

XI

Colliery Cottages 1830–1915

The Great Northern Coalfield

H. Diana Brown

Some years ago a gentleman came into the North to fill an important position in a large colliery. He arrived late at night and slept at the inn. The following morning, on looking out, he immediately called the landlord and asked what all those cottages were for. "Cottages, sir? Those are the pitmen's houses". "Good gracious!" exclaimed the southerner, "I thought pitmen lived in the pit!"¹

THE area of the so-called "Great Northern Coalfield" is a clearly defined region of the north-east of England. The coalfield is bounded by the River Tees in the south, the Tweed in the north and for some of its extent the South Tyne in the west. In general, the slope of the land is towards the east, but there are many local variations. There are five principal rivers—the Tees, the Tweed, the Wear, the Tyne and the Wansbeck and their tributaries. There are many coal seams of varying thickness and many of these continue out under the sea and remain workable for some distance beyond the shore line.²

The nineteenth century was the age for coal and the beginning of the century was marked by its greatly increased use. There was a large natural increase in the demand for coal for domestic purposes as well as for exportation. Among the other causes of increase was the general adoption of steam power and the rapid expansion of the coal trade was largely facilitated by the extension of the railways. This enabled coal to be distributed more easily and economically. From 1800 the output of coal rapidly increased and it is estimated that by 1810 there were 10,000 miners at work in the region and the total annual output was 4·5

million tons. By 1900 it had increased to 45 million tons, a quarter of the national output. The number of miners employed in the region also increased rapidly from the 10,000 in 1810 to 60,000 in 1860 and 223,000 in 1912.³

The precise population which Northumberland and Durham supported in the middle of the eighteenth century is unknown, but it seems that it had been growing during the decades prior to the first national census of 1801, when the population of the North-East was estimated at less than 350,000.⁴ From 1831 to the First World War, the North-East had growth rates which consistently exceeded that national average and in the decades from 1851 to 1881, the decade growth rate was around 25%.⁵ This rapid increase in population inevitably put great pressure on the housing stock.

The Client and Housing Conditions

The "outward man" distinguishes a pitman from every other operative. His stature is diminutive, his figure disproportionate and misshapen, his legs being much bowed, his chest protruding (the thoracic region being unequally developed). His arms are long and oddly suspended. His countenance is not less striking than his figure, his cheeks being generally hollow, his brow overhanging, his cheekbones high, his forehead low and retreating; nor is his appearance healthful; his habit is tainted with Scrofula.⁶

John Leifchild's rather awesome description of a "pitman" gives us a picture of the "client" for the colliery cottages. Relatively high child mortality was a general fact of life in the mid-nineteenth century and it was particularly noticeable among mining families. Approximately 40 per cent of miners' children did not

survive to adulthood, compared with around 33 per cent in the nation as a whole. The Health Officers linked the mortality patterns to the environmental conditions, which prompted the spread of disease and lowered the resistance of children to infections. Dampness, lack of ventilation and cramped interiors were common elements of miner's housing. Some of the poorest quality houses were built back to back, or back against a wall of earth.

Many colliery houses were built rapidly on poorly considered sites which had little natural drainage. The site was usually selected on the simple practicalities of communication and situated on the land adjoining the shaft. Houses, which were built in squares or long rows, were sited about 50 to 60 feet apart. There was usually a privy shared between several houses and connected to either an ash pit or privy midden. Although intended for dry ashes and excrement only the pits and middens filled with rain water and slop water which degenerated into collections of wet putrid animal and vegetable matter on which harmful bacteria bred. The ash pits, uncemented at the bottom, tended to seep into the surrounding soil. Their location close to pantry windows was a further factor in the spread of disease, for it allowed the flies which bred within the accumulations easy access to food.⁷

In 1842 the Poor Law Commissioner noted in his report on the Sanitary Conditions of the Labouring Population that privies were "the exception rather than the rule"⁸ in the mining communities of the North-East. Instead of the middens or ash pits, many had merely dung heaps which tended to spread filth over back yards and on to paths between colliery rows. The problem of the filth was increased because it appears that the farmers who were contracted to remove the excrement only did so when they were in need of manure. In some of the old towns the situation was made appreciably worse by the fact that the old property had no direct access to the middens at the rear of the houses and the contents had to be transported through the house on barrows.⁹ Further ground for complaint was the lack of any proper drainage system. When under-

ground drains did exist, they were often broken or blocked up.¹⁰

Another major contribution to poor health was the water. The supply was often the condensed steam produced as a by-product at the colliery and therefore the supply was intermittent. Not only was there too little water, but also it was often the means by which infection was spread.

The majority of colliery families, being tenants in their houses, were not in a position to improve the basic facilities. It must be said that however meticulous their housekeeping practice, many mining families appeared to have no idea about keeping the outside of the houses clean and were virtually forced into practising habits totally unsuited to high density living. The situation was probably aggravated by the fact that the quality of the external environment was so appalling that there was little point in trying to improve it.

The Great Northern Coalfield had the distinction of being the only coalfield in England and Wales (parts of Scotland were the same) where the colliery owners provided the miners' homes, as they say "free". The precedent for this system was established in 1794 and was common in the northern counties when the "binding" system was in operation. Miners worked under the annual bond which was a legal contract between men and owners. Theoretically this contract was mutually beneficial for, in areas of acute labour shortage, it guaranteed that a master had workmen who were bound to him from one hiring fair to the next and it also sought to protect the men, ensuring employment even when coal was stock piled and prices were falling.¹¹ In practice, it gave the employers far-reaching powers. The miner was subject to fines and conditions imposed entirely at the owner's discretion, without redress of any kind and breaking the agreement meant imprisonment. The relevant section of the Bond which the men were called upon to subscribe to in 1843 states:

Each person to whom a dwelling-house shall be provided as part payment of his wages, shall keep in good repair the glass in the windows thereof, or

pay the said owners for the repairs of the same, it being distinctly understood that the dwelling-house provided for any of the persons hereby hired or engaged are to form part of the wages of such persons; and on the expiration of such hiring in case any of them shall quit or be legally discharged from the employment hereby agreed upon, he or they shall at the end of 14 days thereafter quit such dwelling-house or dwelling-houses, and in case of neglect or refusal, such owners shall be at liberty, and he or they, and their agents and servants are hereby authorized and empowered to enter into and upon such dwelling-houses, and remove and turn out of possession such workman or workmen, and all his and their families, furniture, and effects, without having recourse to any legal proceedings.¹²

For those miners not occupying a colliery house, the custom was to pay a rent allowance.

Tenancy of a colliery dwelling was conditional upon the tenants working at the pit. A man leaving to take employment with another coal company was evicted from his colliery house and when labour was in short supply, coal owners competed with each other for men. The colliery houses were then used as an incentive to induce men, especially those with large families of sons, to work at a particular colliery. Conversely mass evictions from colliery houses was a common form of reprisal used by owners against miners on strike.

The Cottages

Here is the most surprising thing in the whole world; thousands of men and thousands of horses continually living underground; children born there, and who sometimes, it is said, seldom see the surface at all, though they live to a considerable age.¹³

Clearly, some nineteenth century observers doubted that miners lived in houses at all. Until the middle of the nineteenth century the majority of working people in the North-East lived in very primitive conditions, compared to present day standards. Whether these working families were in farm cottages, fishermen's

cottages or colliery cottages, the whole family ate and slept in one or two rooms. The main room, heated by an open fire, which was the only means of cooking, was lighted mainly by an oil lamp. The cottages, usually built in rows or squares, were without indoor water or sanitation.

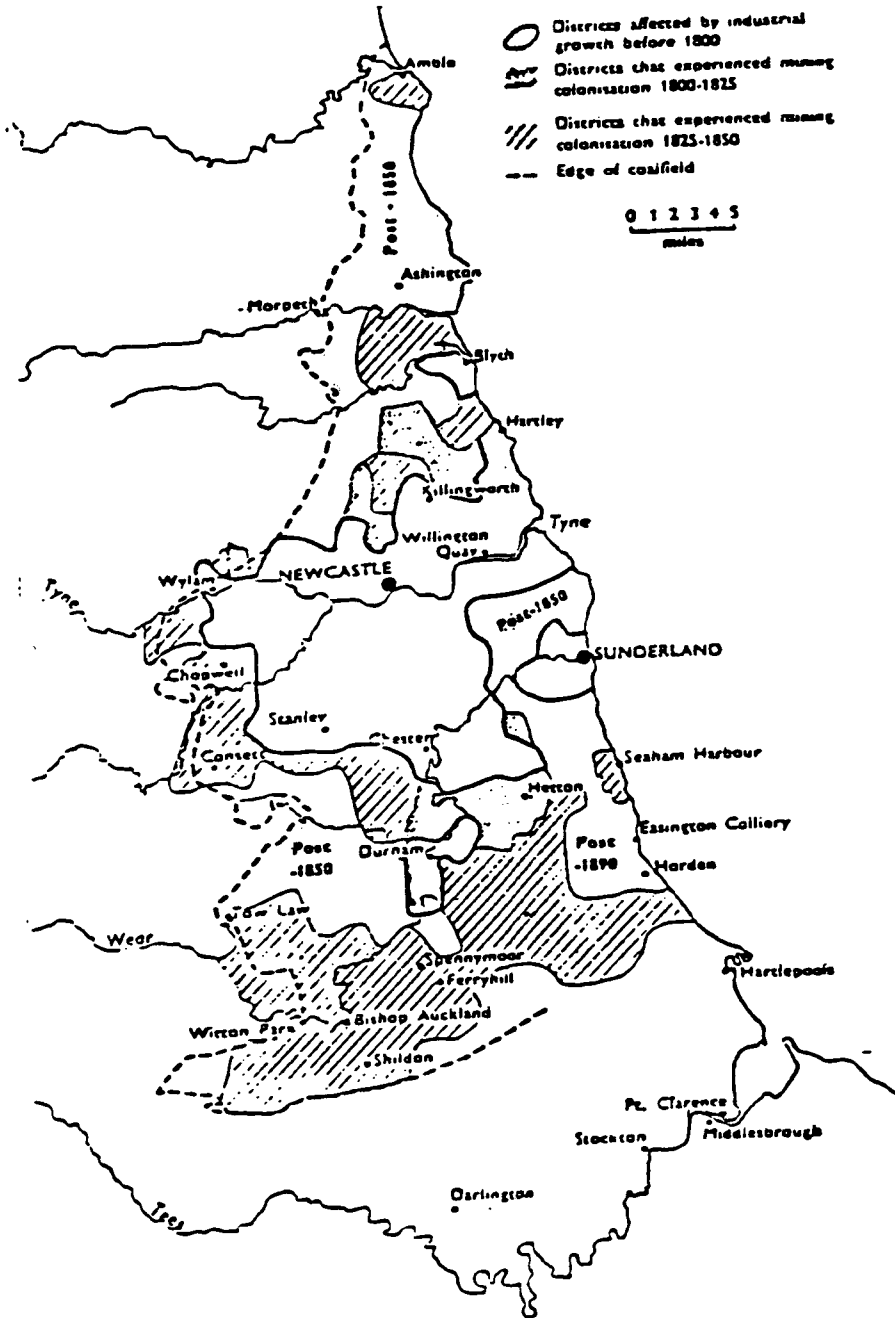
The working population established itself where the work was: where new shafts were sunk and, as the location of the pits changed, so further new settlements with new cottages formed. As pits closed the workforce left the cottages and migrated to new areas of employment. The location of the sinking of the pit has direct relevance to the age of the housing stock,¹⁴ (Map 1).

With increased demand, technology developed apace and after 1850 shafts were sunk deeper and the effect was that the area of study related to time, gradually moved further and further to the east. By 1899 shafts were being sunk at Easington. Clearly the housing stock is younger and much of it is still in existence in the 1990s. Extraction of the coal moved still further east, eventually coal being excavated from under the sea. At the same time, pits were closing in the west of the coalfield. While some collieries continued working for many years, others were closed after a relatively short period of time and some were re-opened. In these circumstances, the life expectancy of the colliery cottage was unknown. It is significant that the age of the colliery cottage was directly related to the technology of the time and date of sinking of the pit.

Economic Framework

The homes of the pitmen are erected either by the proprietors of the colliery, or by the companies, who speculate in the building and letting of them to coal owners, at from £3 to £4 per annum.¹⁵

Colliery housing on the Great Northern Coalfield, as a non-urban area, was an investment prerequisite of colliery operations. The mines as centres of production were nomadic, finding their sources from mineral deposits and not from existing population centres. As the



Map 1 Geographical areas in the nineteenth century consolidation of the Great Northern Coalfield

requirement was in rural areas, there was insufficient existing housing stock and as a new mine was sunk, so this necessitated the provision of housing by the colliery company.

The form of land tenure under which the colliery owner undertook his operations, and the size of operation, were important in this context. Leifchild in 1853 described four tiers of mining enterprise: the first rank, employing a capital of between £500,000 and £600,000 were often the ground Landlords and thus the Royalty owners. They might combine the running of an agricultural estate with that of a number of coal mines. Lord Ravensworth and his partners, the so-called "Grand Allies", were in this category, as were Lord Londonderry and the executors of the Countess of Durham. The other of Leifchild's classes of enterprise were unable to afford the large capital outlay of acquiring the whole of the surface under which they intended working, leased the minerals from the hereditary or other owner and paid a royalty on the tonnage raised.¹⁶

The element crucial to housing in this leasing process was the term of the lease; in Northumberland and Durham this varied. The landlord naturally preferred a short lease. However, it was necessary for the term to be long enough to allow the lessee to exploit fully the mine's potential.

In eighteenth century conditions, a period of twenty-one years was evidently considered adequate; for of 66 instances of which particulars have been noted, 32 were of this duration. Six were for shorter periods, 11 for periods exceeding twenty-one but not exceeding forty-two years, and 17 for longer periods.¹⁷

On surrender of the lease, the colliery and its buildings become the property of the landlord.¹⁸ Not only were the colliery cottages built for a limited life expectancy, but there was an obvious disincentive to keep the housing in a proper state of repair towards the end of the lease. With the short lease, more pressure existed for the small company with less capital to minimize the expenditure on the housing

and so the standard suffered. The quality of the housing as an attraction to draw labour was not so crucial since the standards of mid-nineteenth century rural housing were very poor. Colliery owners only needed to make a minimal effort and investment to produce housing that would attract labourers.¹⁹

In early eighteenth century settlements, the first colliery cottages were grouped around the pit head. However, by the end of the nineteenth century, mining companies became larger and more prosperous as a result of the upward trend in the market. Land close by the pit head was taken on a longer lease, commonly 99 years for housing. These houses remained the property of the lessees subject to the payment of a ground rent after the colliery buildings had reverted to the royalty owners. Less common was the buying of the freehold of the land for housing construction.²⁰ Speculators purchased areas of land adjacent to the colliery and the houses that they built on these pieces of land were either bought by the colliery company for their employees as rent free houses or by private individuals, as an investment, and let to miners on a weekly rent basis or to the company en bloc.²¹

It was not unknown for miners to own the houses they lived in. This was made possible through co-operative societies, building clubs or the colliery company itself. Once established, a co-operative society made available to its members the facility to borrow money to purchase a house.²²

For example, a Co. Durham co-operative stores society with a membership of 1891, mainly miners, prior to World War One spent about £25,000 on building houses. Originally a member wishing to purchase a house deposited one-fifth of the cost—this was later reduced to one-tenth—and repaid the remainder at a rate of 13s 4d a month for each £100 or fraction thereof plus 4-1/6 per cent for interest on the outstanding balance each quarter year.²³ Under this method, the miner owned the house in a period of about seventeen years. During the period of repayment, he was responsible for all repairs to the house and he paid the rates and taxes. There are a few instances of the Ashing-

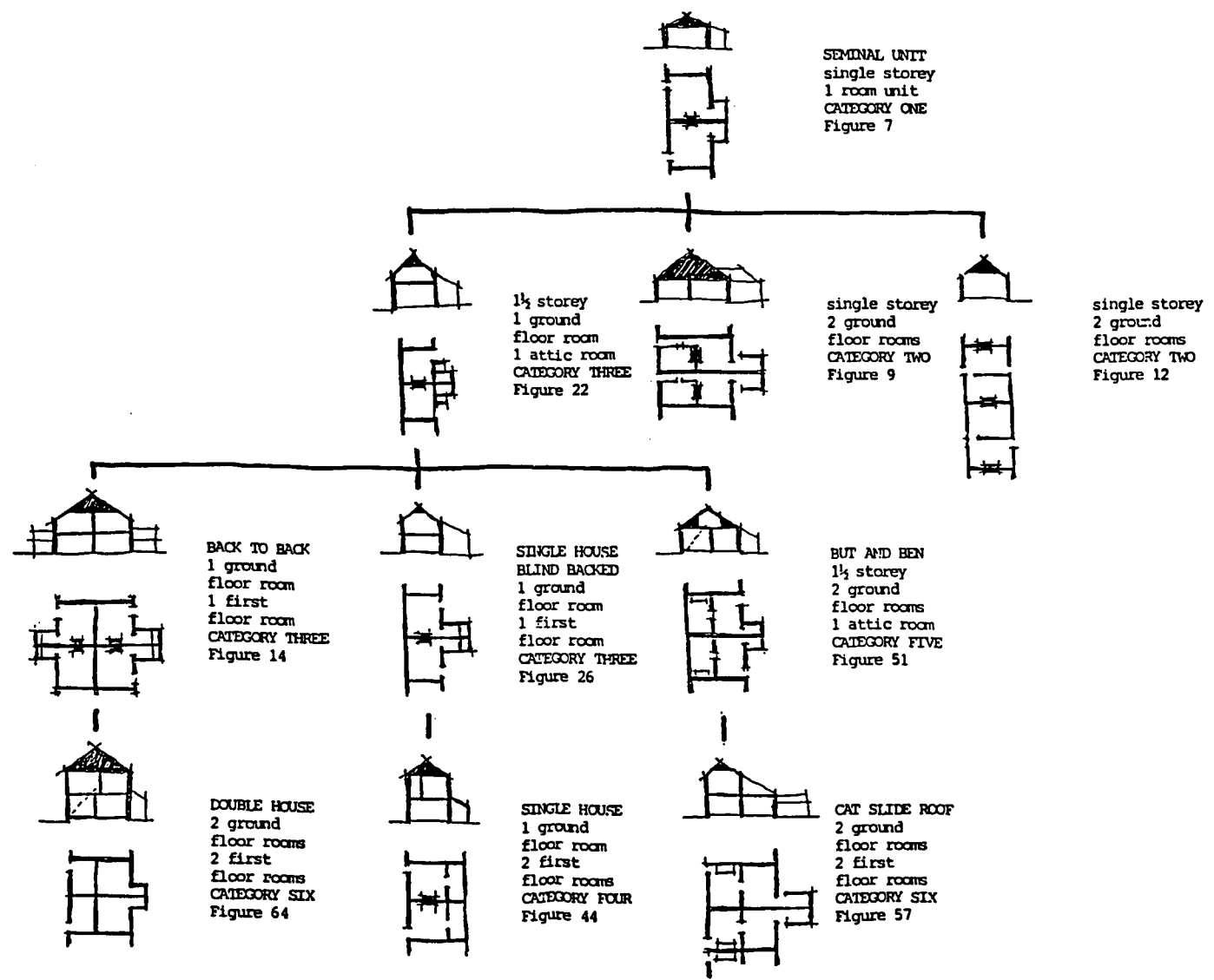


Fig. 1 Development pattern of the colliery cottages of the Great Northern Coalfield

ton Coal Company building houses then offering the miners the option of buying instead of renting them.²⁴

A few collieries were sited quite close to existing villages, encouraging the company to pay a rent allowance and let the miners find their own accommodation locally instead of providing free colliery houses. This situation induced local property owners to tenement their property to obtain the maximum rent potential.²⁵ Evidence is also found of conversion of disused farm buildings into dormitory buildings, known as "barracks" for single miners without lodgings.²⁶ The colliery housing stock developed against a backcloth of tenure, legislation, economic pressures, geographical and technical innovation.

Cottage Types

The analysis of cottage type facilitates knowledge of development pattern and shows the wide range of cottages identified on the Great Northern Coalfield. Using the plan form and the section of selected examples of cottages, Fig 1 shows a diagrammatic representation of the development pattern.²⁷ The diagram is simplified in order to identify visually the thread of development.

The seminal plan form of the dwellings was the single storey, single room unit. This developed on the one hand to cottages with two ground floor rooms and on the other to the cottage with one room on the ground floor and an attic room above. The cottages with two ground floor rooms took two forms, one where the cottage was two rooms wide and the other two rooms deep. Examples of cottages with three ground floor rooms can also be identified.

As more accommodation was required, the cottages increased in size. The one and a half storey cottage increased to the two storey "one up one down" or "single house". Within this type, there were many variations "back to back" cottages, Fig. 2,²⁸ and "blind backed cottages" Fig. 3.²⁹

The "single house" developed into a unit with one ground floor room and two first floor rooms, the upstairs area subdivided with a

timber partition. The single ground floor area became two rooms, the front room and the back room. The two ground floor rooms, two first floor rooms so formed the "double house".

The single storey two room deep dwellings developed to the "but and ben" cottage using the attic space. Following the concept of a dwelling with two ground floor rooms and two first floor rooms, one of which was a room in the roof, was the "cat slide roof cottage". These cottages had one full size first floor room and one attic room. The cat slide roof cottage took a variety of forms, in some instances the entrance was on the single storey side of the dwelling and in other cases the entrance was on the two storey side.

Period of Change

The period was one of great change. A typical place of employment in the 1820s - 40s is depicted in Thomas Hair's *A Series of Views of the Collieries in the Counties of Northumberland and Durham*.³⁰ The pit head was often a collection of timber clad buildings. The Northumberland Pitman, the client for the cottages was depicted in the Illustrated London News in 1844,³¹ (Fig. 4).

A line sketch of the colliery cottages at Longbenton in 1865 provides a glimpse of the living conditions,³² Fig. 5, reinforced by the Ordnance Survey Map of Benton Square, 1865 (Map 2).

At the commencement of the study period, the construction of the houses would have been carried out by the colliery employees as the initial growth in the labour force was relatively slow. When the shaft was being sunk, the colliery mason was normally able to build the small cottages albeit in a "tag-on" manner. In his book on *Coal Mining and the Coal Miner*, Bulman provides an indication of who was responsible for the design of the early dwellings.

On the staff of a large colliery, there are usually one or more officials who have had some experience in the design and the construction of small houses.³³

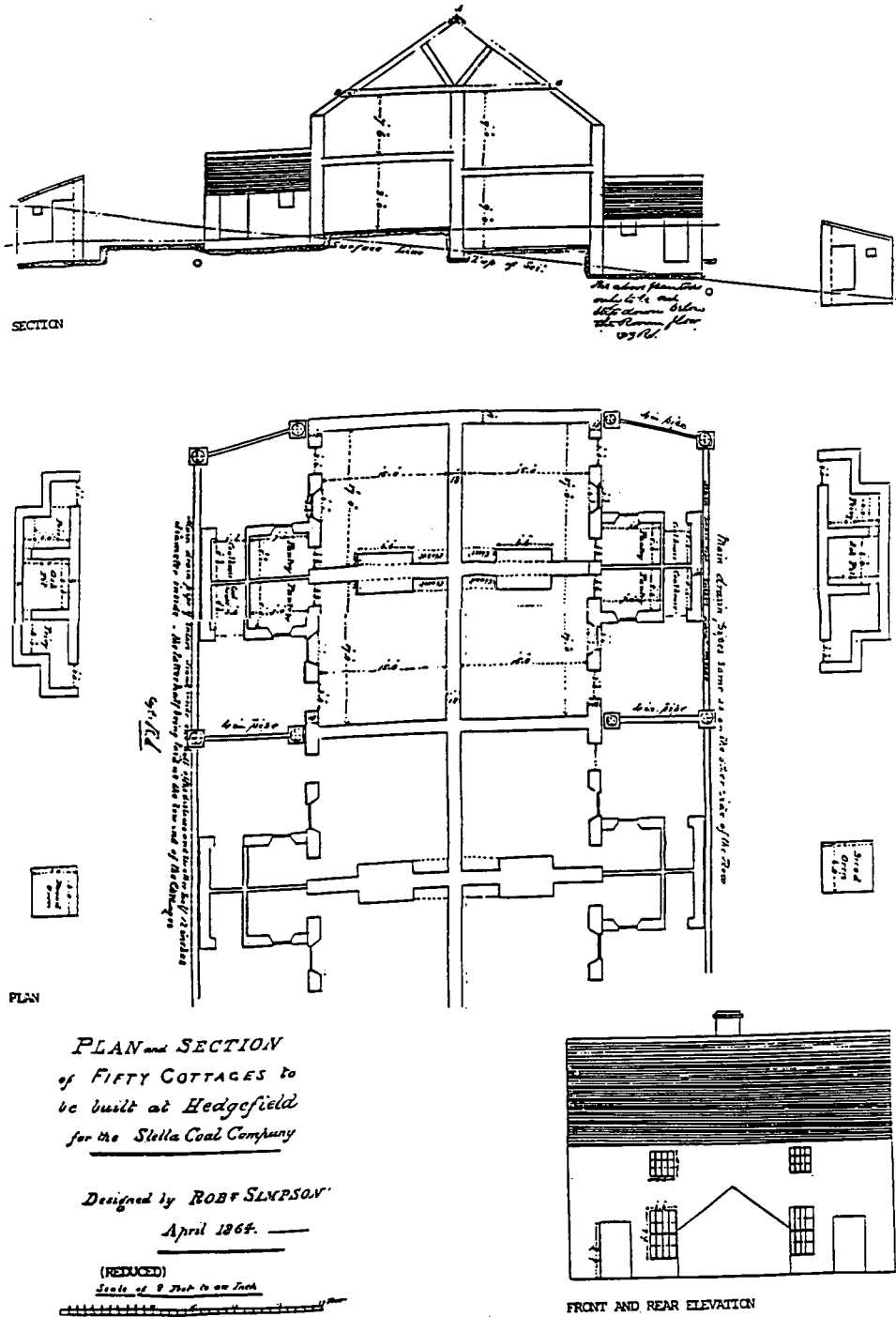


Fig. 2 Two-roomed cottages, back to back: 1 ground-floor room, 1 first-floor room.

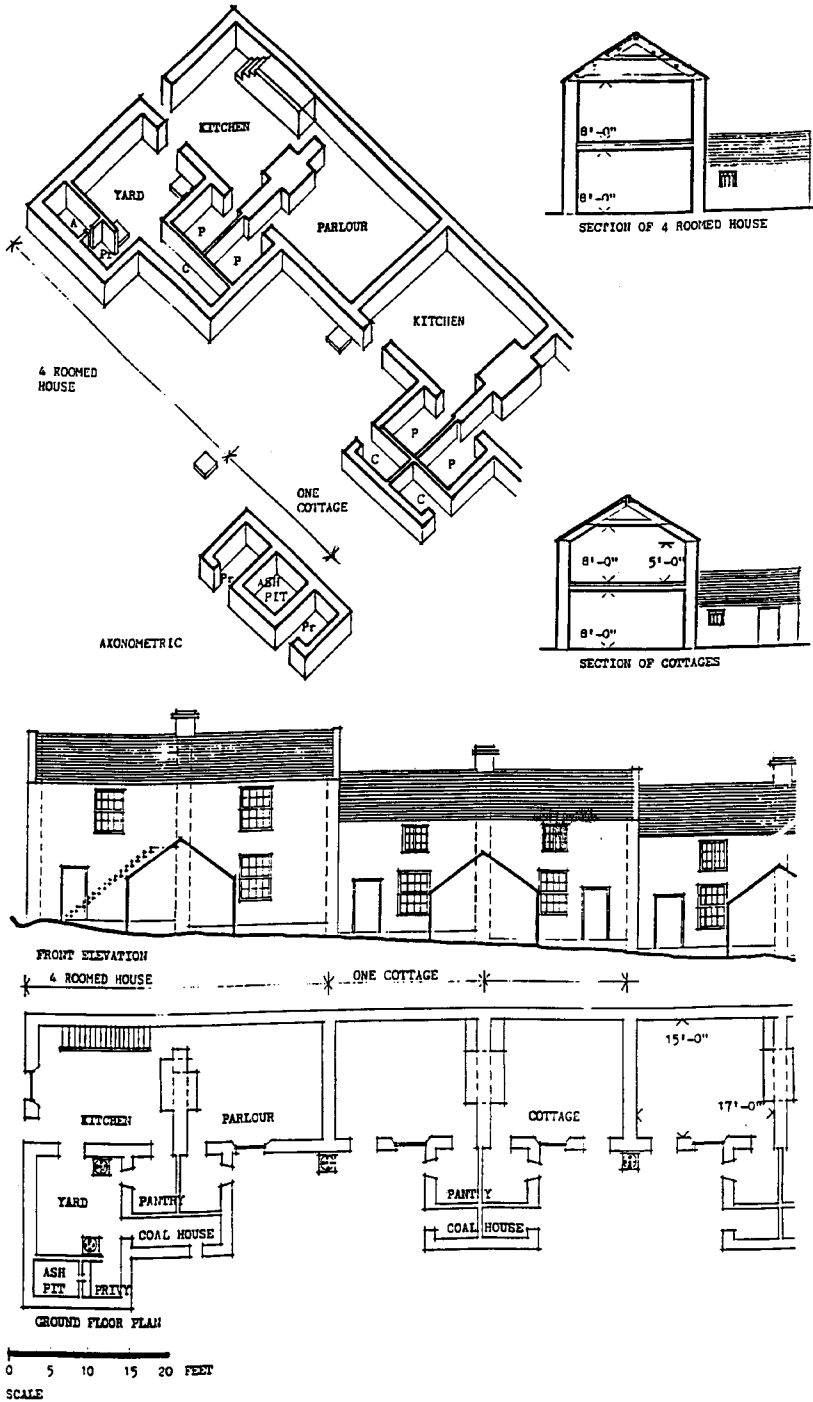


Fig. 3 Two-roomed cottages, blind backed.



Fig. 4 Northumberland pitman (Illustrated London News, April 1844).

Materials used would have been those found locally, timber or stone from nearby workings or stone used from sinking the shaft. Probably because of the short leases, it was common practice to build the first houses, often the sinkers houses, either all or partly in timber. This allowed for a quick and cheap construction, short life dwellings and ease of demolition. It also used simple skills in the method of construction, the skills of carpenters which were also readily available in an existing colliery force.

As the pit became more productive, a larger work force was required and the population of the settlement increased at a considerable rate.

In the circumstances, the coal owner might advertise for contractors to build the required number of dwellings. For example at Ryton, the Stella Company advertised in the local newspaper for a builder to construct a four bedroomed house and fourteen cottages.

TO BUILDERS AND CONTRACTORS
TO BE LET

THE BUILDING of a FOUR-ROOMED HOUSE and FOURTEEN WORKMEN'S COTTAGES at TOWNELEY COLLIERY, near RYTON

Plan and Specification may be seen at Towneley Colliery Office on MONDAY the 21st inst., at Two o'clock; and Tenders will be received by Mr. ROBERT SIMPSON of Ryton, until SATURDAY the 26th inst. The Stella Coal Company, for whom the House and Cottages are to be build, do not bind themselves to accept the lowest or any tender.

Ryton, May the 15th, 1860.³⁴

By the middle of the 19th century there was a growing general awareness of the problem of the widespread squalor and disease of the working class population. Parliament eventually produced a series of Acts to prevent the unnecessary loss of life and suffering caused by insanitary conditions.

The picture of environmental conditions at the start of the 1914-18 War showed improvement in many parts of the country. The houses built on the Great Northern Coalfield in the 1890s and 1900s were far superior to those fifty years earlier. Mostly they had drainage, damp proofing and ventilation and were of a larger floor area than previously. Some of the new houses built in 1910 had four to five rooms, piped in water, water closets and bathrooms.³⁵

If he worked in an expanding district like Ashington, the miner, at the turn of the century, was much better off than his predecessor. A count in 1914 revealed one-half of the houses had been built since 1898. This was so important that miners sought work in Ashington to improve their living conditions. Ashington was reported to have the best housing in

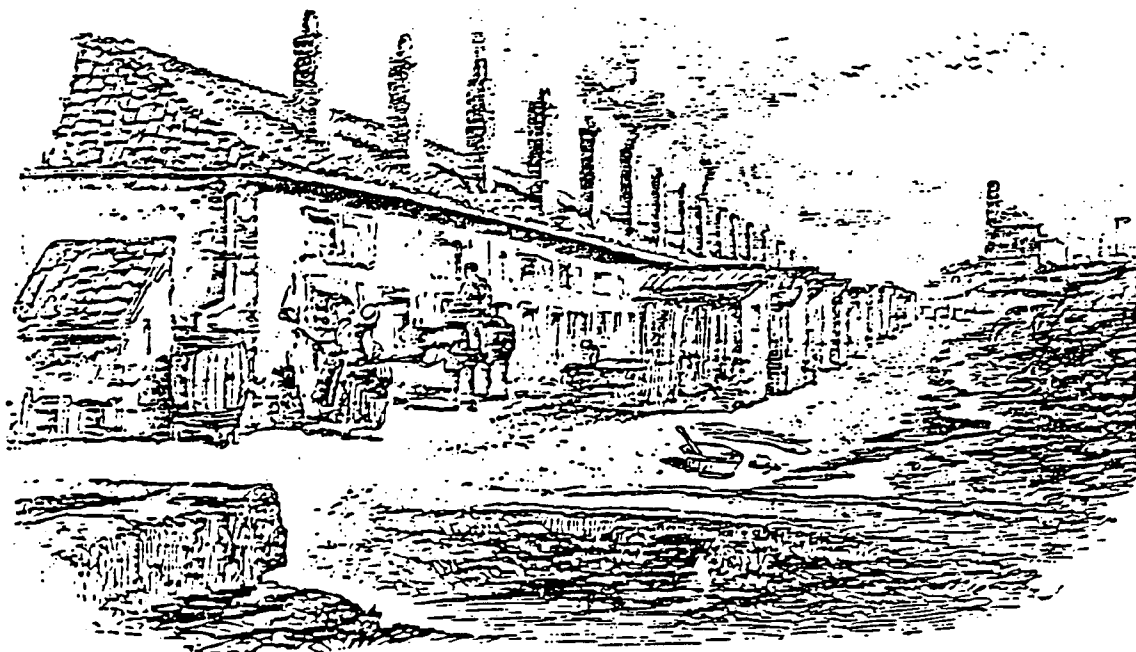


Fig. 5 Collier's cottages at Longbenton in 1865. (From S. Smiles, *Lives of the Engineers*, Vol III).

the country. Of the seven hundred and twenty-four new houses built between 1900 and 1914, one hundred and five were of five rooms and two hundred and forty-seven of four rooms. The remaining three hundred and seventy-two were of the three roomed size.³⁶

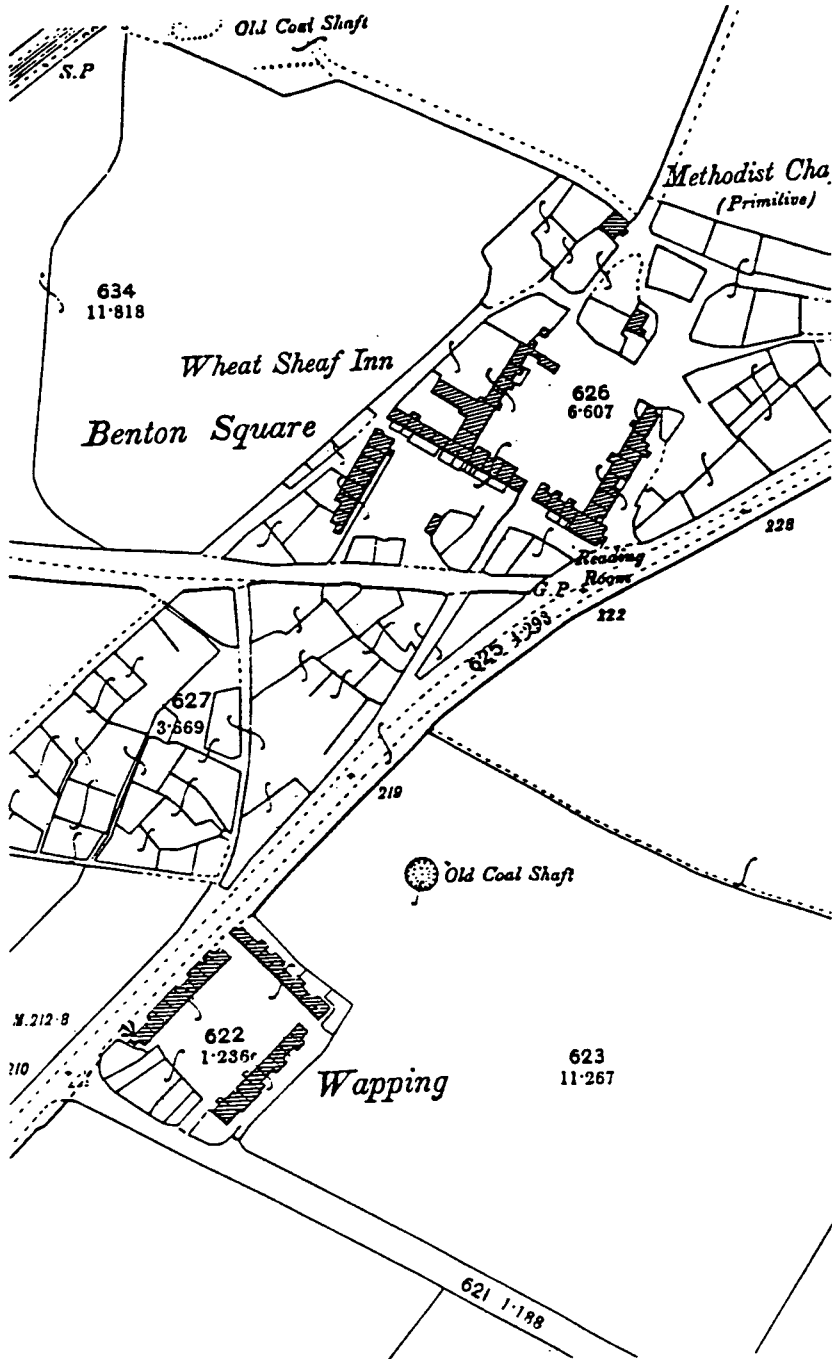
A problem which still had not been overcome was that of over-crowding. The rate at which the houses were built by the coal companies and private concerns could not keep pace with the expansion of the population of the Great Northern Coalfield. In a report on the village of Shotton in 1914, 150 three-roomed houses had between 7 and 14 persons in occupation and 57 four-roomed houses had between 9 and 16 people. In a total of 827 houses, 33 were occupied by two families and in one case there were three separate families in the same house.³⁷

By the end of the first decade of the twentieth century, the worst of the older housing was gradually being demolished or improved. The single house with one room below and the

attic above still existed, but was not usually occupied by large families. It was often the first home of a couple with a small family.

Few homes were demolished, as clearance only aggravated the problem of overcrowding. Other improvements, for example those to improve drainage and sewerage, all took place slowly as they obviously necessitated increases in the rates. The miners themselves were often prepared to tolerate the poor conditions without complaint, as they were afraid of losing the benefit of a rent-free colliery house.

Improvements were taking place, the dung heap had been replaced by the privy-midden and the worst of the privy-middens replaced by ash pits. Floors were being concreted to prevent seepage of filth into the subsoil. By 1914, the excrement was collected by the local farmers and in some instances the more progressive Local Authorities were improving the Back Streets. Adequate water supplies were being provided with the piping in of a supply to homes. By 1914, not all dwellings had been



Map 2 Benton Square (Ordnance Survey, 1865).

improved, but there were substantial changes. In some ways, however, the potential for the spread of infection was greater in the older now very dilapidated houses of the less progressive mining districts.

The improvements in the work environment and the living conditions were not without effect in the general good health of the miner. So 1915 draws to a close the period of the true colliery house constructed for the pitman. Blackhall Colliery on the South-East coast of County Durham was laid out by the Horden Colliery Ltd.,³⁸ Fig. 6. The plan of 1914 shows the Grid Iron pattern of the "Bye Law streets" to comply with the regulations affecting the layout of the dwellings. Also indicated on the plan are public buildings, the workmen's institute, theatre and church.

By November 1917, four hundred and sixty-two houses had been built at Blackhall by the Colliery Company. Some shops and further dwellings had been built by private individuals. The colliery dwellings were all constructed of brickwork, external walls in cavity construction and internally nine inch solid brickwork. The roofs were of second quality Bangor slates. The rooms on the ground floor and first floor had nine foot floor to ceiling height. The houses were provided with back yards in the far corner of which was a coal house and earth closet. Water was laid to all houses and supplied free by the colliery company. Electricity and lighting was also supplied. Coal was allowed free every fortnight in the winter months and every three weeks in the summer. All the roads and footpaths were tarmacadamed.

There were four classes of house all allowed rent-free to the colliery workman as a part of his wages. Class I was a four-roomed house, Class II five-roomed, Class III a slightly larger five-roomed house and Class IV, a house designed for colliery officials was built at the end of rows of other houses.

These colliery cottages of the end of the study period were sophisticated in comparison with the humble dwellings of Longbenton in 1830. The quality of the housing provision and its servicing was good. The social and cultural responsibility was also respected with provision

for school, hotel, hospital, theatre, church and swimming bath facilities.

Conclusion

The initial impression of housing on the Great Northern Coalfield is of many small dwellings of inferior quality. Analysis of plan and section revealed a surprising number of totally different categories of cottage and within each category many variations on a theme. There was a strong hierarchical structure, larger better quality dwellings through to small humble dwellings occupied by managers, under-managers, foremen, pitmen; this was even reflected in the naming of the streets, Quality Street, Foremans Row, Sinkers Row, etc. Cottages, although often built in long rows almost as an extension of the colliery itself, were constructed in a variety of different materials; the sinkers' cottages in stone excavated from the shaft, brick from the clay, cottages constructed and clad in timber by the carpenters of the colliery, and sometimes cottages clad in metal cladding.

Colliery dwellings are often assumed to be of poor quality, but in comparison with other forms of industrial housing, this was not necessarily the case. Many colliery cottages of the Great Northern Coalfield, although not "architect designed", were "planned". Original drawings of plans, sections and elevations of simple dwellings, were traced as early as 1838. Original specifications from some colliery companies, stipulating high quality materials and methods of construction for the age, reinforce the view that the dwellings were satisfactory. The problems lay in outside factors, insufficient number of cottages were built and severe overcrowding resulted. Although many colliery families had a relatively high standard of living and kept their own home in good order, it was the external conditions, the poor servicing, water and drainage which resulted in squalor and was hazardous to health.

The industrial revolution with its rapid increase in population and limited transport resources resulted in large numbers of people living in a small area. This placed pressure on

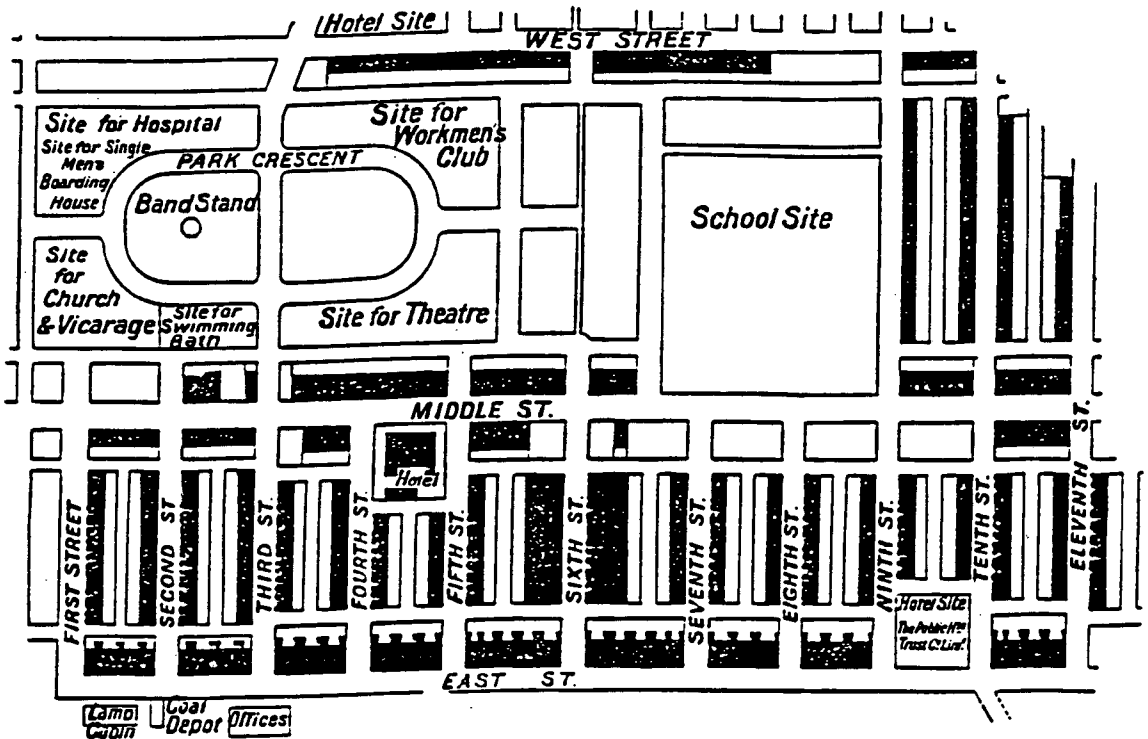


Fig. 6 Blackhall Colliery layout, Horden Colliery Ltd, 1914. (From H. F. Bulman, *Coal Mining and the Coal Miner*).

all industrial communities, whether based in urban or isolated rural areas. The cottages of the Great Northern Coalfield, usually built in rows or compactly planned squares, meant that the routine of domestic life in such close quarters was carried out practically in public. Perhaps these same conditions bred the strong sense of community for which the North-Eastern village has a reputation.

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²¹ H. F. Bulman, *Coal Mining and the Coal Miner*, (London: Methuen and Co. Ltd., 1920), 262-3.

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³¹ *Illustrated London News*, April 27th 1844.

³² Samuel Smiles, *Lives of the Engineers*, 5 volumes *George and Robert Stephenson*, (London: J. Murray, 1874-1899), V, 72.

³³ H. F. Bulman, op. cit., 248.

³⁴ *Newcastle Weekly Chronicle*, May 15th 1860.

³⁵ Hall, op. cit., 220-221.

³⁶ Hall, op. cit., 221 and Ashington Memoranda Book, 150-154.

³⁷ W. A. Moyes, *Mostly Mining* (Newcastle upon Tyne: Graham, 1969), 136.

³⁸ H. F. Bulman, op. cit., 252.

