Joseph Pease; and comments upon them. There is plenty of literary evidence to suggest that Joseph Pease was sincere in his intentions,¹ but the weight of empirical evidence drawn from what the town soon became is very much against him. That he was a genuine Quaker is not in doubt as can be seen from the diligent use of his time after retiring from business, but such diligence was not employed in following the development of his own town plan, in spite of the fears of his father.² He and some of his fellow Owners were active in local government, but it is not the activity that is in question; it is the results of such activity.

As a businessman as well as a Quaker, Pease was a very successful man. It has been said that he 'was one of those grand men whom the North Country has during the present century (19th) produced in sufficient numbers to make an abiding reputation for it.'³ His business interests in collieries grew to one of the largest in the North of England by the time his eldest son, J.W.Pease, inherited the empire. Yet too often this great economic success is coupled with his urban scheme, as if the reputation for the one could guarantee the success of the other.

Similarly in his good works in the moral sphere, both in

1) See thesis pp 66/70.

2) " " p 125.

3) The Graphic - op cit p 375.

Parliament, and from his home at Southend, his reputation has been linked to an almost automatic acceptance that the moral well-being of the incoming citizens of Middlesbrough was guaranteed and was being catered for. A very recent description offers an example in that he 'was one of the first elected members of the local board of health, refused to become first mayor of Darlington,¹ and built schools, laid out open spaces, and campaigned on many generous causes in Parliament, including great support for the temperance movement. The same writer even compares Pease with Thomas Judge in seeing their careers as constituting 'long-drawn-out fights for religious and political liberty', thus classing them as men 'not easily trampled upon'.²

Going back a hundred years an obituary notice stated the same sentiments when it said that 'the career of the late Mr. Pease as a politician was characterised by the same high sense of honour, the same profound consciousness of responsibility which distinguished him in every sphere of life,³ and so on to a finale on Pease' work in the temperance movement. After referring to his work on the Buckingham Inquiry into drink in 1834 the notice ends, Mr. Pease ... as is well known ... was not only a temperance advocate, but a pledged teetotaler.'

Thus the link between personal probity and past endeavours is forged, yet even in the detail of personal history there can be flaws, even in so great a moralist as Pease. It seems true on very good evidence that he was not personally a teetotaler but

1) Brian Harrison - The British Prohibitionists 1853-72 (International Review of Social History, vol XV (1970) pt 3) p 423.

2) Ibid p 396.

3) Northern Echo 9th February 1872.

rather a very moderate drinker: in some respects not a great deal of difference, but when one is concerned with total abstinence the difference seems enormous. His own grandson has written that 'it is quite a mistake which several obituaries make that Joseph Pease was a teetotaler'¹, and goes on to show that nevertheless several of Joseph's sons were. The grandson however attributes the early deaths of some of these to their abstinence, and notes that in the 1860's when they became strong advocates, Joseph 'who had a good cellar of many wines - practically locked his cellar and restricted his own drinking to Claret and occasional brandy'.

Not that this fact alone is meant to suggest that Pease the 'unreliable' abstainer implied Pease the unreliable town planner. Rather this disclosure by his grandson makes him appear far more human than many of his eulogists do; all the more surprising that his town was allowed to go so wrong. Especially so, in that there were peculiar responsibilities attached to being a Quaker for both him and the other five Owners. Not only was there now a possibility of more personal freedom in religion and business but 'The world was visibly being remade and it was possible to contemplate a different order of things without escaping to the other side of the earth'². The ideal of the new kind of colony was taken over from the established 'ventures for new communities by such groups as the Philadelphians, Quakers and Moravians. New radical experiments were now to abound.' If these particular Quakers who started

1) I have consulted the copy of this obituary that was possessed by Alfred E. Pease, in which he made notes and commentary, from which the above are taken. This copy is now in the possession of Mr. A. B. Leake, who before retirement was the Estates Director of the Owners of the Middlesbrough Estate Ltd.

2) G. E. Cherry - op cit p 14. The Spirit and Purpose ...

Middlesbrough did not follow the precepts of their brethren in other parts of Britain and in North America, then they at least could fall back on the reputation of their belief and not be over-burdened by the urban problems of Middlesbrough. More details of the actual lives of these men would be very useful in any attempt to give a definitive judgment on their expertise, if not their actual motives, in this particular case of town planning. Such a plea has been made quite recently in the case of Joseph's father;¹ and the same would apply to the son and the other partners in the Middlesbrough Estate.

- 1) J.D. Rowe - The Economy of the North-East in the Nineteenth Century: A Survey (Northern History 1971), p 128. Dr. Rowe states that a study of the life and work of Edward Pease is long overdue, especially as he figures so prominently in the industrial development of the north-east including the creation of the Stockton and Darlington Railway and the early development of Middlesbrough. His role in the railway is beyond dispute, but as regards Middlesbrough, this was Joseph's creation. In that Edward was the father he had a connection with Middlesbrough, but obliquely as his diaries show.

1) The Pease Planc) The Effects of the Plan's Failure

The effects of the failure of the Middlesbrough Plan on the people of the town can be seen in a number of ways. It is most useful in this case to look at these effects on the people living at the time of the Plan, and also on those living since: in both cases also I attempt to treat the people in both an active and a passive role.

That the divergences from the original plan caused much human unhappiness there can be no doubt. Ranger's report on bad living conditions and the chances of contracting dangerous disease show how physically precarious must have been the lives of many inhabitants of the early town. Yet one gets the feeling that much of this suffering was borne with an almost unquestioning fatalism. Not that all inhabitants were so much at risk - for many the new town was both an adventure and a civic delight.

More needs to be known about the opinions and activities of those who did suffer however: the others have already spoken for themselves. That there were social disturbances has been shown but it would be very useful to have more first-hand evidence of the aspiration of the mass of the inhabitants, and what attitudes if any they had of the Pease scheme. In relation to Tees-side, Rowe notes that, unlike established communities, it 'experienced many disturbances in its early years'. From this fact alone

1) See thesis p 451.

2) " " pp 459/60.

3) J.D.Rowe - op cit p 121.

'one would like to know more about the social and religious implications of migration and also, what is probably unquantifiable, whether productivity varied between immigrant and established workers.'

Given the power structure of the town linked to the ownership of property it seems very unlikely that ordinary people could have much hand in guiding the fortunes of their town plan even if they had a will to do so. It has been suggested that the people of the early town were doubly unlucky in that the very tide of economic expansion worked against their urban environment while they had no benevolent despot to whom they could turn.

Sometimes the early misfortunes of the town are contrasted with the history of Saltaire. Here the comparison seems uneven in that Titus Salt was probably the most practical of the urban idealists of the mid-nineteenth century. Martin compares successes such as Salt's community, Bournville, and Port Sunlight with Middlesbrough in which the 'control of a determined individual' was absent in the latter case; but in the comparison with Birkenhead he implies a lack of incentive on the part of the people of Middlesbrough. Referring to the coming of Laird's shipyard to Birkenhead in 1824 he says that 'the inhabitants exerted themselves to maintain the town's character'. But even here the comparison does not seem fair; Birkenhead was a high-class suburb of Liverpool, not a coal port on the lower Tees: and later Martin acknowledges

1) Idem.

2) G.Martin - The Town (1961) p 70.

even Birkenhead was eventually over-borne in 1844 when the docks were started. If such examples are of use in attempting to understand the situation in Middlesbrough then they seem to suggest that far more than a will to preserve a communal integrity was needed.

Finally, what affect did the failure of the Pease Plan have on the later inhabitants of Middlesbrough? Two strands emerge. First there is the strong tendency to allege success with the first town plan; and not only success but an inheritance. This comes in the abstract form of the giant figures of the city founders and their legendary deeds; and also in the tangible form of the shape of the subsequent town. The old town was seen to have had a glorious symmetry, and the later town took on the same characteristics. The quality of the housing was of no great account in making an assessment: what mattered was the grid-iron formation of the street lay-out. If variety was needed there was the evidence of late-Victorian public building; and even this fitted into the grid framework.

To the critics who alleged monotony - and they were so few - in this town formation, the answer was the uniqueness of the place in English terms, and the relatedness to American experience: the successful pioneer country par excellence. The success of the present reflected the rightness and execution of the past. Yet turning aside from such wishful thinking Middlesbrough can be shown to be not so unique. Conzen has talked of the grid-

1) Dyos - op cit p 151. Quoted in the second discussion of the Leicester Conference on Urban History, 1966.

iron pattern of the nineteenth-century towns, and how even here there could be a distinctive stamp. Yet for Middlesbrough this can only mean that there was more of the grid-pattern than maybe elsewhere, not that the grid-iron development is a particular virtue in itself. Even more, Conzen suggests quite reasonably that 'when you get a town with a much longer history, that uniqueness is even more pronounced'¹. For a town with such a short history as Middlesbrough this does not hold out a lot of hope for a unique urban quality.

Turning back to the effect of the failure of Pease and his partners, the other strand that emerges has just the opposite manifestation to the one already discussed. This strand is the attitude that attempts to obscure completely the past; it is to pretend the old town never existed, or at least that it happened without any forethought by which to judge its appearance. Yet even here the town cannot be completely ignored, nor can the idea of a plan be totally removed from consciousness.

Always the problems of the urban present can be set aside by the solution of searching for a new town and a new plan. This seems almost a recurrent event in Middlesbrough's short history. When the new plan arrives it is praised to the skies, to such an extent that one could imagine that the town envisaged has already been built; but somehow the plan is never worked through. Either it is eventually forgotten about officially, or it is amended, or even replaced by another plan.

It seems that this willingness to fail to follow through the town plan: of whatever generation of Middlesbrough citizens, is

1) Idem.

always an echo of what did not happen in the case of the Pease Plan; and coupled with this is a willingness to accept a level of rhetoric concerning the town that impartial observation will not support. The events concerned with the plan in the years from 1830 to 1853 seem to have created a kind of communal psychology that still exists in Middlesbrough. It remains to this day a town in search of an identity.

2) Demography

In these concluding remarks, I have retained the same order of presentation as in my analysis of the enumerators' books covering the four censuses from 1841 to 1871. Initially I have considered the aggregate situation by relating the growth of Middlesbrough to that of the North Riding and Durham, as well as to the country as a whole; where appropriate I have made brief reference to York and Preston. I have followed this by sections on first the family, and then the household, and finally I have considered my findings with regard to the lodger element.

Aggregate Situation

Three important characteristics of the demography of Middlesbrough were compared with figures for the two immediate counties, and with the country as a whole. These characteristics were aggregate growth, age structure, and sex structure. Absolute numbers and percentage changes for England and Wales, Durham, the North Riding, and Middlesbrough were compared for each census analysed.

There was little surprise in noting that the percentage increases for Middlesbrough was far in excess of the other areas at all four counts. The mammoth percentage for

Middlesbrough in 1841 however is the reflection of a population increasing from next-to-nothing, but the three later percentages for the town are nevertheless impressive by any currently normal standard. Durham showed consistent growth from 1851, and the North Riding increased its rate by fairly heroic proportions, but neither of these really matched any of the tabulated rates for Middlesbrough.

Some surprise was noted at the rather shy appearance of "young" Middlesbrough. Compared with the other three areas, Middlesbrough's image in this respect really only showed itself in 1861; and even here, Durham could claim parity. In fact the image of "young" Durham was much clearer than that of Middlesbrough. Apart from the 1861 instance that I have just noted, Durham had a higher proportion of its population under 20 than any of the other areas shown in my tables.

The image of "masculine" Middlesbrough was however unequivocally supported by the percentages in the tables. In every case, the Middlesbrough figure in this respect was higher than any comparable one. Even Durham, which itself was consistently ahead of England and Wales and the North Riding, in masculinity, only once came within 2% of the Middlesbrough figure over the whole four censuses.

The Family

Over the four censuses analysed the average size of the family in Middlesbrough was 4.09 persons. The pattern is one of slight increase with each census, apart from a fall in 1851. In this, as in other respects, the analysis of the 1851 census makes for exceptions. Behind this census is the experience of the 1840's, and the relative stagnation of this decade represents a very different picture from the boom conditions of the other decades preceding the censuses that have been analysed.

It is at the end of this exceptional decade however that most of my comparisons with York and Preston were made. In average size, the Middlesbrough family was seen to come midway between these other towns, and note was made of the economic structure in Preston, which enabled children to remain at home until marriage. However in the census of 1861, Middlesbrough's average family size had increased, and the high average was almost identical with that of Preston in 1851.

Turning to the constituent parts of the family, we can say that the typical family head was the married man. There were very few widows or widowers. This typical head was in his late thirties, and the only notable divergence was in 1851 when there was a shift to the early forties..

In the industrial grouping, the typical head changed from a worker in the distribution group to one in the manufacturing group. Nevertheless the distribution group remained important even in 1871 because of the ancillary influences of the West

developing iron industry. Within the industrial grouping, the typical head tended to be a skilled labourer, although from 1851 the status of unskilled labourer has a growing importance.

By birthplace, the head tended to be locally born to 1851, then after 1851 he was just as likely to have been born outside the counties of Durham and the North Riding.

His wife was over the same period of time in her mid thirties. As with the head, the average age of the wife showed an increase over this period. Here however the exception of 1851 was an inordinate rise, only to be normalised in 1861 and 1871. In regard to birthplace, there was an indication in 1841 that the wife was more likely to have come from a greater distance than the head. However this was dispelled in 1851. The same pendulum type pattern was repeated in 1861 and 1871, so no consistent conclusions could be drawn in respect of propensity to migrate over a distance greater than the immediate area.

In regard to the children, there was expectedly a larger proportion of these born in the town than their parents, and similarly a larger proportion of youngest children compared with eldest. Most families had children and the 75% of 1841 increased in both 1861 and 1871; in this instance also, 1851 once more provided the exception with a fall in the proportion of families possessing children. This same pattern was followed by the average number of children, with 2.87 in 1841, and 3.06 in 1871.

In 1851 Middlesbrough was seen to occupy a midway position between York and Preston in regard to children. Note has already been made earlier in these conclusions ¹ to the Preston situation in regard to children's employment; and reference was made in my 1851 summary to the peculiar sex structure of York. In this latter respect, York and Middlesbrough represented opposite extremes.

Turning back to the head of the Middlesbrough family, two-variable analysis showed up some interesting variations within the broad patterns already mentioned. Taking social status as one variable, heads were analysed from three other variables, each in turn. These were age group, industrial group and birthplace.

Analysis by status and age showed that there were changes over the four censuses in both the spread of ages, and the particular age peaks. Of the four status groups most represented, only that of skilled labour showed a consistency, in that there tended to be an age peak in the thirties. Semi-skilled labour showed some major changes in that from an age peak in the thirties in 1841, a wave like pattern followed in 1851, and continued to 1871. The other two status groups, small employers and unskilled labour, varied in each census.

1) See thesis p 502.

Small employers showed a fairly even span of ages from 30 to 60 in both the 1841 and 1861 analysis; alternately this same group showed downward trends in 1851 and 1871. Unskilled labour showed the most variation of all in that the even spread of 1841 became a wave-like pattern in 1851, which in its turn assumed a shape having a peak in the forties in 1861, and this subsequently came forward to a peak in the thirties in 1871.

These differences suggest the contrast between fairly settled employment at one end of scale, and shifting, often precarious opportunities at the other.

In the analysis of industrial grouping, the main interests centre on the shifts in status levels as the town changes from a distribution point to an industrial manufacturing centre.

Large amounts of skilled labour are evident over the four censuses, but there are variations in the other groups. Agriculture soon becomes insignificant, and the large proportion of unskilled labour in this grouping reappears in 1861 as an important element in the manufacturing group. Transport etc. persists in its importance after its loss of preponderance by 1861. At this date also, the small employer status group were very largely represented in the transport group, and even by 1871, over 60% of this status group were so included.

In respect of birthplace, two factors emerged in 1841 that continued, with only minor deviation through to 1861, but were weakened by 1871. These factors were the tendency for the higher status groups to be born locally, while at the same time higher status correlated with a willingness to migrate from a distance beyond the immediate counties. By 1851, however, the migrants with Ireland as their birthplace provided an important exception to this pattern; in fact by 1861 almost half the unskilled labour in the town was Irish born. By 1871, only the small employer status group were prominent as locally born; Irish apart however, high status and willingness to migrate over a long distance continued to correlate.

Two variable analysis of wives showed similar trends to family heads. Age peaks did not always coincide however; for example the age spreads for the wives of small employers and unskilled labourers was shorter in 1841 than the equivalent for heads, and this continued to 1861. The other main age variation was in 1861 when the wives of unskilled labourers showed a peak in the twenties, while the head equivalent showed a similar peak in the forties.

Regarding birthplace, the pendulum-like pattern has already been referred to in discussing the propensity to migrate.

The only group to show consistency in migration over long distances was that of unskilled labourers' wives. Throughout all four censuses also, there is a tendency for the spread of birthplaces of wives to increase.

In the comparative analysis of children, two main factors emerged regarding the size of the family. In 1841 it seemed that the lower the social status of a family, the higher the average number of children in the family. However in 1851 the highest of the main status groups, that of small employers, emerged with the highest average number of children so the generalisation had to be amended. It seemed that those of relatively high or low social status were likely to have a larger average number of children than those of middling status. This 1851 situation held also in 1861 and 1871, thus strengthening the evidence behind these two factors.

Note has already been made of the large proportions of children born in the town in comparison with parents, and of course this proportion is larger among youngest children than eldest children. Within this main pattern, however, some shifts in emphasis between censuses and social status groups have suggested that the attraction of Middlesbrough was not the same in the two immediate counties.

For example, the 1851 analysis showed that the movement from Durham was more sluggish than that from the North Riding, which posed the question of industrial counter attractions; this situation was repeated in 1861, but here the sluggishness did not apply to small employer status. Thus while the supply of labourers may have been more plentiful from the North Riding than from Durham, the industrial counter attractions did not apply at higher status levels. Albeit in a limited way, the growing town continued to attract migrants from Durham at the higher status levels.

The Household

Over the four censuses, the average size of the household was 5.25 persons; this was 1.16 persons above the overall average for the nuclear family. A similar pattern of fall, then sustained rise in this average, can be seen in the household as in the family. However, the fall in 1851 is much more marked in the household (due no doubt to the failure to differentiate visitors from inhabitants in the 1841 census).

In the 1851 comparisons also, Middlesbrough showed a lower size average household than either York or Preston. However, methods of data recording were mentioned that were bound to deflate the analysis of the Middlesbrough household in such comparative reckonings. In the 1861 census, however, it was seen that the average household for Middlesbrough approximated very closely to the Preston experience of 1851.

In regard to the four elements of the household in addition to the nuclear family, there are two main divisions. First, there are, consistently over the four censuses, few workmen and many lodgers; secondly there are variations in the numbers of relations and servants in the same period.

Workpeople made up a very small element in the household structure of the town, and this small element almost completely disappeared after 1861. Two reasons were suggested. The complete lack of any craft tradition in such a new town; and the lack also of a certain area of middle-class demand, in such a socially homogeneous town. As one would expect, only the small

employer status households possessed workpeople, and that only a small proportion of such. The fact that Armstrong and Anderson did not treat this group as a separate category made comparisons with Middlesbrough impossible.

Lodgers conversely were a significant element in Middlesbrough's social structure. Large numbers of households possessed lodgers, and averages in possession were high. However, more details of lodgers will be given in the fourth and final part of these general conclusions.

Meanwhile, at the comparative level, Middlesbrough showed fewer lodgers than either York or Preston in 1851. However, the social pattern of lodger keeping in York closely resembled that of Middlesbrough; and in the 1861 analysis Middlesbrough showed more lodgers, in this comparative sense, than Preston in 1851.

Relations made up the next most significant household element. In 1841 there were very few relations shown in the analysis, but this changed to a more significant amount in 1851 and continued through the next two censuses.

The pattern of household relations changed considerably over the thirty years in question. In 1841 it seemed that high social status and the presence of household relations went hand in hand, but a much more uniform distribution emerged in 1851. The 1841 imbalance was attributed to the shortcomings of the 1841 enumeration, already mentioned. Nevertheless, in 1861 the small employer class once more

emerged predominant in relation keeping, and so high social status correlated with the presence of relations in the household. In 1871 finally, this symmetry was shattered. This lack of consistency was most marked among the small employer households, thus a kind of volatility was suggested here that was more or less absent in the lower status groups.

Compared with York and Preston, some interesting aspects of the Middlesbrough kinship pattern were noted. In 1851 Middlesbrough recorded the lowest proportion of households containing non-nuclear kin, but was nevertheless well above figures for pre and post industrial societies. However, in 1861 the Middlesbrough proportion of households containing kin actually diminished, and militated against Dr. Anderson's general kinship thesis.

Servant keeping varied also over our period. Two elements were expected to emerge: the relation between middle-class status and servant keeping; and the presence of the short term servant among the labouring classes. It seemed most likely that this latter element would be strong in a town that offered virtually no other paid employment for women.

In 1841 this first element was very strong, but the latter element was almost non-existent; but in spite of the general decline, illustrated in the 1851 analysis, this second element did emerge. The distribution changed apart

from slight increases as the iron industry expanded.

Nevertheless, servant keeping does not occupy the importance in Middlesbrough that one normally associates with many mid-Victorian towns.

The Lodgers

As mentioned earlier, this was the most significant element in household size. In accounting for lodger distribution, two elements suggested themselves: the need for extra income on the part of the household family, and the levels of expectation on the part of upper-working class and lower-middle class lodgers. Thus in 1841, the small employer households were prominent in lodger keeping, but, as in other cases, the shortcomings of the enumeration meant extra qualification.

In 1851 there was a general fall in lodger keeping households, especially among those of small employer status, and explanations for this have already been advanced. In 1861 there was a general rise once more, so the two elements yet again seemed to be at work, but in 1871, the lodger keeping among small employer households fell again. Overall, the element of financial need seemed to outweigh that of lodger expectation in accounting for the status distribution of lodgers among the four main groups of households.

Turning once more to the lodgers themselves, one notes that the typical lodger was male, and in his late twenties. This is with reference to what has earlier been categorised as "the essential lodger".

Surprisingly there was a very large proportion of skilled

labour among the lodgers of 1841, but the distribution of status became more widespread from 1851 onwards, when less skilled status became more common. As for birthplace, there were some interesting comparisons between the distribution of lodgers with that of heads. In 1841 a larger proportion of lodgers were born beyond the immediate counties' area than that of household heads. Whereas, in 1841, the change-over in proportional bias comes in regard to those born in England and Wales and one has to go to those born in Scotland and Ireland to see the equivalent change-over in 1851. From the 1861 census onwards, however, the point of change-over shifts back to England and Wales.

In two-variable analysis of lodgers, when both status and birthplace were taken into account, some changes were noticed over the four censuses. Whereas in 1841, the lodgers, of both skilled and semi-skilled labour status, tended to have been born in the rest of England and Wales, the 1851 analysis indicated that there was a distribution shift whereby more skilled labour had been born within the immediate counties.

This trend continued through 1861 and 1871, whereby not only was there a wider birthplace distribution than previously, but there tended also to be a decline down the social status scale of those born locally. In 1861 also, the status of unskilled labour entered prominently into the make up of

the town's lodger element, and at this time also the large Irish contingent became prominent in the town. Nevertheless if we treat this Irish element as an exception to the rule, there remains a strong correlation between high status levels and willingness to migrate over long distances. This was evident in the analysis of both lodgers and household heads.

3) Final Remarks

In previous writing on the town it seems that there has been far too much adherence to generalisation. One can see how some prominent aspects of the town's development have made this convenient: the speed of growth, the uniformity of building, the limited economic base, etc. Moreover, given that much of the historical writing on the town has been done for comparative purposes, then this temptation to generalise must have been almost irresistible: Middlesbrough seemed to epitomise an ideal type. Yet this common eagerness to grasp and make use of the ready generalisation has done a disservice to the history of the town. That is to say, at the point where the generalisation has stopped, local writers have taken over to redress the balance. This redress, although often detailed, has often taken the form of a defence against the general criticism rather than providing a detailed means of judging the merits or otherwise of the generalisation.

Inevitably there has been a thriving trade in myth-making, and I have given many examples of local myths in my main chapters. Unfortunately this process has not yet ended, as some recent publications prove.

To mark the inauguration of the Teesside County Borough in 1968 William Lillie was commissioned by the local authority to write a history of Middlesbrough from Saxon times to the present day. In the resulting book, Mr. Lillie tells his readers that his book is 'the most comprehensive ever written', and then goes on to use the opportunity to give 'due praise for the enterprise and leadership

1) W.Lillie - The History of Middlesbrough (1968) pp 1 and 4.

that has made this town the prosperous hive of industry that it is today'. Similarly, the inauguration of Cleveland County in 1974 prompted a history of Teesside by G.A. North, under the auspices of the new local authority. Mr. North chose to study the economic history of Teesside whose 'development bears the hallmark of human enterprise, of invention, of the courage to carry on business on a scale virtually unknown before'. In this great enterprise, Middlesbrough played the central role. In relation to the start of the town, Mr. North notes that Joseph Pease proclaimed to any doubter of the town's future that 'If such a one appears, he and I are at issue. I believe it will be'¹.

Apart from sharing a lack of training in the discipline of history, both these authors had strong local authority connections. Mr. Lillie had been Borough Librarian from 1926 until his retirement in 1951, and Mr. North had been in the Teesside Planning and Development Dept. until leaving to work for another authority. Whilst there can be no argument against promoting the future of a new local authority, there is an overwhelming case against such an innocent use of history.

Parallel however to these latter-day examples of old style history, there has been a loss of interest among the ordinary citizens in the myths of Middlesbrough's recent past. A local reference nowadays to the Pease town is no longer in terms of the grid-iron plan; rather is it in terms of the slumland into which the original town soon degenerated. Local people talk of 'going

1) G.A. North - Teesside's Economic Heritage (1975) pp xi and 11.

over the border' to mean going north of the railway into what is left of the old town. In this original area there now exists an interesting mixture of buildings. The original docks still thrive and there is some light industry around the edge of the old town. Also there remains evidence of the original purpose of the town in large general offices such as those of the Owners of the Middlesbrough Estate and of the Teesside Conservancy Commission. Most striking, however, is that alongside the oldest buildings in the town there are low rise municipal flats that were destined to be shuns almost from their conception. In this latter sense, one gets an uncanny feeling that history is very closely resembling itself.

In turning to earlier writing on the town's demography, I could repeat many of the remarks that I have made in regard to the urban historiography. The speed of population increase, the social uniformity of that population, the strong sex bias: all lend themselves to obvious generalisation. Yet even this can be over-simplified. Professor Briggs has shown, for example that while the town's population may have been largely homogeneous in social class, it was nevertheless heterogeneous in geographic origins.¹ This 'boiling-pot' community aspect has too often been ignored by writers on the town's population. Locally, however, one still comes across references to such phenomena as the prevalence among the population of the 'Irish upper lip', and long accounts of the evolution of the local accent.

In my work on local demography I have tried to quantify some of the inner detail of family and household structure that

1) Asa Briggs - Victorian Cities (1963), p. 248.

hitherto has remained untouched. In doing so I have not only made it possible for the town to be compared with any similarly treated town of the mid-nineteenth century, but also I have brought to the fore the importance of the crucial decade of the 1840's in many detailed ways. I have shown how this decade produced many aberrations in a pattern that was set in the previous decade, and confirmed in the two later decades.

At a more general level, I have shown not only how Ravenstein made a serious error in his account of migration into Middlesbrough, but also how my sample analysis suggests that his estimation was a decade too late for the big change over to long distance migration. Similarly the fairly established concept of 'young' Middlesbrough will have to be further qualified.

Finally there are other healthy signs regarding future work on the history of the town. Where formerly much local material was hard to locate, there is now a central repository of local government material. Moreover the recent appointment of the authority's first archivist, Mr. David Tyrell, has meant a proper recording of available historical material for the first time. Not only has he scrupulously indexed all known historical material in the area, and its location, but is currently making all efforts to unearth new material, and as far as possible, to arrange storage of such material within the Middlesbrough area.

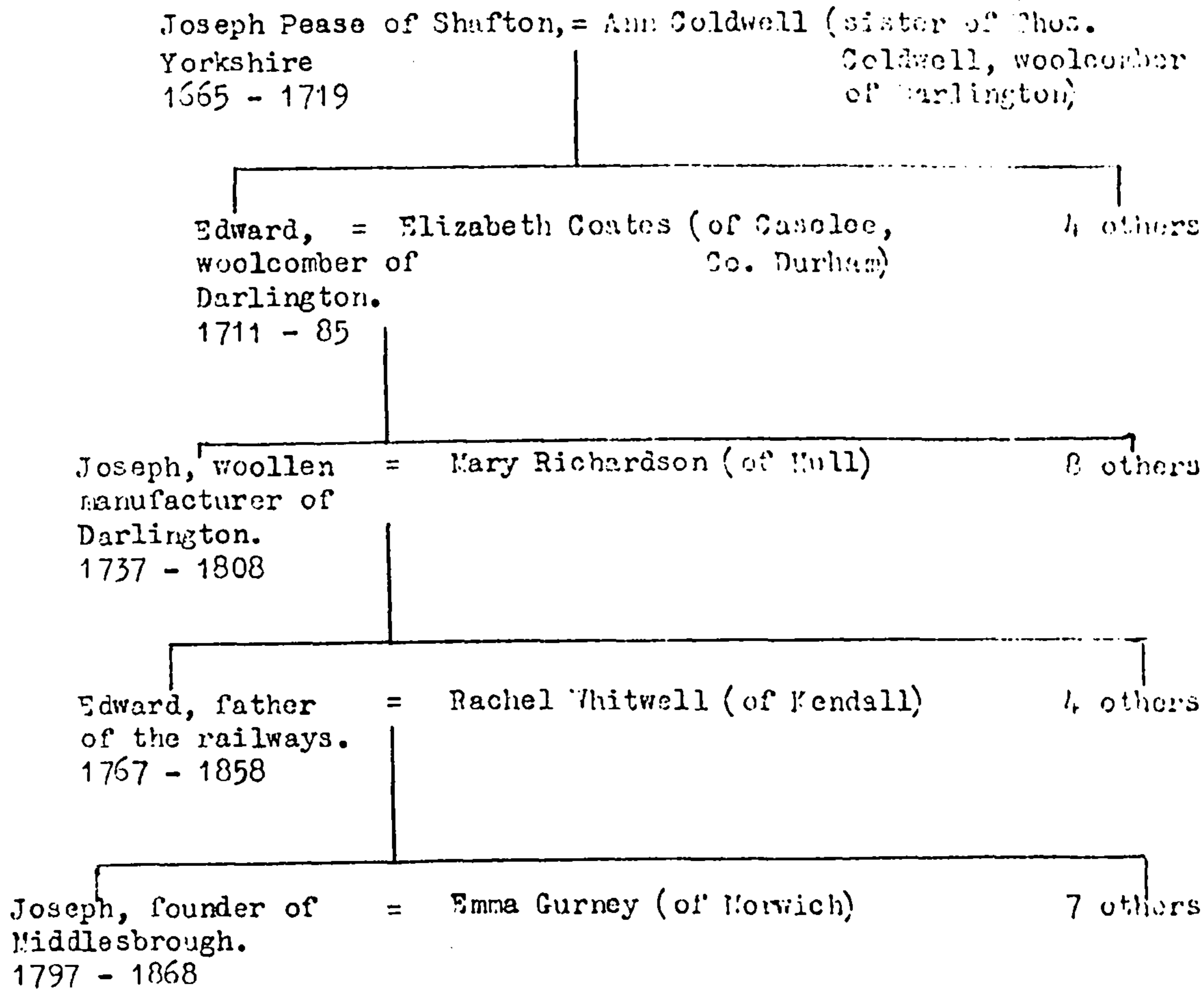
Thus not only can new questions be asked of this area's past, but the means of answering them are also being enhanced.

Appendices

	<u>Page</u>
Notes and Calculations etc.	521
Maps	536
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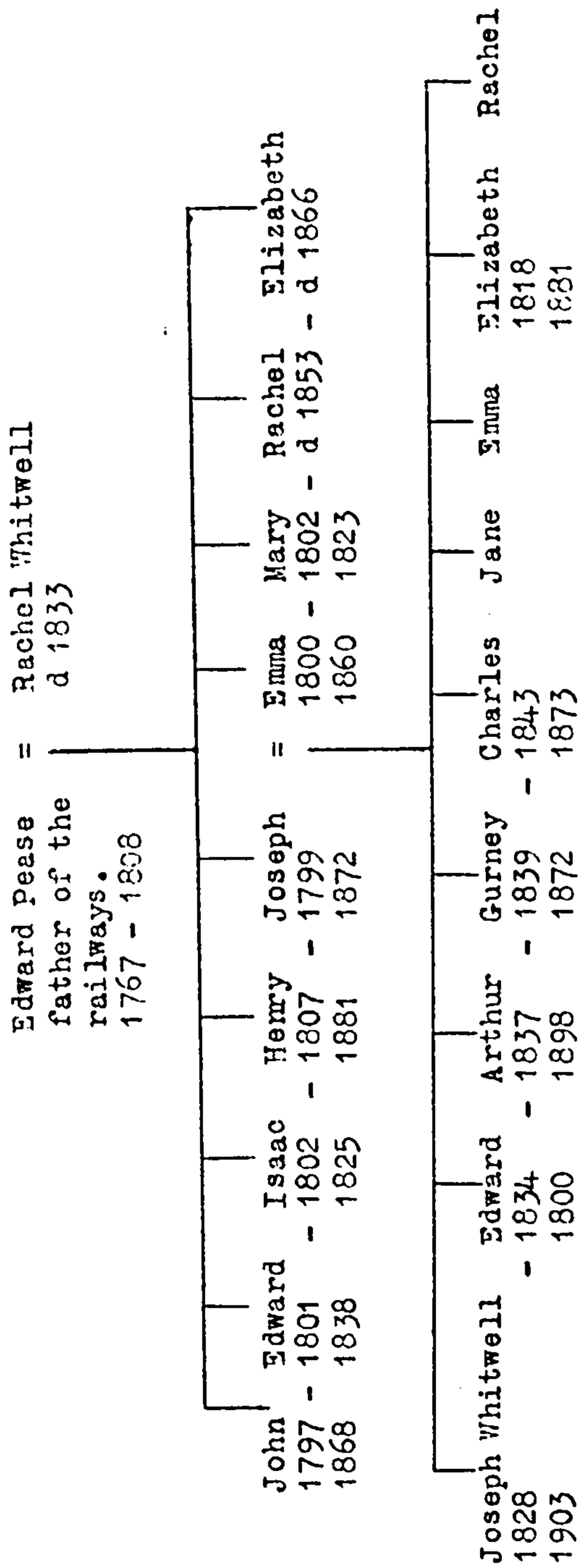
AppendixPease Genealogy:

1) The link between Joseph Pease of Shafton and Joseph Pease of Southend, Darlington:



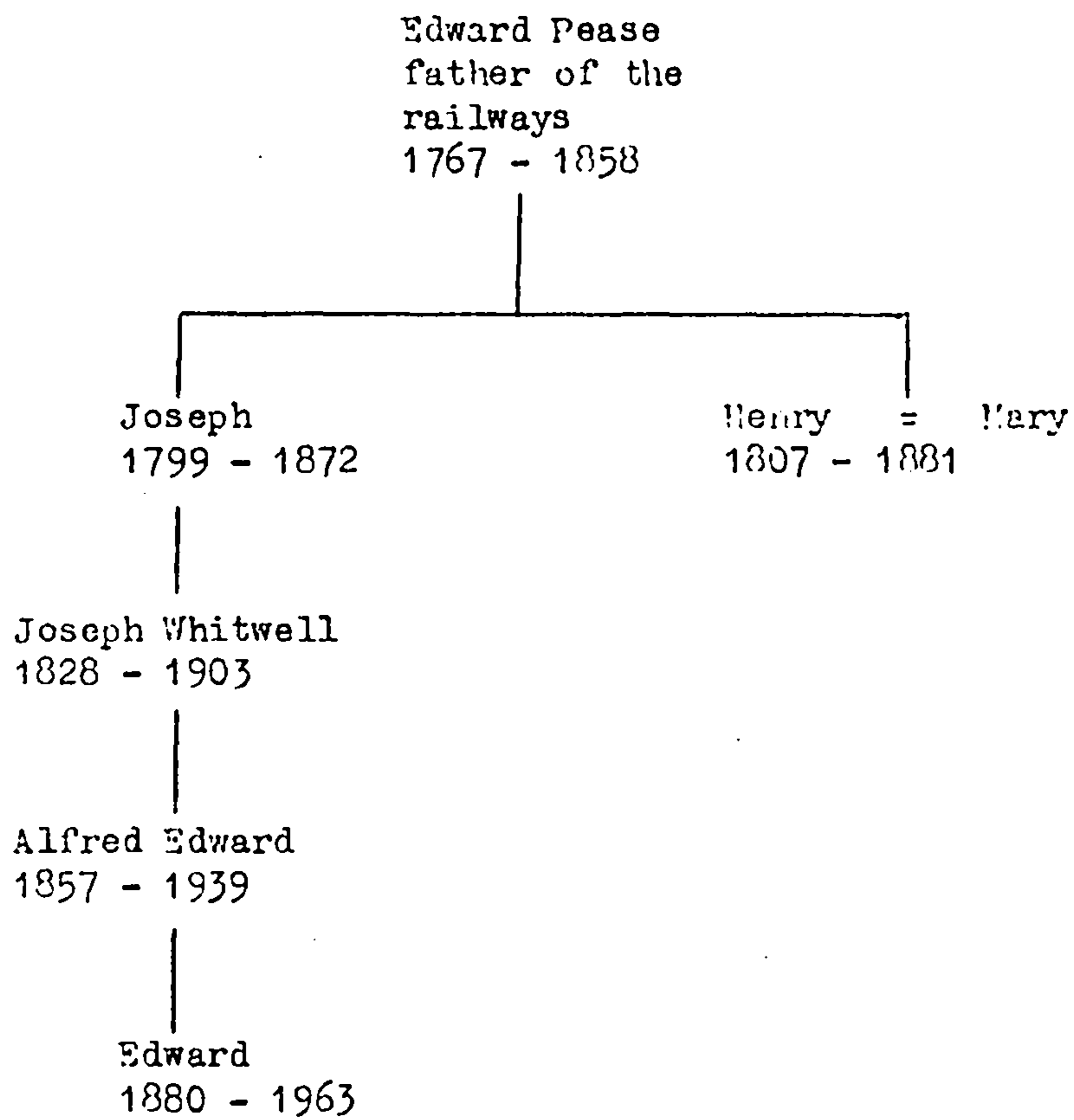
AppendixPease Genealogy

2) The families of Edward Pease (father of the railways) and Joseph Pease (founder of Middlesbrough):



AppendixPease Genealogy

3) The relationship of those members of the Pease family that are mentioned in this thesis either as writers, or as the subject of books and articles:



AppendixTurnbull's Statistics

Coals shipped at Stockton and Middlesbrough 1825/41:

<u>Years</u>	<u>Tons</u>	<u>Years</u>	<u>Tons</u>
1825-6	7,296	1833-4	285,765
1826-7	18,589	1834-5	357,726
1827-8	54,290	1835-6	359,731
1828-9	46,216	1836-7	326,781
1829-30	79,434	1837-8	405,660
1830-31	151,262	1838-9	465,792
1831-32	281,960	1839-40	558,117
1832-33	336,060	1840-41	498,092

Coals shipped at Middlesbrough 1841/5:

1841-2	392,110
1842-3	370,180
1843-4	316,845
1844-5	505,486
1845	264,180 (1st July - 31st December 1845)

Total shipments in one year, 1844-5, at Stockton) 562,583 tons.
and Middlesbrough-on-Tees.)

AppendixBarton's Statistics

Total shipments of coal and cinders from the port of Stockton-on-Tees for the year 1840:

<u>Place of shipment</u>	<u>Quantity in tons</u>
Stockton	109,865
Middlesbrough	426,304
Seaham Harbour	333,515
Port Clarence	187,358
Hartlepool	441,707
	<hr/>
Total	1,498,794
Shipment of cinders	1,625
	<hr/>
Grand Total:	<u><u>1,500,374</u></u>

AppendixCensus figures on housing in Middlesbrough from 1831 to 1851:

<u>Year</u>	Houses: <u>Inhabited</u>	<u>Building</u>	<u>Uninhabited</u>
1831	26	-	-
1841	877	36	62
1851	1,304	21	42

Sources:

Enumeration Abstracts, vol 2, 1833 (149) p 780.

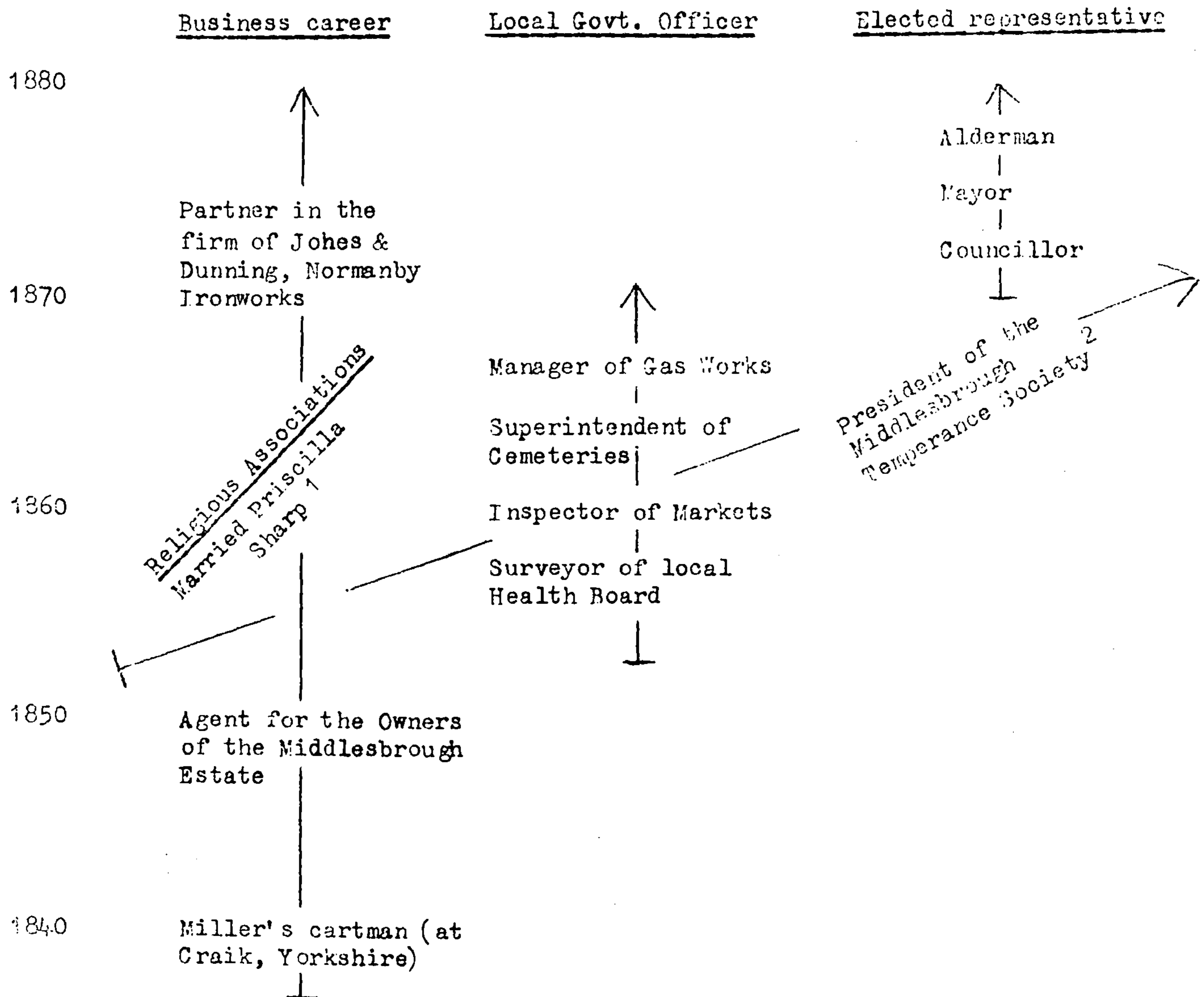
Enumeration Abstracts, part 1, 1843 (496) p 376.

Population Tables I, vol 2, 1852 [1632] p 12.

Appendix

John Dunning

The Career of John Dunning (1826-1885) represented diagrammatically in order to illustrate the interconnected nature of both early Middlesbrough influential families, and business and civic functions:



1) Sister of Isaac Sharp, agent for the Owners of the Middlesbrough Estate in the early 1830's, after being private secretary to Joseph Pease, and before becoming General Manager of the O.M.E. office in Darlington, and one of whose daughters married a son of Joseph Pease.

2) Like Pease and Wilson, Dunning was a Quaker.

AppendixEstimation of cholera deaths in Middlesbrough in 1854:

Given the total of 88 (see p 231) we must add for the days missing in the table, and deduct for non-cholera deaths. We can find information for the days missing from other sources: The Sunderland News and North of England Advertiser gives the cholera deaths for the last week in August as 15; while the Yorkshireman notes that in the second week in September the death toll was low: the report in fact says that by 16th September the disease 'had almost gone, there having been only 1 death recently'. Our grand total thus becomes $88 + 16 = 104$.

We must now deduct the non-cholera deaths. The Sunderland News and North of England Advertiser gives the total disease deaths in Middlesbrough in August as 65, and of these 15 were not cholera morbus. Thus 81% of the deaths quoted were from cholera, and we can apply the same ratio to our known total for Middlesbrough, thus:

$$104 \times \frac{81}{100} = 84$$

AppendixA Note on the 1861 birthplace data.

If the birth place data for Guisborough district in 1861 had included Middlesbrough, then Ravenstein would have had a useful proportion of 84.57% ($\frac{18714}{22128} \times 100$) of the total population to set against a native county element of 73.2%. Similarly if birth place information for Yarm sub-district had been available, the Middlesbrough population of 18,714, out of Yarm's total of 23,877, would have been useful.

In the circumstances, the birth place information for the Stockton district is of no statistical use.

Middlesbrough population made up only 32.8% ($\frac{18714}{57099} \times 100$) of the total; and moreover, of this total, only 33.3% ($\frac{19324}{57099} \times 100$) made up the native county element. Statistically therefore we would be attempting to give information on a population of whom we could be dealing with anything from 0% to 100% of the total.

AppendixThe Dock Riot

The riot in connection with the excavation of the Middlesbrough Dock, 30th March 1840: prosecutions and sentences from the North Riding Quarter Session records.

Records for 6th April 1840 show that of the 15 men originally arrested, one was not prosecuted and one was acquitted. 13 men were charged with 'unlawfully and riotously assembling together ... and then assaulting Patrick Farral, and wilfully ill-treating Francis Mac Rory and others.' Of these 13, 4 received 12 months hard labour, 3 received 6 months, and 5 received 4 months; one, as previously mentioned was acquitted. Another man was charged with 'violently assaulting, beating and ill-treating Robert Swinburne, a police officer', and he received 12 months hard labour.

The Calendar of Prisoners that is concurrent with the record of the sentences shows that the average age of those 13 men who were charged was 24.1 years, although one of the men was as old as 40 years, and another as young as 14 years. As would be expected, all the surnames suggest men of English origin, whilst witnesses against the prisoners have English surnames if they are policemen, and Irish surnames if they are witnesses who were assaulted.

AppendixPopulation for Middlesbrough township 1801-51:

<u>Year</u>	<u>Population</u>
1801	25
1811	35
1812	40
1831	154
1841	5,453
1851	7,631

Sources:

Enumeration Abstracts, part 1, 1801 (140) p 427.

Enumeration Abstracts, part 1, 1812 (316) p 401.

Enumeration Abstracts, part 1, 1822 (502) p 402.

Enumeration Abstracts, vol 2, 1833 (149) p 780.

Enumeration Abstracts, part 1, 1843 (496) p 376.

Population Tables I, vol 2, 1852 [1632] p 12.

AppendixMale and Female Population of Middlesbrough and Stockton 1831-51:

<u>Year</u>	<u>Middlesbrough</u>		<u>Stockton</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
1831	89	65	3,604	4,159
1841	2,939	2,524	4,695	5,129
1851	4,000	3,631	4,766	5,405

Sources:

Enumeration Abstracts, vol 2, 1833 (149) p 780.

Enumeration Abstracts, part 1, 1843 (496) p 376.

Population Tables I, vol 2, 1852 [1632] pp 12/13.

AppendixRavenstein's Tables, 1861 and 1871.

By using the following tables, Ravenstein attempted to compare the birth places of the population of Middlesbrough, but inadvertently he used figures for 1861 that were not those of Middlesbrough:

Composition of the Population of Middlesbrough according to Birthplace

<u>Natives of</u>	Numbers		Percentage	
	<u>1861</u>	<u>1871</u>	<u>1861</u>	<u>1871</u>
Yorkshire	16,179	19,858	73.2	50.1
Durham	1,854	5,218	8.4	13.3
Northumberland	329	929	1.5	2.4
Cumberland	138	537	0.6	1.4
Lancashire	208	725	0.9	1.8
Stafford	109	1,031	0.4	2.6
Lincoln	639	556	2.9	1.4
Norfolk	278	547	1.2	1.4
Monmouth & Wales	267	1,530	1.2	3.9
Rest of England	1,404	3,182	6.4	8.2
Scotland	239	1,163	1.1	2.9
Ireland	442	3,621	2.0	9.1
Other parts	42	603	0.2	1.5
Total:	22,128*	39,563	100.0	100.0

* 'In the superintendent-registrar's district of Guisborough, Middlesbrough only had 18,992 inhabitants.'

AppendixClassification of Social Status

Here I have followed the lead of Armstrong, and used a classification based on occupation, and approximating to the conventions of the Registrar-General, as set out in 'The Social Classification of Occupations' (HMSO, 1950).

Slight modifications have been made whereby all persons employing 25 workpeople or more were upgraded to Class I; employers of less than 25 workpeople were upgraded to Class II; self-employed shopkeepers were demoted to Class III. Also I introduced two new groups: a class of "not-stated", where no reasonable inference could be made, and a "residual" class to cover housewives and the retired.

This system of simple classification made for reasonable comparison between groups having fundamentally different standards of life and income.

AppendicesMap Section:

- 1) Otley plan of 1830, showing original intentions of Joseph Pease and his partners in the Owners of the Middlesbrough Estate company.
- 2) Plan accompanying Deed of Covenant, 1831. This shows the situation of the first sales of building plots in the new town.
- 3) Plan accompanying deed of sale of building plots between the Owners of the Middlesbrough Estate and John Vaughan, 1840. This plan shows not only an additional plot to those shown on the Otley plan, but also illustrates the subdivision of 'inner' plots.
- 4) Plan of the whole of the land owned by the Owners of the Middlesbrough Estate by 1848. There is a clear demarcation between the developed land to the north of the railway, and the numbered fields to the south. The physical barrier between these two types of land is seen in the form of the railway line and the new dock.
- 5) This is part of the first O.S. map of Middlesbrough. The scale is 6" to a mile, and the map was made in 1853. This map shows all the major urban changes that took place in and around the town during its first generation of industrial growth.

Map 1

Otley Plan of Middlesbrough - 1830 - Original intentions:
Middlesbrough in theory.

**BEST COPY
AVAILABLE**

**Variable print
quality**

R T D A R L I N G T O N

Watercourse between the S & D. Rail
the Middleborough Canal

Middlesbro' Branch
Railway

Thomas Husbler Esq.

Stockton Street

Plan of Building Ground

at

MIDDLESBROUGH,

in the North Riding of the

County of York.

AND

PORT DARLINGTON,

the

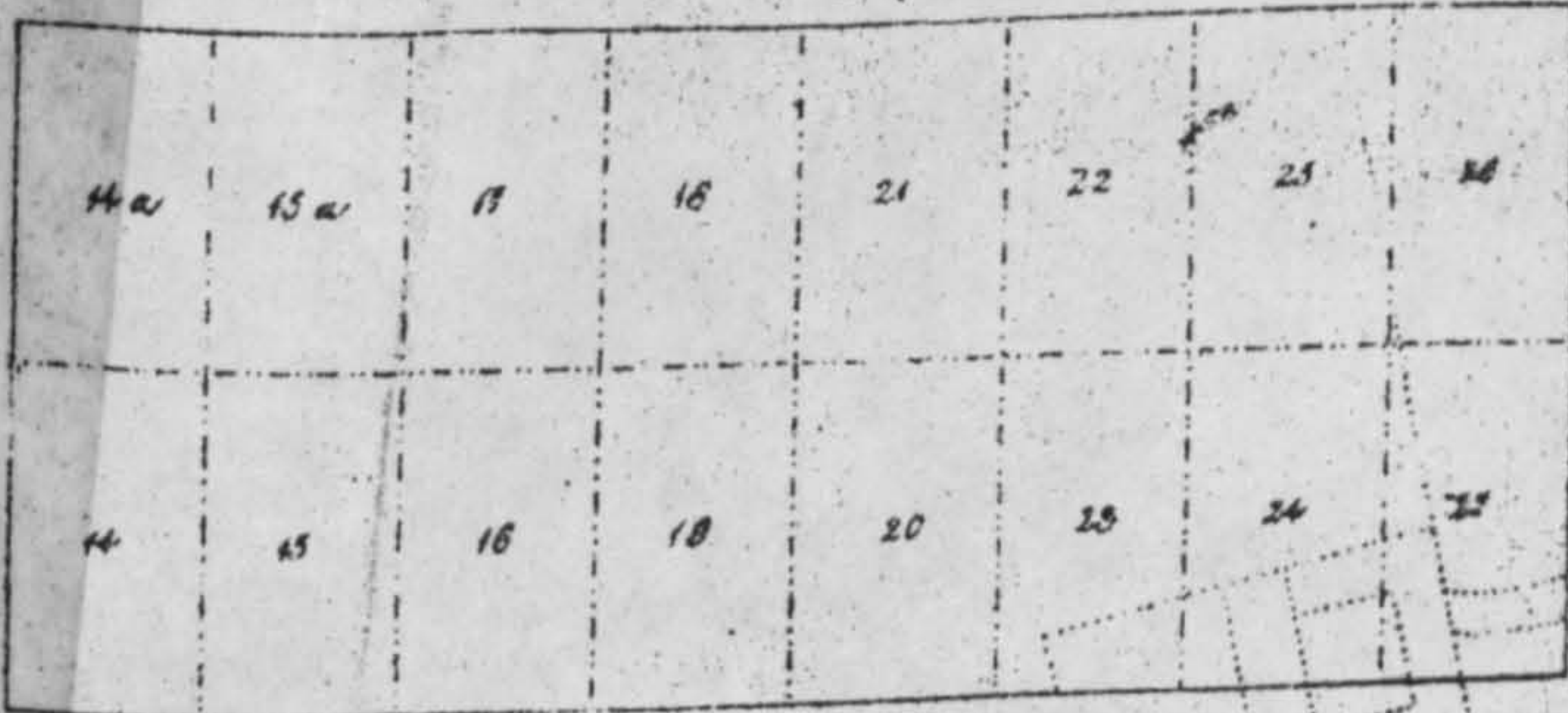
STOCKTON and DARLINGTON

RAILWAY COMPANY'S

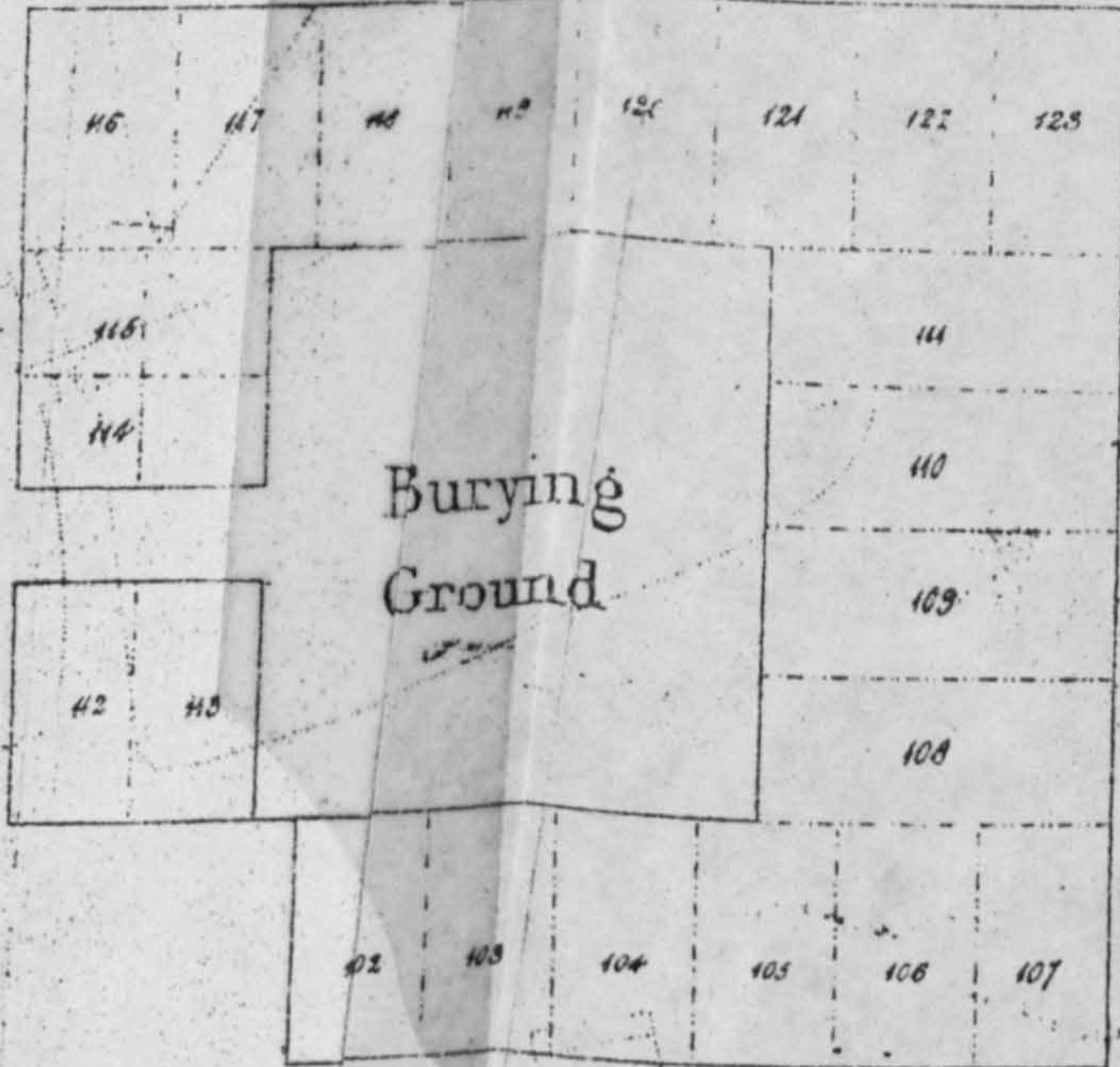
New Shipping Station.



Commercial Street



Street



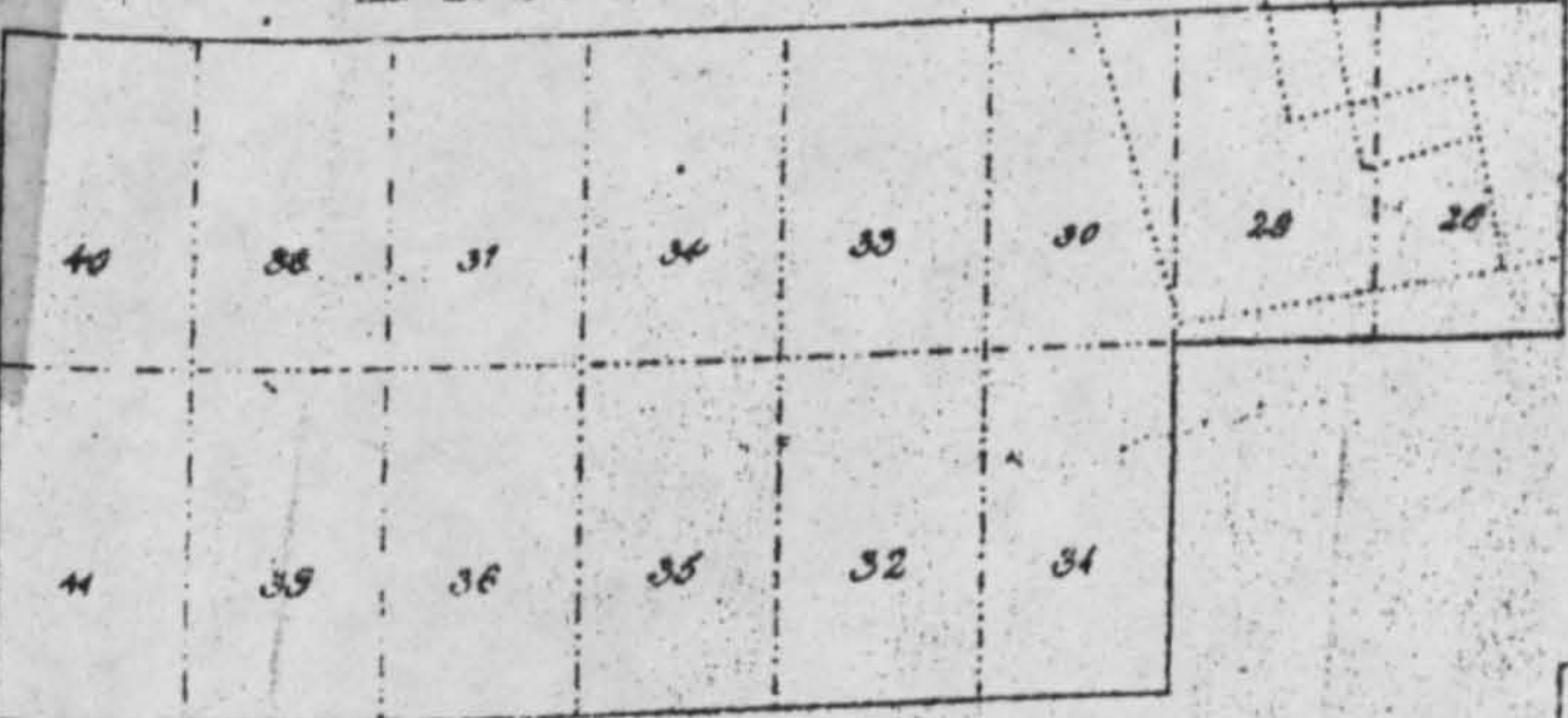
Dacre Street

North Street

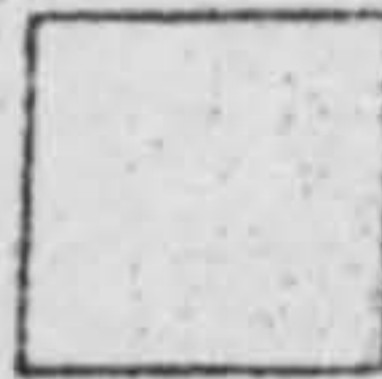
Burying Ground

Durham Street

Stockton Street



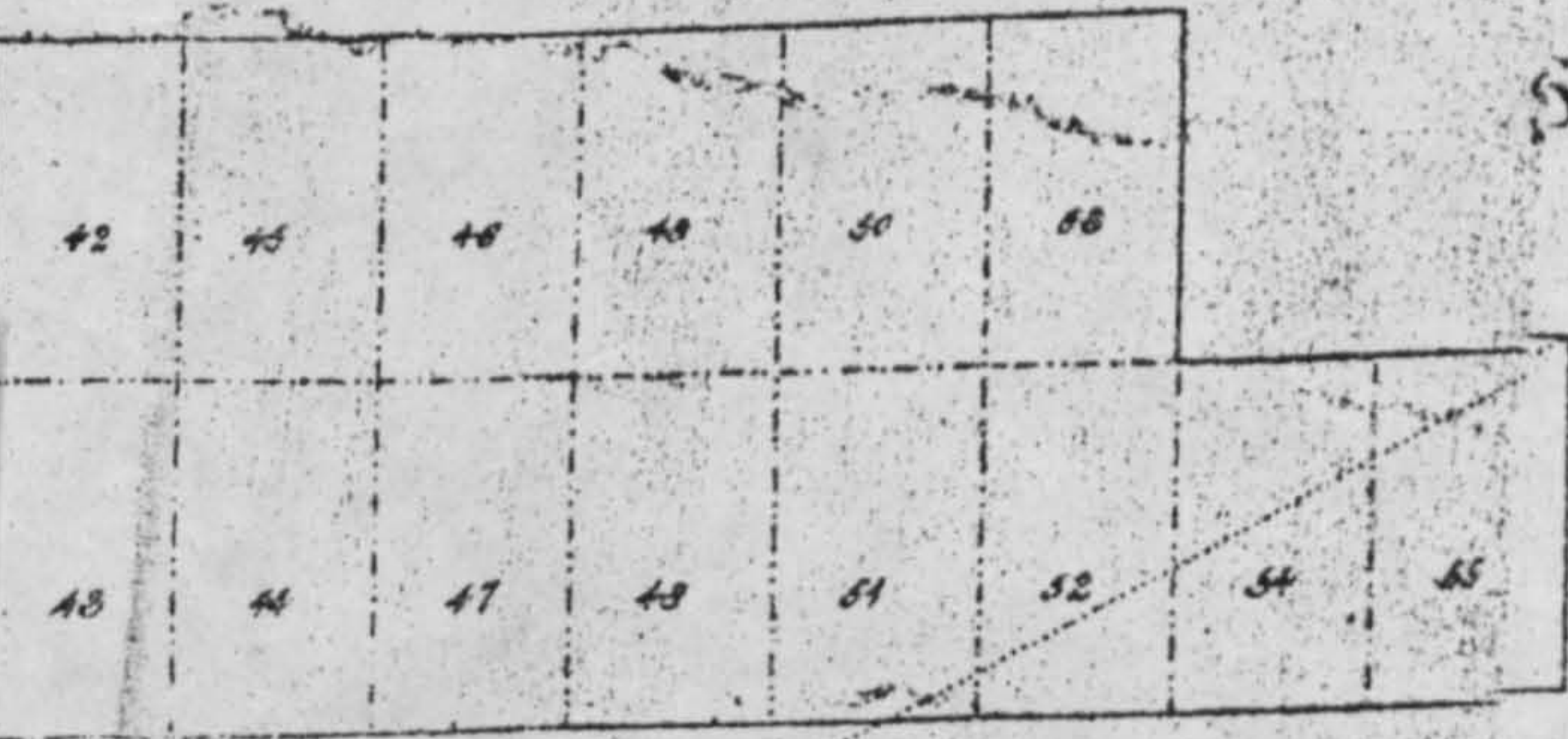
East Street



To Stakeley Gainsbro & Whittes

West Street

Square



Feversham Street

South Street

Cleveland Street

Suffield Street



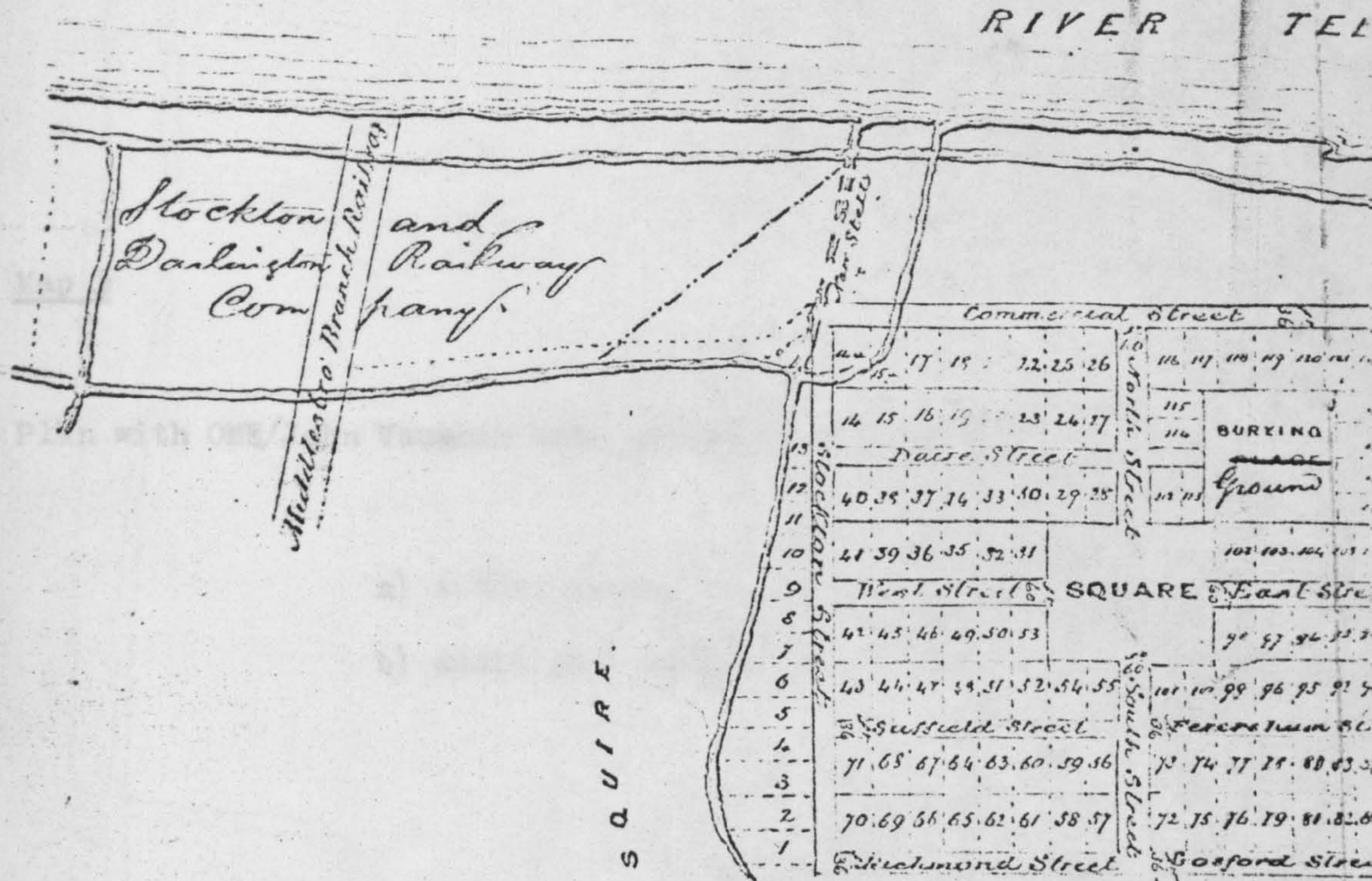
Richmond Street

Gosford Street

Stockton Street

Map 2

Deed of Covenants - plan of building sites 1831 - State of play
after first land sales: Middlesbrough in practice.

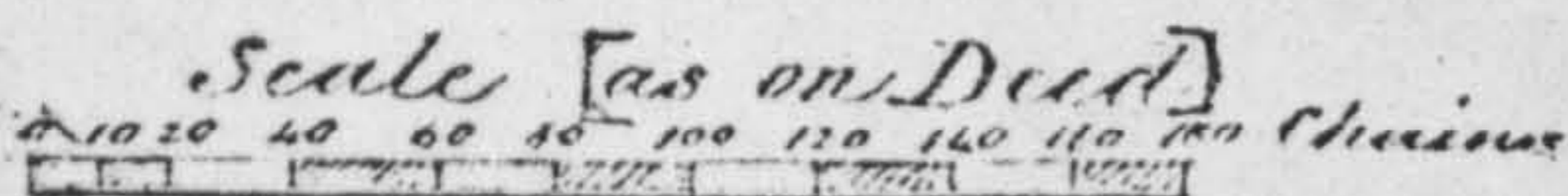


REFERENCE

The proposed Town of Middlesbro' is marked on the Plan, and the different Lots are divided from each other by red lines and respectively numbered from 1 to 123.

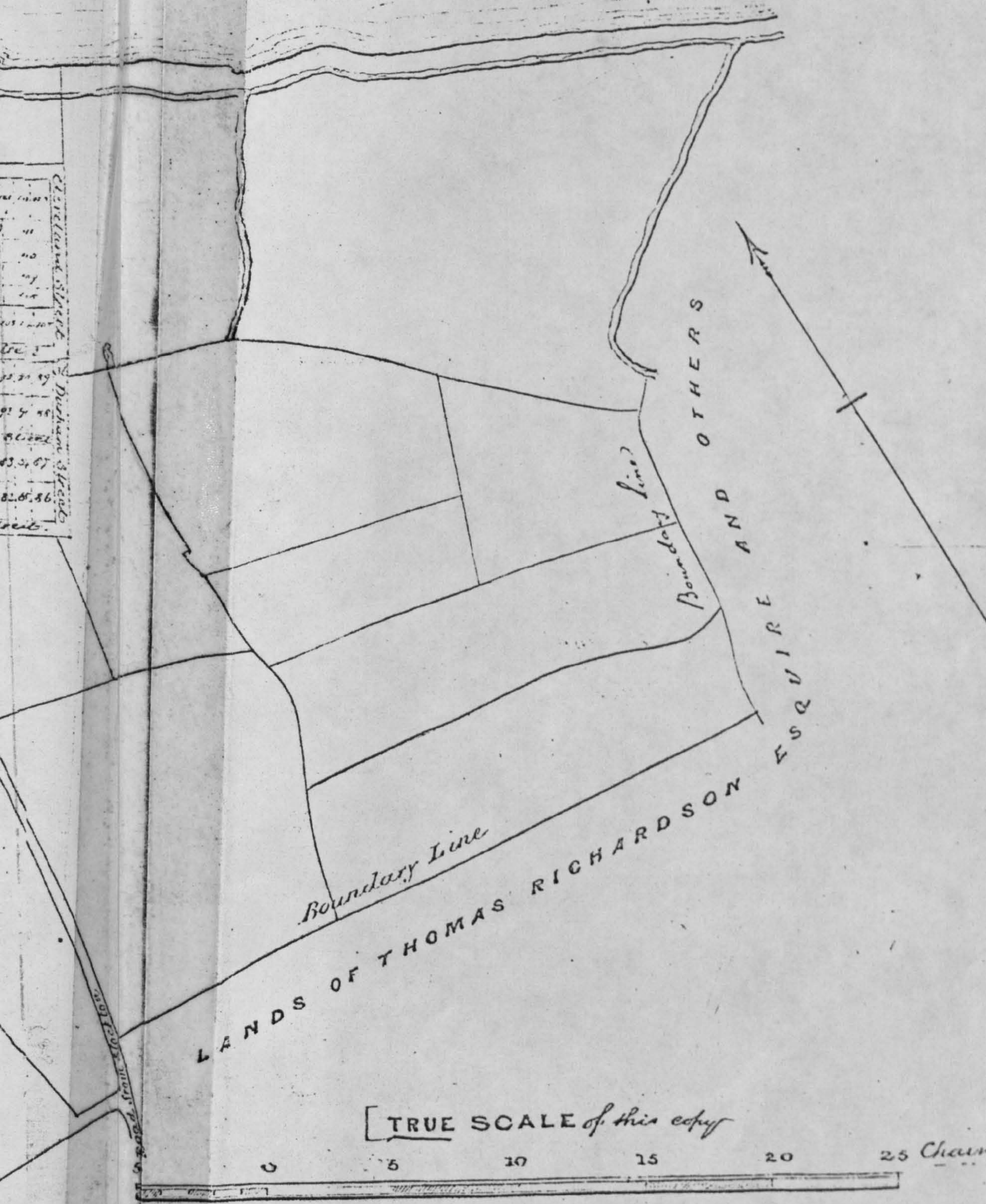
Land purchased by Thomas Richardson and others of Thomas Hunter Esq^r etc. ^{included} within the line coloured Blue.

The Red Boundary Line includes all the property liable to be rated to the repair of Streets Roads Paths &c. bound to the Middlesbro' Branch Railway from the Town of Middlesbro' coloured Brown and Yellow, the part coloured Yellow is that part granted by the Stockton and Darlington Railway Company to the Middlesbro' proprietors.





ELS



Boundary Line
LANDS OF THOMAS RICHARDSON
ESQUIRE

[TRUE SCALE of this copy

0 5 10 15 20 25 Chains

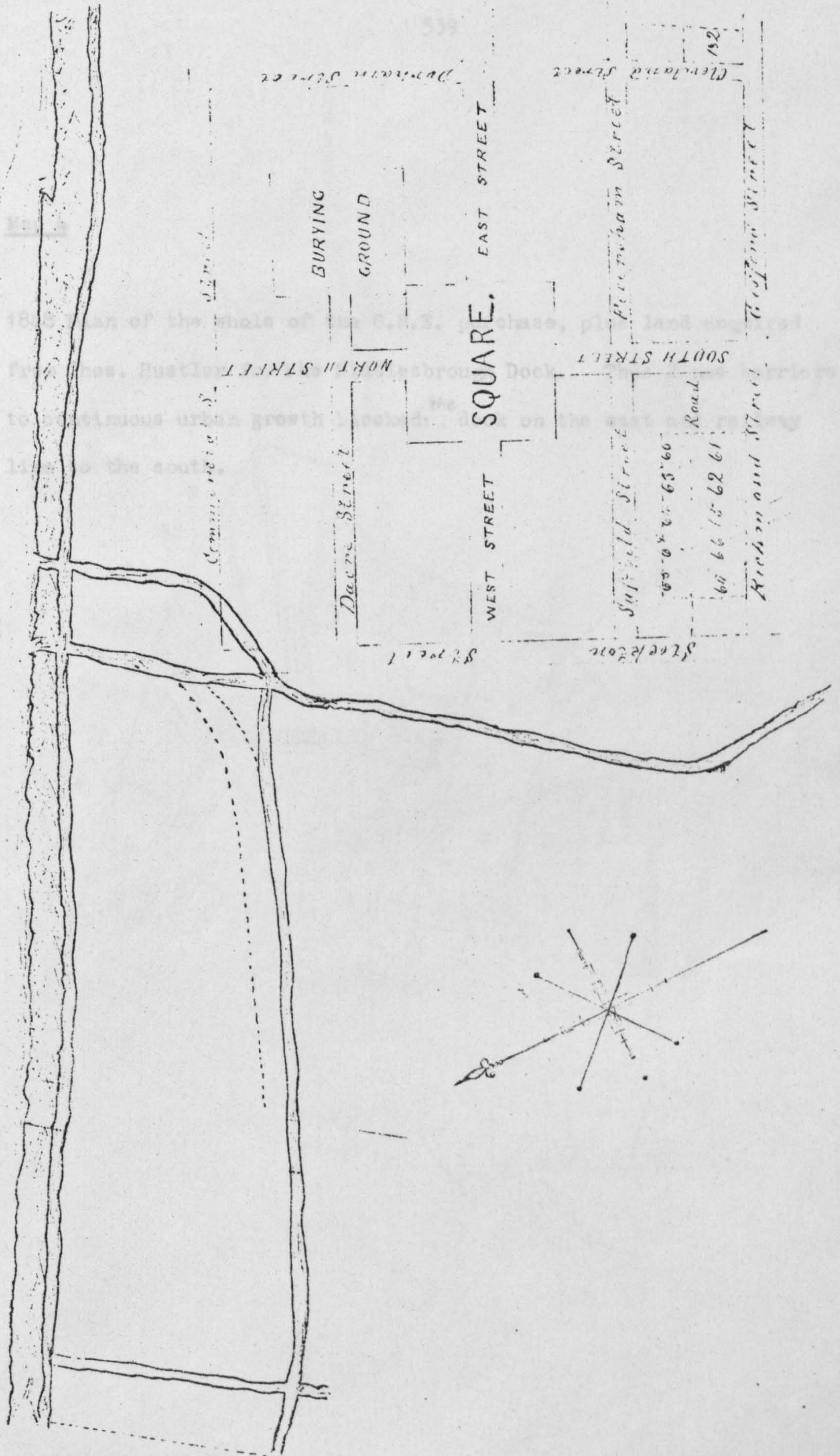
[The Plan having been reduced, the ^{true} scale of the Deed Plan was 600 to the inch, whereas this is 60 chains to the inch.]

Wm. H. Lough of C.
T. D. Hill.

Map 3

Plan with ONE/John Vaughan sale agreement 1840 (shows):

- a) subdivisions.
- b) additional plots.



Dorham Street

Merrill Street

BURYING

GROUND

EAST STREET

SQUARE.

Pittsboro Street

SOUTH STREET

NORTH STREET

Dacre Street

WEST STREET

Southfield Street

65-68-71-65-60

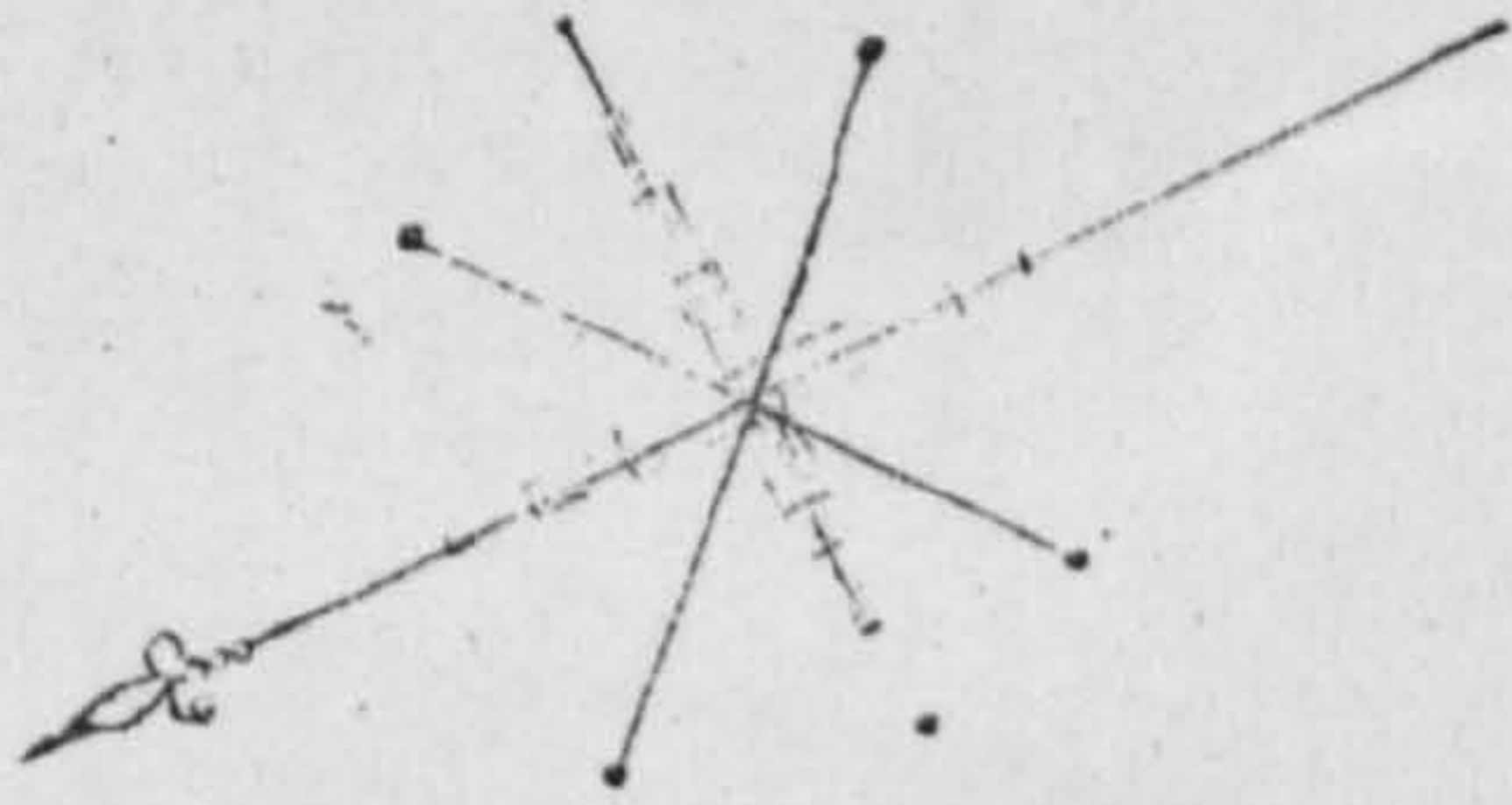
Road

60-66-65-62-61

Richmond Street

Street

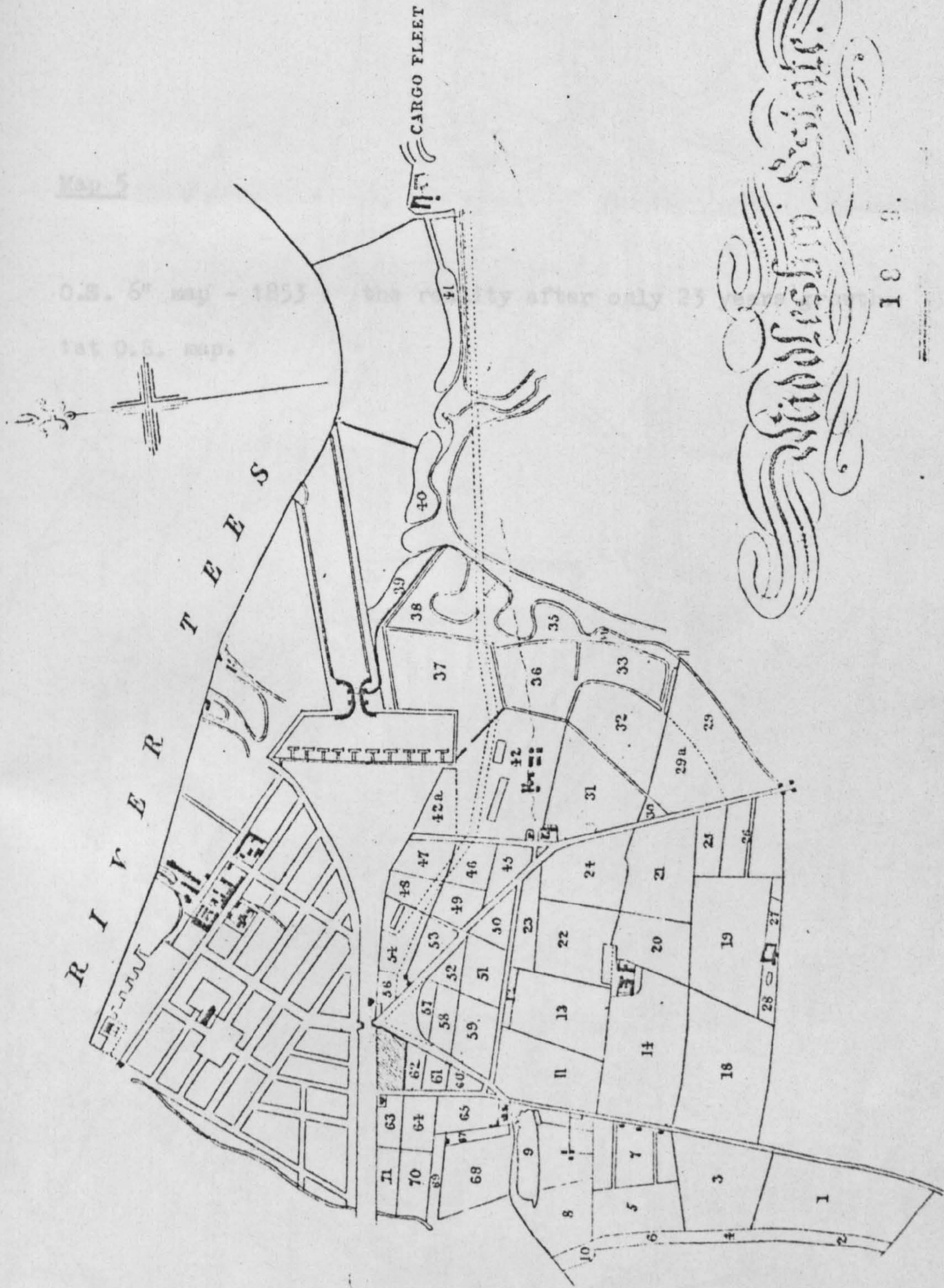
Street



Scale

Map 4

1848 Plan of the whole of the O.M.E. purchase, plus land acquired from Thos. Hustler for the Middlesbrough Dock. Thus 2 new barriers to continuous urban growth blocked: ^{the} dock on the east and railway line to the south.



Widdowson's Survey.

1859.

Scale 20 Chains to 1 Inch.

Map 5

0.5. 5th May - 1853

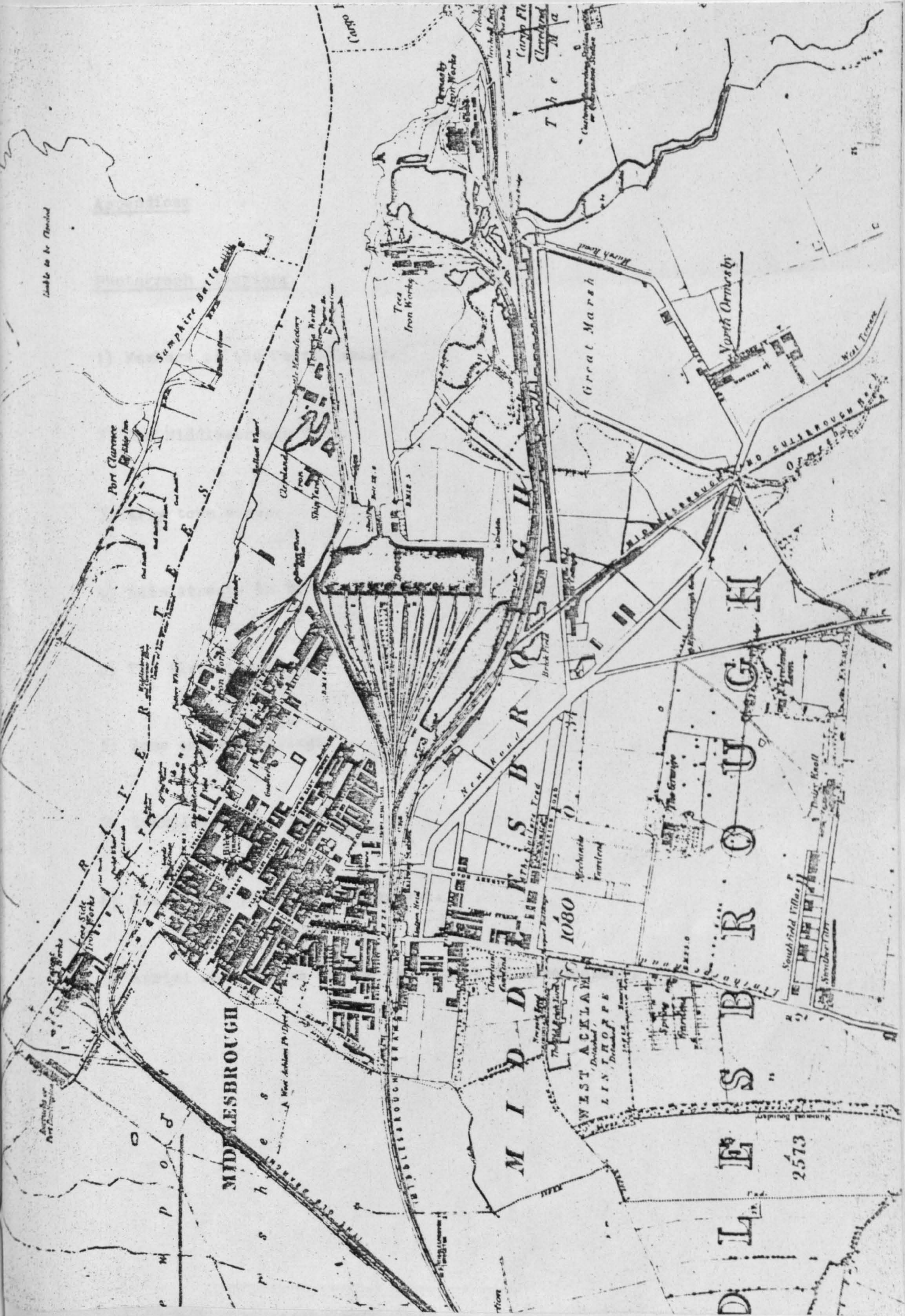
lat 0. 2. 10. N.

Map 5

O.S. 6" map - 1853 : the reality after only 23 years growth.

1st O.S. map.

Scale to be provided



Sumptre Belle

Port Clarence

Tees Iron Works

Ormsby Light Works

Thorncliffe

Great Marsh

North Ormsby

MIDLESBROUGH

MIDDLESBROUGH

MIDDLESBROUGH

MIDDLESBROUGH

MIDDLESBROUGH

MIDDLESBROUGH

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MIDDLESBROUGH

MIDDLESBROUGH

MIDDLESBROUGH

1080

2573

WEST ACKLAW

LINTHORPE

Southfield Villas

Strithers City

The Grange

Mechanics

Farmstead

Southfield Villas

Strithers City

The Grange

Mechanics

Farmstead

Southfield Villas

Strithers City

The Grange

Mechanics

Farmstead

Southfield Villas

Strithers City

The Grange

Mechanics

Farmstead

Southfield Villas

Strithers City

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AppendicesPhotograph Section:

- 1) Members of the Pease family.
- 2) The Middlesbrough Farm.
- 3) Early town views.
- 4) Main streets in the early town.
- 5) The first town hall.
- 6) Some early buildings.
- 7) Examples of in-filling.
- 8) The second phase of development.
- 9) Aerial comparisons of the two phases of development.

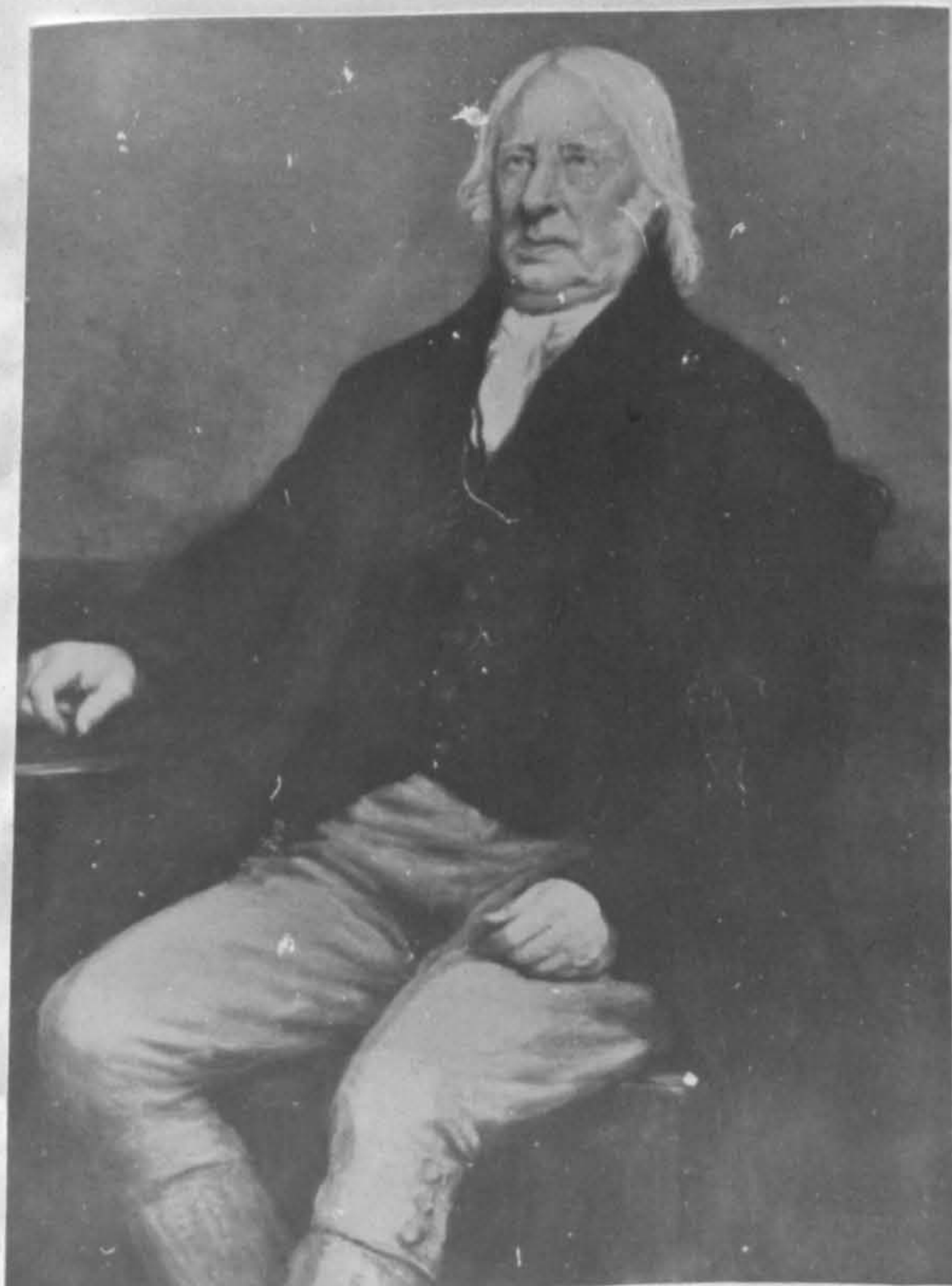
Members of the Pease Family

Plate 1.

Edward Pease (1767-1858)

Founder of the Pease dynasty, and sometimes referred to as 'father of the railway'.

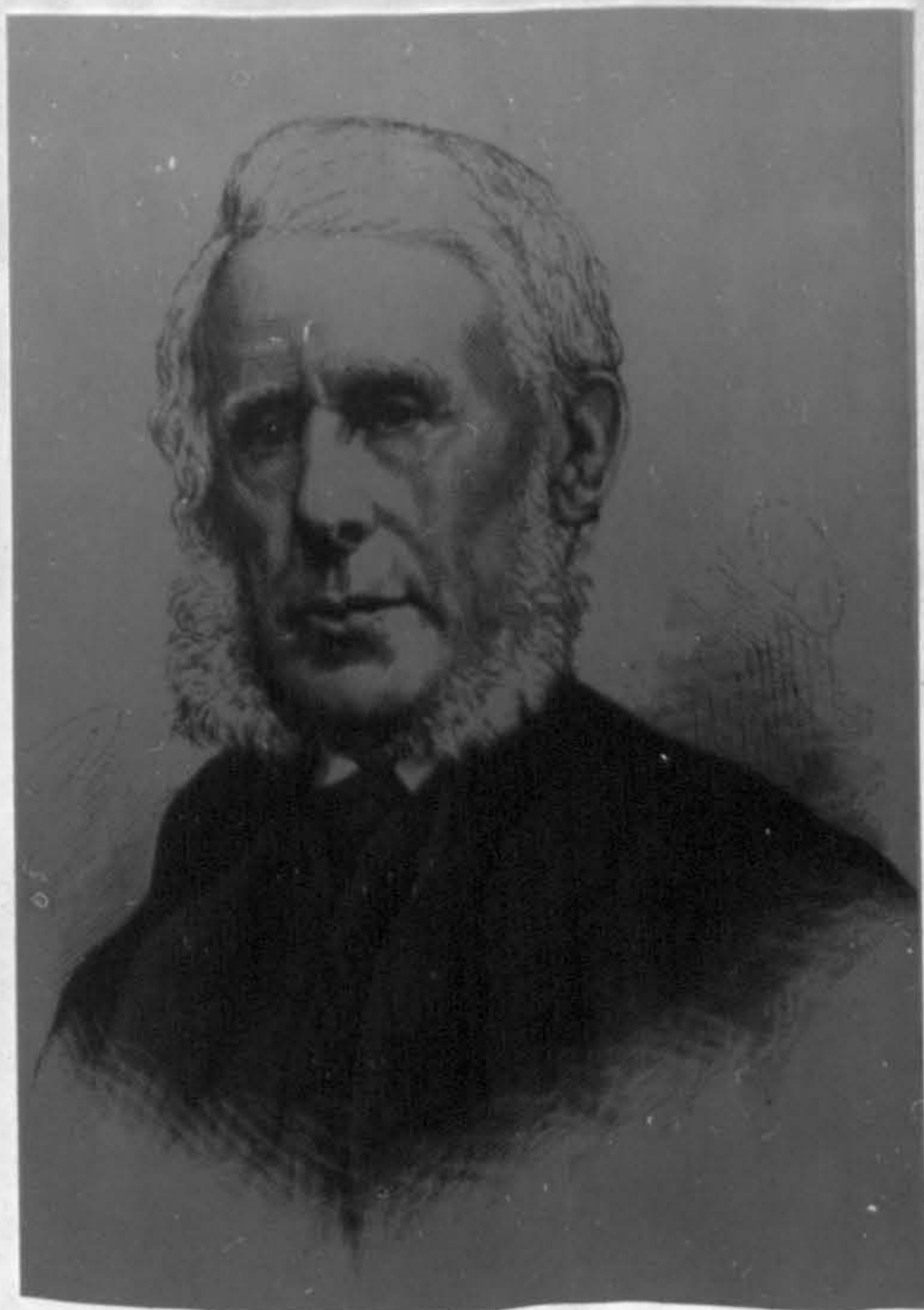


Plate 2.

Joseph Pease (1799-1872)

Founder of Middlesbrough, and first Quaker M.P.

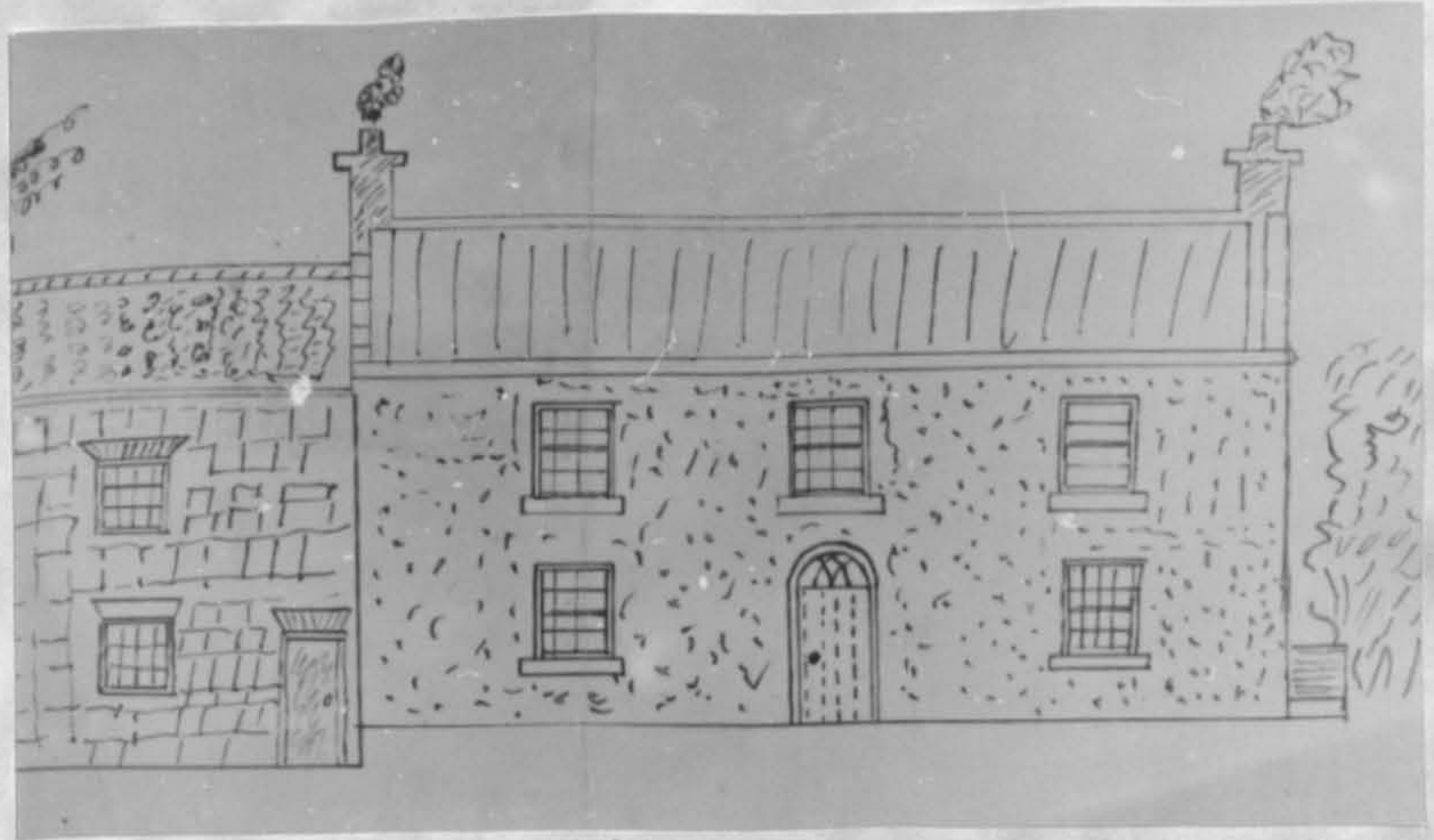
The Middlesbrough Farmhouse

Plate 3. Sketch of the south front of the farmhouse, home of the Parrington family from 1808 to 1835. Demolished 1842.

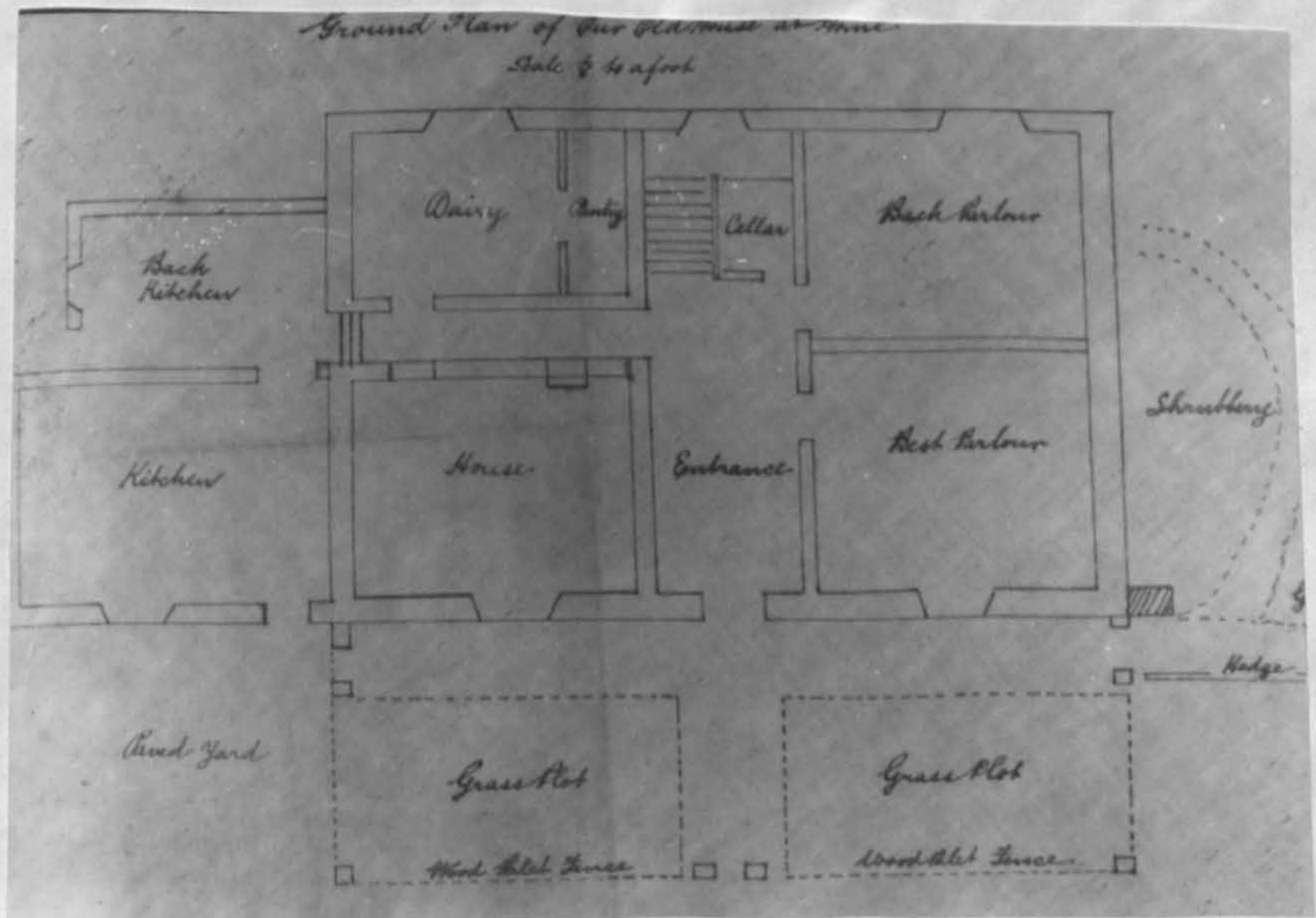


Plate 4. Ground Plan of the farmhouse.

These sketches were sent to the town clerk of Middlesbrough in 1890 by a descendent of the Parringtons. Both are to the scale of $\frac{1}{8}$ " to 1'.

Four Views of Early Middlesbrough

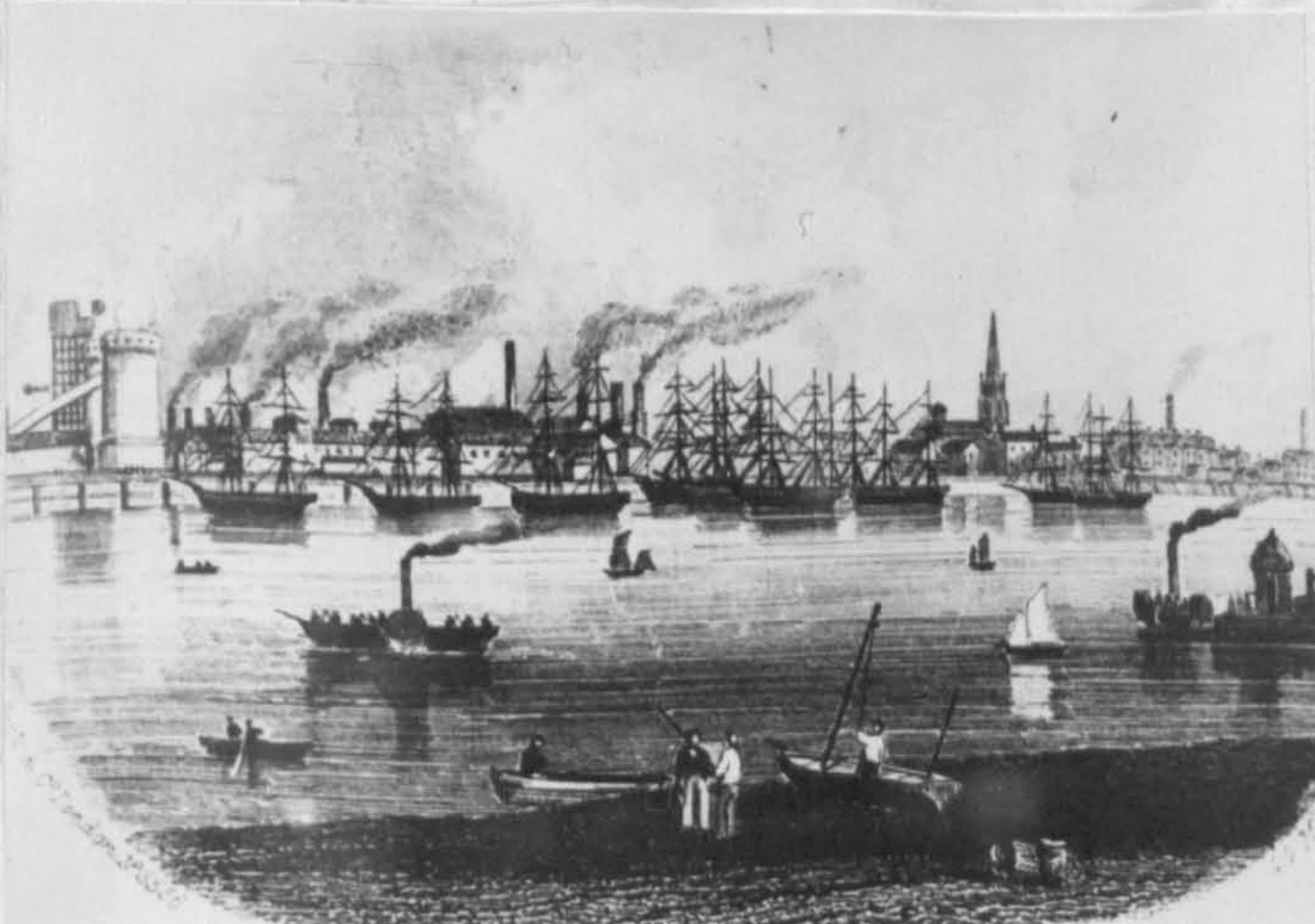
Plate 5. Watercolour painting of the town in 1832. The artist was looking eastwards, towards the Eston Hills. This picture illustrates the slightly high ground on which the town was planned, as well as the rather haphazard way in which the first streets were built.

Plate 6. View of the town from Port Clarence in 1846. This shows the early simple splendour of the coal port.



Plate 7. This is an unusual view of the town, in that the artist chose to look at the 'back' of the early town. The painting was done about 1850, and illustrates the very close rural aspects of the coal port.

Plate 8. Another view from Port Clarence, but this time in 1866. By now the coal port had given way to the iron town, as the industry in this picture shows.



Two of the Main Streets of the Coal Port



Plate 9. Sketch of South Street, 1857. This illustrates aspects of the 'grand design' as written in the 1831 Covenants. At the north end of the street is the first town hall, with the clock tower and market buildings, and to the right, the first parish church.

Plate 10. Another photograph of South Street, but this one was taken in 1947. Both views show elements of street trading although at an interval of ninety years. This latter view in fact is a good example of the centre of old Middlesbrough shortly before the drastic reconstruction in the following decade.



Plate 11. A photograph of West Street in the 1950's. The houses are boarded up prior to demolition. The slight incline towards the old centre can clearly be seen in this photograph. Also notable, is the modest nature of the buildings compared with South Street.

The First Town Hall

Plate 12. This is a sketch of the old town hall and St. Hilda's Church in 1885, forty years after the town hall was built. This view is from the centre of the town, looking down North Street. The building on the right, at the end of North Street was by this time the Customs House. In spite of the lack of detail, one can see that this street had pretensions to the grandeur of South Street rather than the modesty of West Street.



Plate 13. This is a photograph of the clock tower, behind the town hall, taken during reconstruction in 1960. On the right are some of the notorious new flats.



Plate 14. A photograph of the rear of the town hall, the clock tower, and the market buildings, taken in the 1920's. These rear views of the old town hall are far more common than those of the impressive Italianate facade and result from the southwards shift of the main parts of the town from the mid-nineteenth century onwards.

Some Early Buildings

Plate 15. The first house of the coal port. This was built in April 1830 for Geo. Chapman in West Street. This house was built on plot 46, so its exact position can be seen on the Otley plan. The house was demolished in 1960.



Plate 16. This photograph of the Ship Inn in Stockton Street was taken in 1954. The inn was first licensed in 1831, and although somewhat reconstructed, is now the oldest building in Middlesbrough.



Plate 17. This sketch, done in 1840, is of the Exchange Hotel, built in 1836. This building stands at the corner of North Street and Commercial Street. It was described by Pevsner as the most dignified building in the city. In 1853 the building was bought by the local authority to provide the accommodation that the town hall lacked. In 1881 it became the Customs House, and, as such, is the oldest public building in the town today.

In-Filling in the North and West of the Town

Plate 18. This is a photograph of Spark's Buildings off Commercial Street. It was taken in the early years of this century by the Medical Officer of Health, and presented, as part of a collection of 50 examples of Middlesbrough slums, to Middlesbrough Reference Library in 1959.

This group of houses was referred to in the Ranger Report, when there were house fronts on two opposite sides, and backs on the others.

Plate 19. Hopper's Yard, also off Commercial Street. At the time of the Ranger Report (1854) this yard had houses on two opposite sides, with the backs of other houses on a third side, and a dead wall on the fourth side. This latter could well be the wall in the background of the photograph. Ranger noted that there was one privy for the use of six of the dwellings; and some occupied cellars, with liquid refuse oozing through the walls from the ground above.



Plate 20. Graham's Yard, off Dacre Street. This group of houses was in the south-west part of the old town, whilst the two lots of housing above was along the southern boundary. This south-western corner of the town became notorious for its slums, as opposed to the south-eastern corner, where for example, Bolckow and Vaughan lived, in Cleveland Street.

In-Filling in the East of the Town

Plate 21. Robinson's Buildings off Lower East Street. This, and the two succeeding photographs, illustrate the presence, if not the prevalence, of slums around the south-east corner of the town. Thus the contrast with the north-west corner is only relative. A very careful look at the brick-work of this house will reveal the random nature of the courses, where no normal bonding system was followed, and where stretchers and headers appear in a most arbitrary manner. Such chaotic building was common in the town in the mid-nineteenth century

Plate 22. Paradise Place, off Sun Street. These houses were located very near Robinson's Buildings (Plate 21), just to the east of the original grid. These photographs show how the infilling of the original grid was exported to the newer area just beyond the peripheral streets.



Plate 23. Princess Place, off Dock Street. As the name implies, this group of streets grew up around the Middlesbrough Dock, constructed in 1841. The exact location is somewhat to the east of Robinson's Buildings; and although well beyond the original grid, the characteristics of the north-west of the town are once more reproduced. The cluttered oppressiveness of this group of buildings is at least as evident as either Spark's Buildings or Hopper's Yard (Plates 18 & 19).

The Second Phase of Development



Plate 24. This is a sketch of the intended second exchange building in the town. The actual building was finished in 1868, but minus the elaborate tower, which was omitted for economy reasons. The building is situated in Albert Road, just south of the Pease town, and was originally used as an iron market. Its scale should be compared with the earlier coal exchange (Plate 17). This iron exchange cost £35,000. compared with £3,650. for the earlier building. A measure of the iron town compared with the coal port.

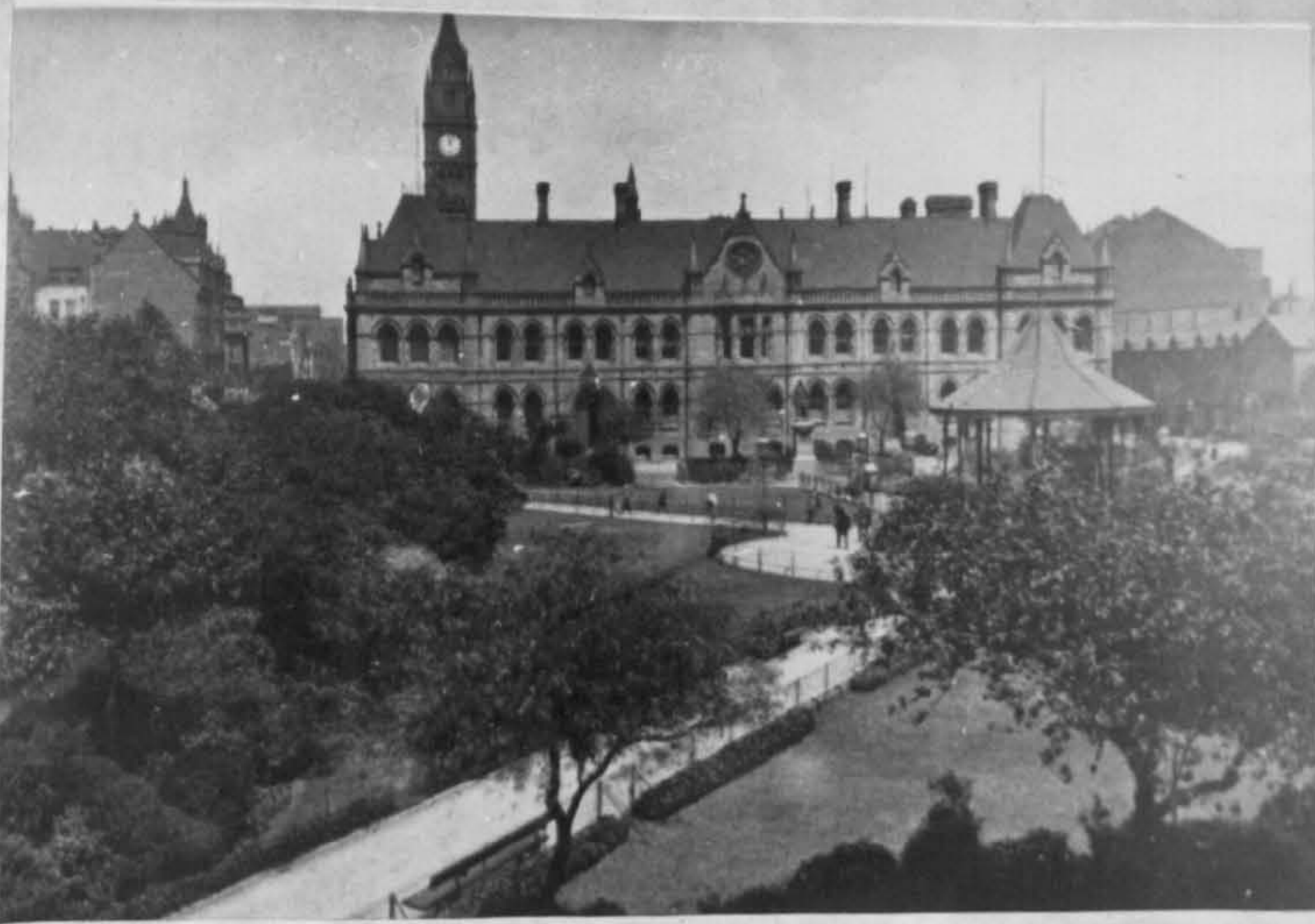


Plate 25. This is the second town hall, situated not far to the south of the second exchange building. This newer town hall was opened in 1889, after a long drawn out negotiating and building process. It cost £130,000. to build, compared with the £2,000. of the first town hall, (Plate 12). Its Neo-Gothic pretensions contrast greatly with the Italianate simplicity of the earlier building: again a measure of the difference between these two phases of Middlesbrough's growth.



Plate 26. Although not a public building as in the two earlier cases, Gunnergate Hall represents the same scale and the same values. This was the residence of John Vaughan, Bolckow's partner; and built in 1858, only five years after the first borough charter. In both size and design it contrasts with earlier examples of housing (Plates 18 to 23), although it is dwarfed by Bolckow's residence, Marton Hall. Bolckow's house was situated about four miles to the south of the original town, while Vaughan's was five miles south.

Long Distance Views of the town and its Surrounds

Plate 27. This aerial view, taken in 1961, shows very clearly the old town in relation to the river and the railway. In the middle of the photograph is the first town hall, surrounded immediately by what Pease had intended as Union Square. Although much of the old town had been reconstructed by the time this view was taken, one can nevertheless easily trace the original grid. In the bottom right is the site of the original staithes.

Plate 28. This was taken in 1963. It shows the iron town to the south of the railway in comparison to the older town to the north, and beyond that, the Tees. This view illustrates the linear development of the post 1850 town, with Linthorpe Road to the left, and Albert Road to the right. In Albert Road, just south of the railway, one can see the second exchange building, and to the south of this, there is the second town hall. One can begin to work out the position of the old town from the blackened St. Wilda's spire. Apart from differences of scale, this photograph shows the by-law symmetry of much of the housing of Middlesbrough's second phase, at a time when that very symmetry itself is being disrupted by the most recent phase of commercial and administrative building.



Plate 29. This photograph of Roseberry Topping was taken by a firm of local photographers in the mid-1920's. This particular view was used extensively in the depression period when the town was advertising itself to the world outside; the antidote to the image. I have shown in my comments on leisure that the town endowed this moor with as many myths as it reserved for itself.

Bibliography

Main Sections:

- 1) Documents.
- 2) Official Publications.
- 3) Newspaper and periodicals.
- 4) Diaries, Memoirs, Letters and Minutes.
- 5) Books and Pamphlets.
- 6) Articles.

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