

Chatterley Whitfield Mining Museum

Secondary School Teachers Pack

4: SOCIAL ASPECTS



**CHATTERLEY WHITFIELD MINING MUSEUM,
TUNSTALL, STOKE-ON-TRENT**

This short book is a segment of a Secondary Schools Teachers' Pack, which has been produced in four parts by the Education Department of Chatterley Whitfield Mining Museum, Stoke-on-Trent. The project is designed as an educational aid relating to the study of Earth Sciences in the National Curriculum, from Attainment Level 7 upwards. In addition to providing source material for teachers and pupils, it suggests avenues for further study.

Social conditions in the pits and in mining communities in former times were little understood by the vast majority of the population. Collieries were often established in isolated, out-of-town areas, and the grim realities of the miner's life were little known to the general public. Newspaper reports detailing major disasters at pits informed the population of the inherent perils involved in working in the industry, but the fact that an isolated death in the mines usually went unreported meant that an incomplete picture of life was presented.

The story of the miner over the last 200 years is, at worst, an appalling one, involving back-breaking labour, the employment of women and children in the mines, corrupt payment of wages, pit disasters, and a likely future in the parish workhouse for anyone who became destitute. However, only a gloom-monger would offer this as an overall picture of the Miner's lot. From the early 20th century, the introduction of pit-head baths and canteens and the provision of a wide range of other facilities has vastly improved the life of these black-faced providers of heat.

This segment of the Secondary Schools Teachers Pack focuses on some of the main social aspects of Mining over the last two centuries. In the detailed study which follows, the Miner himself is often quoted, as the rigours and rewards of his profession are explained best by him.

SECTION ONE: A FAIR DAY'S PAY FOR A FAIR DAY'S WORK

The title of this first section is an ironic summing-up of conditions in the mines in the 19th century. Men, women- even pregnant women- and children all descended into the pits in the desperate endeavour to eke out a meagre living, in order not to have to "go to the parish" for relief. Families tended to be large, and parents forced their children to work, to boost their income. If the country's economy had slumped, food was often scarce, such as in the "Hungry" 1840s, when the widespread increase in the use of machinery led to many manual workers losing their jobs. Ordinarily, though, there was plenty of work for the man in the street, be it on the land, with agricultural gangs, in the factories, or in the mines. Each of these types of types of employment had their own characteristic health hazards, and all involved exhausting toil. It was an employer's market: human labour was cheap and easy to come by, and if a man died in the pit, or had become incapacitated, there was always someone else waiting to fill his position.

It is shocking to consider the degree of discomfort which 19th century mine-workers had to endure in order to earn their weekly pittance. An early morning walk to the pit, sometimes in bad weather, was followed by the descent into the workings; this involved clambering into a wicker basket, suspended on chairs, and being lowered perhaps a thousand metres down below. Many deaths occurred, as people fell from the baskets. The earliest version of the modern day miners' "cage" was not introduced until the 1830s.

Once down below, miners had to walk, and sometimes crawl to the coal-face on which they were working- perhaps a journey of two or three miles. They were not paid for this journey to work and most likely would have been fatigued before the work started. What would they not have given to ride to their place of work, as do modern miners, in an underground locomotive?

In the deeper mines, temperatures were very humid; men often worked naked, whilst women and children stripped to the waist. In many pits, water trickled from the roof of the workings on to the semi-nude workers. Dry pits were no more comfortable, either, as the dust levels were horrendously high. Candles provided illumination but were often an instrument of death, causing methane explosions.

Most able-bodied men worked on the coal-faces, and were known variously as "hewers" or "haggers". Coal-carrying was widely undertaken by women and girls. In pits where it was impracticable or too expensive to utilise rails and trucks, the gentler sex were given the task of transporting the basketed coal on their backs. When a seam of coal outcropped on the side of a hill, passages were driven in, and hewing then began. This type of pit was known as a "drift mine",

"bearmouth", or "footrail". In such pits, a seam often came to an abrupt end, having ended in a "fault". The seam then continued at a higher or lower level, necessitating the driving in of another tunnel. In such conditions it was infeasible to install rails for trucks, and so women were used to carry coal up and down ladders from one level to another. The chances of coal being dropped by the bearer on to a colleague using the same ladder beneath her, would have been high. Nevertheless, this practice was common, particularly in the "stair pits" in Scotland. R.H. Franks, in his contribution to the 1842 Report to Parliament, recalled of his visit to the pits in East Scotland:

"The persons employed in coal-bearing are almost always girls and women. Boys are sometimes engaged in the same labour but that is comparatively rare. The coal-bearers have to carry coal on their backs in unrailed roads with burdens varying from three-quarters of a cwt. to 3 cwt..."

The next section in this Teachers Pack deals with the findings of the 1842 Report in greater detail. We now look at the terms of employment and methods of payment which prevailed in the 19th century.

Miners' wages fluctuated according to the state of the trade and the region. Until the second half of the 19th century, miners largely earned little more than workers in most other semi-skilled or manual industries, save when there was a particular rise in the demand for coal. In 1842, 12 hours was the most common shift-length, although 13-16 hours per day was certainly not unusual. Not all miners worked full-time, some of them being employed as farmers' labourers as well.

Many pit-owners cared not for the safety and welfare of their employees, who were treated almost like animals. In Scotland, an Act of 1606 had enforced the economic slavery of the colliers; the Scottish miner was not permitted to leave one mine to work in another, without his employer's consent. If the mine changed hands, then the miner and his family changed hands with it, carefully listed in an inventory, like cattle. The system was abolished by two Emancipation Acts in 1775 and 1779, but a similar system of "bonding" was widespread in Durham and Northumberland from the early 1700s to 1844. A "bond" involved a miner being "tied" to a mine for a year at a time, it being a crime to break this agreement. To a lesser extent, this yearly hiring cropped up in Scotland, Lancashire and South Derbyshire. It became a major grievance among miners, culminating in a major strike in 1844 which brought bonding to an end.

The butty system in the mines was another thorn in the miners' side. This was a form of sub-contract labour, prevalent in many areas, where only the Charter Master or "butty" (often a hewer) was directly employed by the pit-owner. The butty-collier recruited miners and oversaw contract-work- often employing his wife and children, prior to 1842. Some butties provided their own ponies, tubs, tools and explosives, effectively supplying the working capital of some mines, but their main aim was to get the greatest amount of work out of the smallest amount of men, keeping costs as low as possible. The system held numerous evils, especially in regard to the payment of wages. This was often done at the Tommy shop, or the local pub. Butty colliers were often publicans, and miners were encouraged to spend freely in the taverns, in order to keep their jobs. This practice

kept wages low, and inhibited the growth of the unions by dividing the workforce. Bitterness among miners resulted, giving rise to many strikes. In most parts of the country, the butty system of payment had petered out by the mid 19th century, but it lingered in North Staffordshire, not completely disappearing until well into the 20th century.

An Act of Parliament (1899) forbade the payment of wages in public houses, but the butty colliers responded craftily by paying the wages in pub out-buildings- the miners still being encouraged to assemble in the hostelryes for drinking purposes.

The Truck System involved the payment of wages either partly or wholly in goods or tokens. The tokens were usually exchangeable only at the company-run "tommy shop", which generally sold inferior goods at exorbitant prices. As a consequence, miners ran up huge debts with their employers, from which it was difficult to free themselves. Truck was most common in those areas where the butty system was in operation, since the butty often ran the tommy shop. The Truck Act of 1831 attempted to prohibit payment other than in "current coin of the Realm" but these abuses prevailed in many parts and were a great grievance in the aforementioned 1844 strike. This corrupt, law-defying method of payment continued in some areas until the 1870s, especially in places like Staffordshire.

Although society became more enlightened, and there was greater prosperity towards the end of the 19th century, the early to middle years of the Victorian Age witnessed a divided society of "haves" and "have-nots". Between the miners and the rest of society, there was what D.H. Lawrence called "the gulf impassable", a fact which is clearly indicated by the country's horrified reaction to the 1842 Report.

HOTSPOTS:

1. What does the phrase "go to the parish" mean?
2. Find out what kinds of garments a collier might have worn around 1850.
3. Why was the Truck Act largely ineffective in preventing the continuance of the tommy shops?

It was the accepted practice in the coal mines up to 1842 that any work which could be done by a child must be done by a child. Economic pressure on the mine-owner forced him to use this form of cheap labour whilst poor families had little choice but to sell their children into virtual slavery, or else starve. Children therefore worked in the mines out of necessity, but what DID become an issue, was the way in which they were being treated. Lord Shaftesbury and Lord Astley were the two principal figures behind the setting-up of the Government's nationwide Commission of 1840-42, which assessed the working conditions of children and young people. Women were included in the survey from 1841.

The "Childrens' Employment Commission. First Report of the Commissioners. Mines. H.M.S.O. 1842", to give it its full title, is a fascinating sociological document which speaks volumes about a miner's life in the 1840s. The evidence collected tells of the punishments meted out to children by older colliers, and the numerous moral tragedies which were inherent in the industry at the time. In 1840, Thomas Moorhouse, who worked at a pit in Halifax, told one of the Sub-Commissioners:

"I don't know how old I am; father is dead; I am a chance child; mother is dead also; I don't know how long she has been dead; 'tis better na three years; I began to hurry when I was nine years old for William Greenwood; I was apprenticed to him till I should be twenty-one... he was bound to find me in victuals and drink and clothes; I never had enough; he gave me some old clothes to wear, which he had bought at the rag-shop... he stuck a pick into me twice in my bottom... he used to hit me with the belt... and fling coals at me; he served me so bad that I left him, and went about to see if I could get a job; I used to sleep in the cabins upon the pit's bank, and in the old pits that I had done working; I laid upon the shale all night; I used to get what I could to eat; I ate for a long time the candles that I found in the pits that the colliers left overnight; I had nothing else to eat; the rest of the hurriers did not know where I was; when I got out in the morning I looked about for work, and begged of the people a bit; I got to Bradford after a while, and had a job there for a month while a collier's lad was poorly; when he came back I was obliged to leave; I work now here for John Cawtherley; he took me into his house, and is serving me very well; I hurry for him now, and he feeds me in victuals and drink".

A girl, Margaret Gomley, who also worked in a Halifax mine, explained:

"They flog us down in the pit, sometimes with their hands upon my bottom, which hurts me very much; Thomas Copeland flogs me more than once in a day, which makes me cry".

Elsewhere, children spoke of their lives in more general terms. Mr. Samuel Scriven, Her Majesty's Sub-Commissioner for North Staffordshire, was told by Daniel Knapps (aged 15):

"I have been working in Delph six or seven years; began first to open and shut doors to turn the wind off and on, at Number 8 pit. I cannot read or write. I never went to day-school; I go to Sunday-school now at the National, under Mr. Wade; they teach me from a book; I begin at one leaf and turn over to another; I don't know what it is about. When I had done to shut doors I began to drive horses; I does that now. I begin to come to work at foive, and by the time I gets down into Delph it is six; I come up again to bank at six or thereabout; sometoimes a bit arter. I works as you see me, without any clothes besides my shoes; sometoimes I puts on some trowsers, but I got a hardish job today; yesterday I only drove horse; today I got to drive upon sloipes (rails) and to jetty to (upset the corve). I would rather work down in Delph than in pot-banks. My father is dead. I left mother 'cause I was clemming (starving); she has had four children afore her was married. I lodge with Isaac Hall; he take my wages at the public-house; he gets all as I get: he finds me in clothes to wear- I got enough; he finds me in meat- I got enough to eat and drink- tea for breakfast, and bread and butter; beef and tatees for dinner, and a supper. If there was an evening school I should go to it to larn my book. Mr. Wade talks to us sometoimes and tells us to be good and to fear God. I sometoimes take his advice- sometoimes I dinna".

Children performed several duties in the pits. Daniel Knapps referred to his task opening and shutting doors. This was the job of the "trapper", a task which required little strength but much conscientiousness. The doors were installed as part of the ventilation system in the pits, and their opening and closing regulated the flow of air. Every time miners passed through with tubs, the trapper had to ensure that he shut the door again. Boys of six or seven years old worked 12-14 hours shifts. Not surprisingly, some occasionally fell asleep, and fire-damp explosions sometimes resulted.

Other children, normally girls, were employed to haul baskets or tubs of coal away from the coal-face. They were usually known as hurriers. Young boys found work as pony-drivers, and some even helped to pump water out of the pit. It is amazing to consider the level of responsibility which some of these children carried.

Samuel Scriven and his colleagues had been asked by Parliament to report objectively on what they saw, but the shocking nature of what they witnessed occasionally registered in their testimonies; the Commissioner J.L. Kennedy wrote with a certain amount of compassion about the trapper-boys in Lancashire and Cheshire:

"This occupation is one of the most pitiable in the coal pit, from its extreme monotony. Exertion, there is none, nor labour, further than its requisite to open and shut a door. As these little fellows are always the youngest in the pit, I have generally found them very shy and they never have anything to say for themselves... were it not for the passing and re-passing of the wagons, it would be equal to solitary confinement of the worst order".

If there was one piece of evidence, though, which persuaded Parliament to ban all female labour underground, it was probably that collected by Sub-Commissioner R.H. Franks, who described the work of a pretty six-year old girl, Margaret Leveston, a bearer:

"She first has to descend a nine ladder pit to the first rest... she then takes her creel (a basket formed to the back, not unlike a cockle shell flattened towards the neck, so as to allow lumps of coal to rest on the baack of the neck and shoulders) and pursues her journey to the coal-face. Dhe then lays down her basket, into which the coal is rolled and it is frequently more than one man can do to lift the burden on her back. The straps are placed over her forehead and the body bent in a semi-circular form, in order to stiffen the arch. Large lumps of coal are then placed on the neck, and she commences on her journey to the pit bottom, first hanging her lamp to the cloth crossing her head. In this girl's case, she has to travel 14 fathoms (84 feet) to the first ladder, which is 18 feet high; leaving the first ladder she then proceeds along the main road, probably 3 feet 6 inches to 4 feet 6 inches high, to the second ladder 18 feet high and so on to the third and fourth till she reaches the pit bottom, where she casts her load into the tub. This one journey is designated a "Rake", the height ascended and the distance along the roads added together exceeded the height of St. Paul's Cathedral".

When the findings of the honourable Commissioners became known to the British population in 1842, a wave of horror duly swept across the country. Lord Shaftesbury was able to persuade the House of Commons to accept his suggestions for a new law; indeed, some members listened to his description of childrens' work underground with tears in their eyes. Despite some opposition from the House of Lords, the Mines Act was passed in 1842, its five regulations going some way to alleviating the massive exploitation of mine workers. Its five points were:

1. Total prohibition of female labour underground.
2. No boy under the age of ten to work underground.
3. NO child under fifteen years old to operate winding machines.
4. No miner to be paid his wages in, or near a public house.
5. Official Inspectors of the Mines to be appointed.

Abuses did still occur in the mines, as across-the-nation monitoring was virtually impossible to carry out. However, it was a significant step forward in the lives of mining people, who were to benefit from further Acts as time passed.

HOTSPOTS:

1. Hurrier girls wore a "dog-belt". What was its use?
2. A gin-driver worked with horses. What did his job involve?
3. What other dangers might a trapper boy have faced, in the course of his duty?

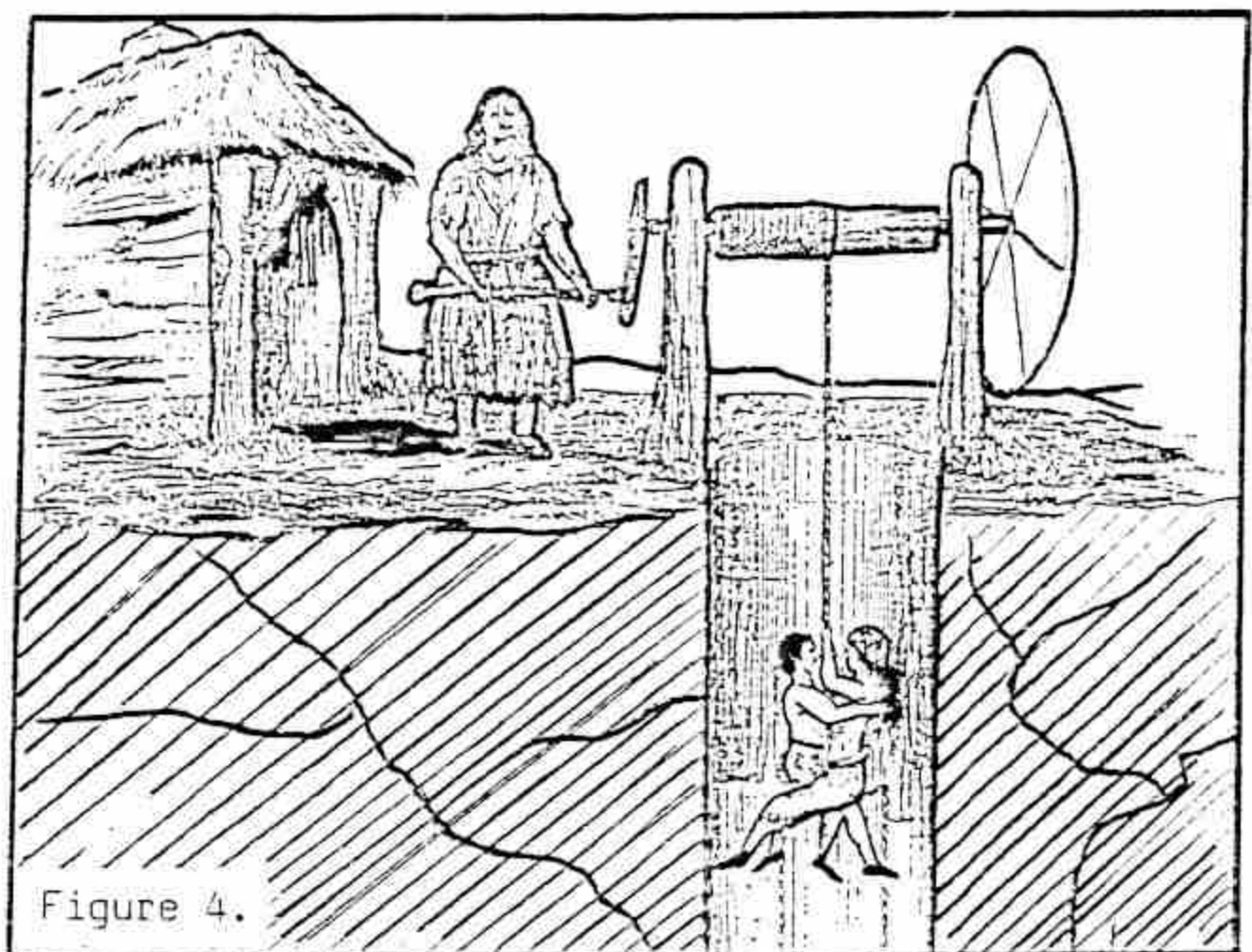
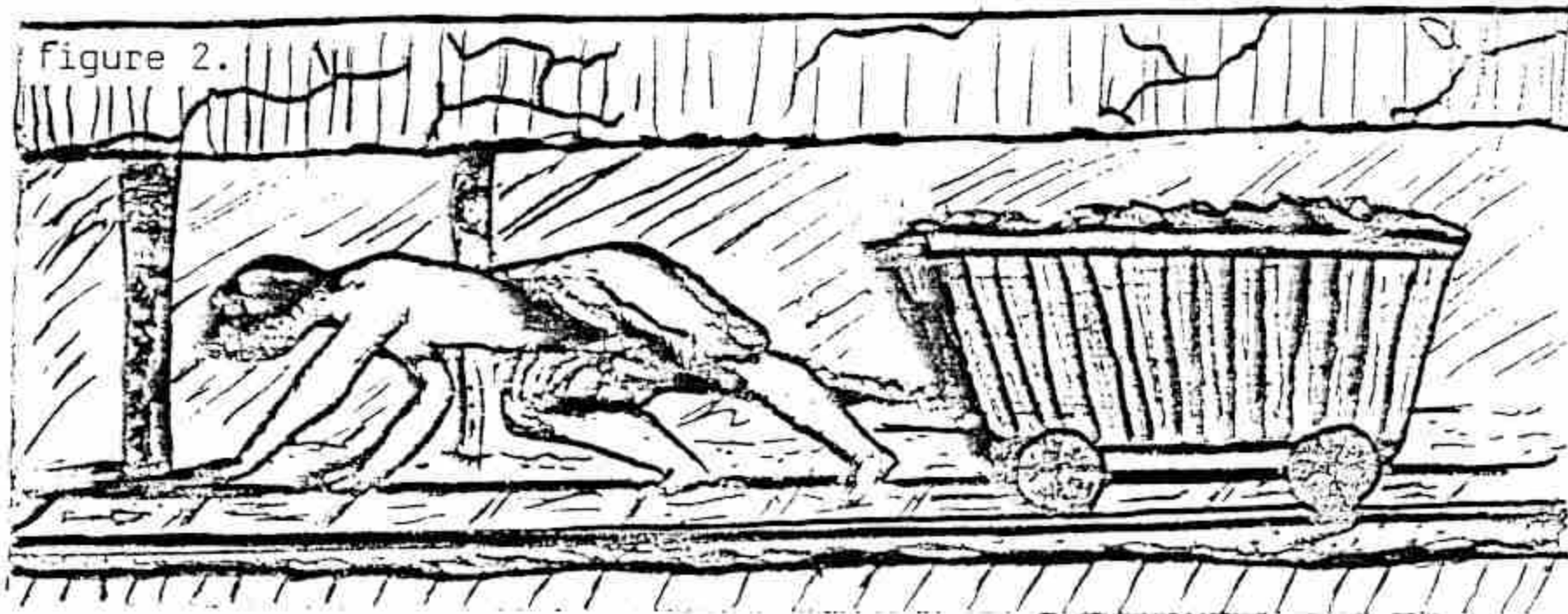
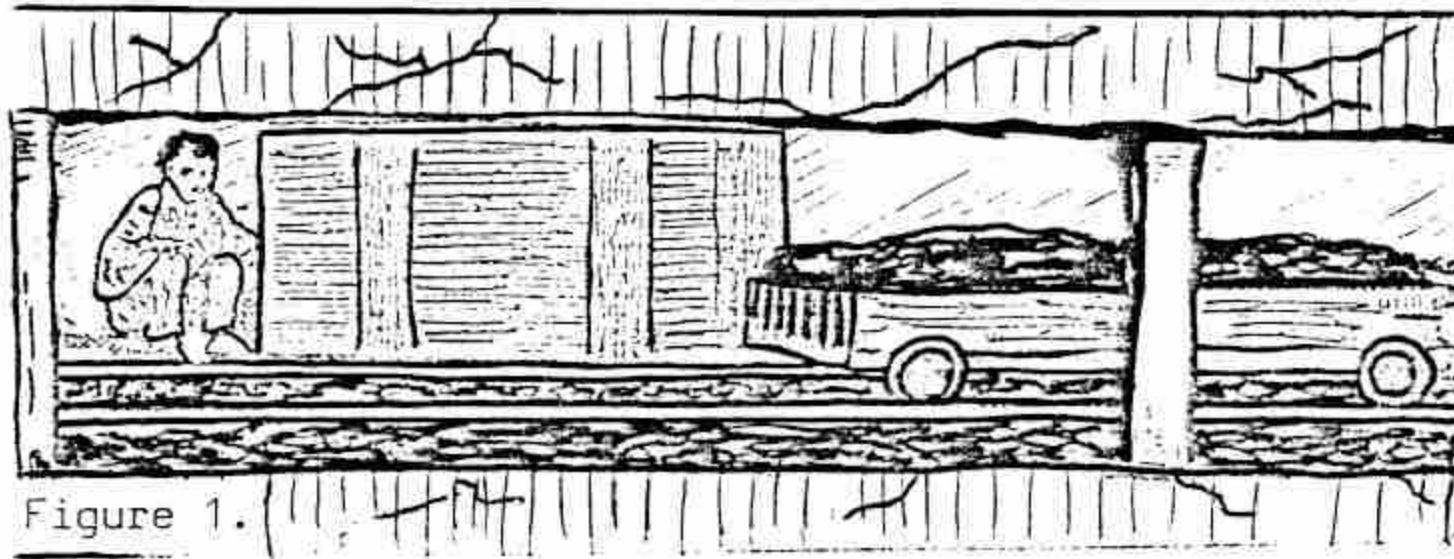
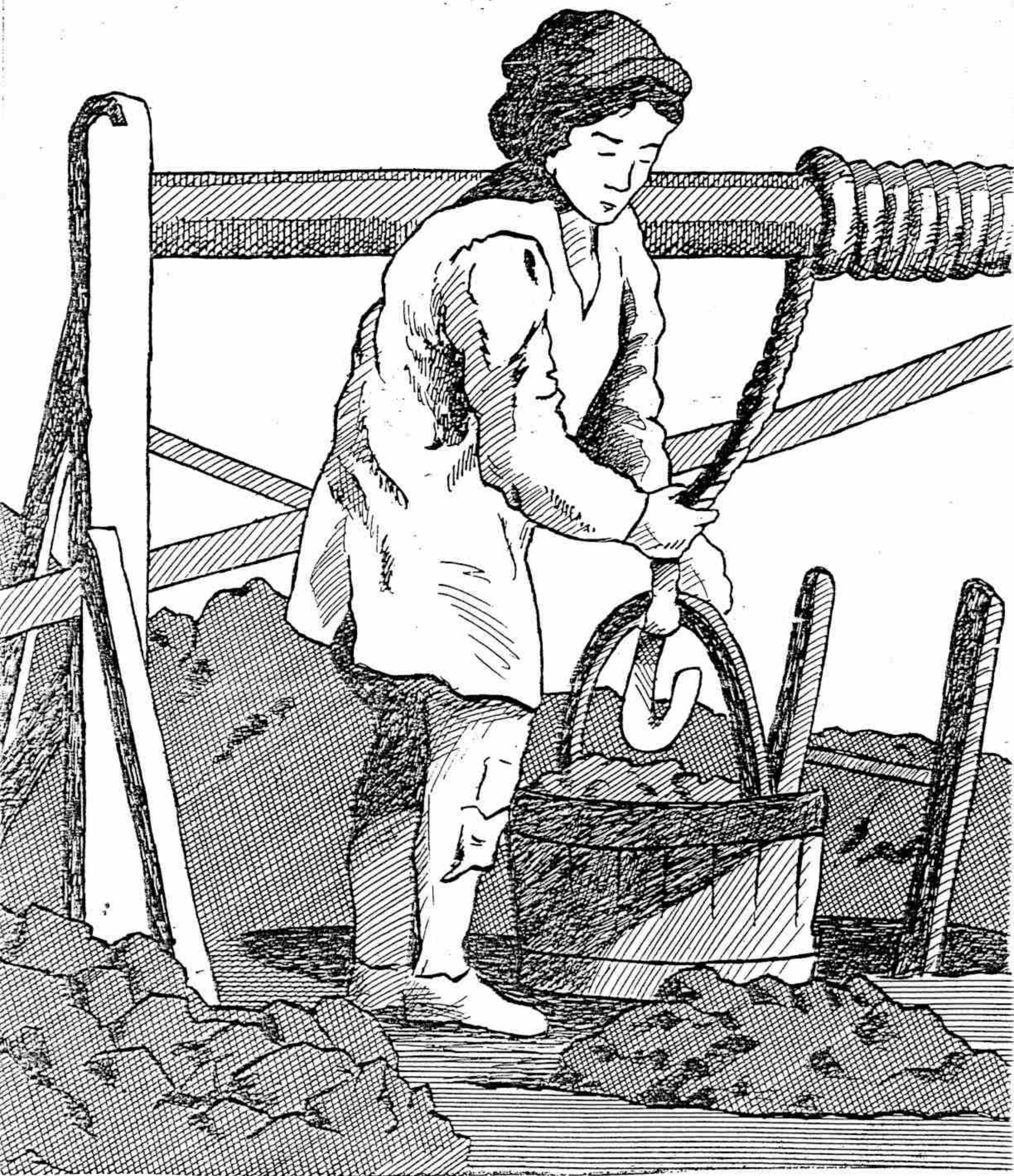


Fig 1: TRAPPER BOY. This creature would sit alone, often in darkness, opening and shutting doors to allow the passing of coal trucks. The doors were part of the ventilation system underground. Fig 2: The HURRIER was often a young girl, who pulled coal trucks from the coal-faces. Fig 3: The BEARER was usually a woman or young girl. She carried a heavily-laden creel (or basket) of coal on her back. Fig 4: Children travelling up and down a bell-pit. The ageing woman operates a windlass, above the shaft.

Young person working at the pit-head.



An incentive for many folk to pursue employment in the pits was the housing which coal companies frequently provided for their workers. Having a workforce living near to the mine was obviously a benefit to the companies, whilst colliers paid a fairly low rent- sometimes being provided with the dwelling free of charge. The standard of accommodation varied considerably, but the better houses were fairly rare. An official report of 1846 describing the Bridgewater Collieries' housing in Worsley, spoke of favourable living conditions:

"Much attention has been paid to the houses of the colliers and labourers, which generally consist of four rooms and a pantry with a small backyard, and all proper conveniences".

The rent was as low as £3 per annum. However, the other side of the coin has slums in many mining communities. Some privies were located above open streams, whilst other houses did not boast a w.c. at all, which resulted in the accumulation of piles of excrement and the spread of diseases. In northern parts, squalid back-to-back housing was common, and miners' cottages in Whitehaven, known locally as the New Houses, were among the worst:

"There are no privies; the ashes are taken away every week by the Earl of Lonsdale's carts for agricultural purposes; the water supply is very inadequate. There is a metal pipe laid by the Earls of Lonsdale from Monkway Gill, to supply an engine with water which is situated at the top of the Ginns. The overplus is taken through a pipe to the Middle Row of New Houses; this is the only supply of water for these 266 tenements. The people from the top of the Ginns also go to the Middle Row for water. It is not uncommon to see at one time 20 women waiting their turns for water... many of the tenants on the front row complain of the ash-pits belonging to the middle row as being level with the roof of their houses behind; the refuse sinks down into their back kitchens, and causes a very bad smell through the whole huse. Pigsties and stagnant water prevail in abundance. This place is very seldom clear of fever. The whole surface around the houses and roads is covered with human dirt, and Sundays 10 to 12 men can be seen exposing themselves at one time; with the children this is the case throughout the week".

It is hardly any wonder that disease was so rife in mining communities (and indeed elsewhere) in the 19th century. Although the more prosperous companies were building more habitable houses towards the end of the century- or else improving existing ones- much of the poorer housing in mining communities survived into the 1900s, providing George Orwell with some of the subject matter for his book "The Road To Wigan Pier". By the 1930s, however, the responsibility for housing shifted from private companies to local authorities, and the first wave of slum clearance programmes began. Early council housing developments followed.

Mining communities tended to be very close-knit, and so deaths in the mine usually engendered widespread grief. The actual quality of life in a mining community very much depended upon the pit-owner who rented

the houses out to his workforce. The less philanthropic ones would have no qualms about turfing a family out on to the streets, should its breadwinner have been incapacitated or have been killed.

Mining communities had a unique atmosphere, largely as a result of the characteristic personality of the miner and his kith and kin. Miners are not always attractive individuals. Often bluff and unnervingly direct in speech, a miner calls a spade a spade, but he is usually a sincere and very resolute character. Mining was often a "hand-me-down" profession in which sons followed their fathers into the pits. In some cases, fathers were wont to be somewhat domineering, as an idle or conscientious son reflected badly upon the family name. In a book called "Most Splendid Of Men", Harold Brown, a miner who worked at Silverdale Colliery in North Staffordshire in the early 20th century, writes of his relationship with his collier father:

"The reader... may not understand or appreciate the almost complete absence in our family of the quality of endearment and affection. This is not a criticism of my parents; we were a large family fighting for survival and any expression of affection was a luxury we could not afford as our parents fought and struggled to clothe and feed us".

The advent of the motor-car, and far better roads in the 20th century saw the miner becoming a commuter, and for better or for worse, proper mining communities have all but disappeared. However, in old mining villages in North Staffordshire- Packmoor, Silverdale, Ball Green and elsewhere- the atmosphere of former times is still there, with the survival of mid 19th century housing, local pubs, and often a landscaped spoil tip serving as a monument to the input of the local miners.

HOTSPOTS:

1. Find out more about the type of houses which miners lived in, and living conditions. You might try consulting the old census returns (in your local reference library), which list peoples' occupations and the number of people living in properties.
2. Many of the novels of D.H. Lawrence describe life in mining communities in Nottingham. Borrow a few from your local library, and find out what Lawrence wrote about a miner's life.
3. Why did miners' dwellings tend to deteriorate quickly?

It's off to work we go! Many miners are "characters" and enjoy a laugh and a joke. Humour was a way of dealing with the attendant hard conditions of the profession. **13**



Mining disasters had implications which were sorely felt by mining communities. Families which were affected by the loss of a life in the mines not only had to suffer the demise of a loved one, but also had to face the future without their "breadwinner". North Staffordshire has seen more than its share of disasters, notable ones occurring at Mossfield in Longton (1889- 64 killed); Diglake, Audley (1895- 77 killed); and the Minnie Pit, Halmerend (1918- 155 killed). Britain's most appalling colliery disaster, however, occurred in 1913, when 439 men perished at Senghennyd.

Causes of underground disasters were various, including explosions caused by ignition of firedamp through use of candles, a defective safety lamp, or unsafe shot-firing. Flooding accounted for many of the lives lost at Diglake, whilst a firedamp explosion at the Grove Pit, Brownhills, in 1930 (14 killed) resulted from the ignition of firedamp when a foolhardy miner used a naked flame to light a cigarette! Thankfully, cigarettes are now among a number of items classified as contraband.

Some miners died as a result of entombment, or being buried alive, surely one of the worst ways to die. A pitiful note scratched on to a tin bottle after the Seaham explosion of 1880 describes the thoughts of one who knew that his days were numbered:

"Dear Margaret, There was 40 of us altogether at 7 a.m. Some were singing hymns, but my thoughts were on my little Michael, that him and I would meet in Heaven at the same time. Oh Dear wife, God save you and the children, and pray for me... Dear wife, Farewell. My last thoughts are about you and the children. Be sure and learn the children to pray for me. Oh what an awful position we are in".

We ought not to forget either, the rather less conventional disaster at Abervan in 1966, which saw the loss of 144 lives, when one of seven spoil tips slid down on to the local village. 116 of the casualties were children, who perished inside the nearby Pantglas Junior School. The willingness of members of a closely-knit community, to come to the rescue of their friends and neighbours, comes across loudly and clearly in the subsequent report of the Attorney-General:

"With commendable speed, the work of attacking this seemingly ever-moving slimy, wet mass began as people strove to release the afflicted. Essential services were brought to the village and there began the unprecedented and Herculean task of recovery. People came in their hundreds from far and wide to lend their hands, whilst from the local collieries there hurried the officials and the sturdy experienced colliers to use their strength and skill as never before".

However, to fully understand the way in which a pit-disaster affects a mining community, we now present further details of the Halmerend disaster in North Staffordshire, in 1918.

Podmore Hall Colliery at Halmerend was commonly known as the Minnie Pit, being named after the daughter of the original owners, the Craig family. On the morning of January 12th, 247 men and boys were at work underground. At around 9.45 a.m., the colliery manager, Joseph Smith, noticed large

clouds of smoke, soot and dust emanating from the Podmore Shaft, and he realised an explosion had occurred. Smith's worst fears were confirmed when it was discovered that sections of the Banbury Dip had collapsed, and many men lay dead or dying, as the carbon monoxide began to take effect. Rescue teams worked frantically to save lives, but found to their grief that the explosion had ripped the guts out of the Banbury and Bullhurst seams.

The villagers were quick to realise the implications of the explosion. Some locals had several members of the family underground, and hundreds flocked to the scene of the disaster. The local Primitive Methodist Schoolroom, which had been readied for an old folks' party, became a mortuary, as corpses were hauled up from the pit, and placed in the building, to await identification. The mutilated grandfather of a respected local businessman lay in a sack, and was virtually unrecognisable. The grandmother put her hand into the sack, and felt the man's charred head. She realised that this was her husband when she recognised a distinguishing lump or birthmark near the man's temple.

The dead or the injured continued to be hauled up from the pit, the lucky ones being transferred with all speed to a hastily-improvised first-aid station nearby. One of the rescue captains had the thankless task of bringing up four dead brothers to the surface. Their father, a blind man, was at the pit-head, pathetically carrying out their names. He requested of the rescue captain:

"Take me to them, Mr. Allman, and place my hand on each of their foreheads so that I may kiss each one".

In the wake of the disaster, services were held in the local church and chapel, and people came from miles around to mourn. Outsiders brought food parcels, money and clothing to help the bereaved in their hour of need. It was not until 20 months later, on August 19th, 1919, that the last body was brought up to the surface. Twenty 14 year-old boys were killed, the oldest man to perish being a veteran of 65. The village of Halmerend has never forgotten the tragedy it suffered in 1918.

The preceeding details emphasise the sorrow and grief which was all too often felt in mining communities, as well as underline the potential perils of mining. However, one last consideration is offered as a means of bringing the dangerous nature of the profession fully into perspective: During the Crimean War, the battle casualties among privates amounted to 2.1% ; miners were killed or maimed at the same time at the rate of 5.15% The pits were the last battlegrounds of many unsung heroes.

HOTSPOTS:

1. In what ways have pit disasters in your area been commemorated by local people?
2. Find out what happened at Abervan, and the effects that the disaster had on the community.

There have been, and still are, many diseases peculiar to the working environment of the miner. Investigation into the underlying causes of these ailments has led to the discovery and application of preventative measures and cures, but improvements in the field of occupational health were long in coming.

Emerging out of the haze of ignorance, came the perceptive observations of Agricola, in his celebrated "De Re Metallica", written in 1556. He expressed:

"Of the illnesses, some affect the joints, others attack the lungs, some the eyes, and finally, some are fatal to men... Some mines are so dry that... the dust which is stirred and beaten up by digging penetrates into the windpipe and lungs and produces difficulty in breathing... if the dust has corrosive qualities, it eats away the lungs and implants consumption in the body".

The Royal Commission of 1840 also unearthed much information on the physical state of those working in the mines:

"In the thin seams, more especially, the limbs become crippled and the body distorted; and in general the muscular power gives way. The seeds of painful and mortal diseases are very often sown in childhood and youth; these... assume a formidable character between the ages of thirty and forty; and each generation of this class of the population is commonly extinct soon after fifty".

Indeed, some 19th century miners claimed that they were fortunate if they were not "mashed up at 40". They could certainly expect to live ten years less than men in other jobs. The usual occupational diseases of the miner fell into three categories, namely, Nystagmus, Pneumoconiosis, and Beat Diseases.

The symptoms of nystagmus were abnormal movement or oscillation of the eyeballs. The sufferer often saw stationary objects "moving", and experienced dizziness and headaches leading to general depression. The inadequate illumination provided by candles and safety lamps often gave rise to the disease, but it is now almost unheard of, thanks to the development of modern cap-lamps in the pits.

Pneumoconiosis is the general term now applied to all miners' diseases resulting from dust inhalation. In 1831, a Doctor J. Gregory announced that melanosis (blackening) of the lungs, was directly related to coalmining. Long shifts with a pick and shovel saw miners inhaling fine coal dust which found its way into the lungs. Sufferers became emaciated, their breathing became erratic, and they coughed a great deal. Miners spat out black mucus. The disease was incurable, and usually hastened the death of the sufferer. Dust is now contained more efficiently underground, by the use of water-sprays during drilling and cutting.

Beat complaints included beat knee, beat hand, beat elbow, and synovitis of the wrist. These are all forms of inflammation (caused in different ways) and coupled with an infection. The infecting organisms penetrated into the body through cuts and abrasions. Scrupulous cleanliness and prompt attention to these cuts helped, but it was not until the advent of pithead baths that the problem of beat diseases was properly addressed.

Another disease, Ankylostomiasis, sometimes known as miners' anaemia or hookworm disease, has now been eliminated. It was never common in British coal mines, but was a problem in French, German and Belgian mines as well as the Cornish tin mines. The disease was caused by an intestinal parasite encouraged by insalubrious conditions underground.

The decrease in the contraction of these occupational diseases was brought about by medical advances, and by improvements in the field of mines' welfare this century. The environmental conditions faced by a miner will always present threats to his health, but it is certainly not unusual to find robust, hale and hearty ex-miners of 60 or 70 years old- some of whom take delight in showing visitors the underground at Chatterley Whitfield Mining Museum!

HOTSPOTS:

1. Does the temperature in a mine have any effect on the health of those employed underground?
2. What is the disease known as "Rickets"?
3. What kind of protective clothing might a miner have worn in the 19th century?

Whitfield's ex-miner guides are a robust breed who enjoy imparting their knowledge to the general public. Here is Wilf Hales, once again tatking pleasure in his work.



MERVYN EDWARDS JULY 1990.

SECTION SIX: THE MINERS' WELFARE FUND AND SOCIAL IMPROVEMENTS

Following the First World War, there was increased debate on the subject of miners' welfare and the improvement of facilities at the pits. In 1919, the Government appointed a Royal Commission, superintended by Lord Justice Sankey, to inquire into and report upon "the position of and conditions prevailing in the Coal Industry". Some of the recommendations of the Sankey Commission were taken up, and the Mining Industry Act of 1920 introduced. A great experiment was launched, and a unique social movement was born.

The Act established a central fund, called the Miners' Welfare Fund, for "purposes connected with the well-being, recreation and conditions of living of workers in or about coal-mines and with mining education and research". After 1926, a separate fund for pit-head baths was set up. A Miners' Welfare Commission was formed, to administer funds. Money would be spent on Recreation (institutes, parks, playing fields, libraries, etc); Health (medical and nursing services of all kinds, hospital and convalescent homes, pit-head baths etc); Education (lectures, scholarships etc); and Administration.

Hospitals and convalescent homes were erected, the first convalescent home being built at Blackpool for the Lancashire and Cheshire Miners. However, it was in the provision of pit-head baths and canteens that miners more immediately felt the benefits of the Welfare Fund.

In the first two decades of the 20th century, Britain lagged behind its European neighbours, in the provision of washing and drying facilities at mines. In Belgium and France, baths were compulsorily introduced, whilst in Germany, provision and use of baths was mandatory.

A weary miner, covered in dry sweat, was poorly prepared for a journey home on a cold day. The sight of blackened miners trudging home through towns and villages also inspired prejudice in the breasts of some people, and in the view of such niggardly folk, the miner's sullied exterior indicated a roughness and crudity within.

Following the building of the first pit-head baths at the Gibfield Colliery at Atherton in 1911, there was a slow increase in the provision of bath buildings. By 1925, only 2% of miners were catered for. The establishment of the Baths Fund in 1926, however, provided new impetus in setting aside more money specifically for the building of pit-head baths. By 1945, 361 bath schemes had been completed.

The benefits to the miner and his wife, as pit-head baths became the norm, were numerous. Lockers for both clean and dirty clothes in the bath buildings gave miners the opportunity to change into working garb on starting their shifts. A miner's wife would later welcome a cleaned and washed pit employee back into the home, and no longer had to prepare a zinc bath full of water for her husband's "stripwash", as she had done before. Furthermore, there was less washing of clothes to be done.

Chatterley Whitfield's pit-head baths and canteen were erected in 1937-38, and were a great boon to the Colliery's workforce, which was kept properly fed and watered.

The food requirements of the miner are greater than the average worker, and an abundant supply of good food is needed to provide his energy. By the end of 1949, 98% of the persons employed in the Mining Industry were catered for in over 900 canteens, which provided full-meal catering for 72% and "snap" and "snack" catering for 26% of the total employed. Most pit-head canteens were open day and night, and offered good, wholesome food at reasonable prices. They lessened the burden on the miner's wife, who previously had to cook his meals herself, and they became a popular rendezvous point for social meetings among miners.

The Canteen at Chatterley Whitfield (still used by Museum visitors) was once known as the "Whitfield Kitchen" and opened in January, 1938. The only previous facility at the pit was a wooden hut. It would be injured men who worked in the Canteen, or men who could only do light jobs. The cooks were women, and the Supervisor who lived in accommodation on site was a Mrs. Bessie Stanway. Food sold in the Canteen included fish and chips, sausage, meat pies, "footblocks" (cakes), etc. Also for sale was tea, coffee, Horlicks, and cigarettes. Bread was given free with all meals. A hot meal cannister was available from the Canteen to take underground, and this would contain meat, mashed potato, peas, gravy, and a "footblock". Men who worked on the coal-face would not eat meals as filling as this, but they would be favoured by the haulage workers, or those working in cool temperatures.

The cakes got the name "footblocks" from the miners, who said that they were the same size and shape as the footblocks which were used under the roof supports. In a busy Canteen like Chatterley Whitfield there would be about 1,000 meals served in 24 hours. During the First World War, the supply of bacon, cheese, butter and meat were fixed, but it was found that the colliers needed a more liberal supply than those in other occupations, and all underground workers were granted extra rations. During World War Two, a feeding centre was opened, because people were rationed at home.

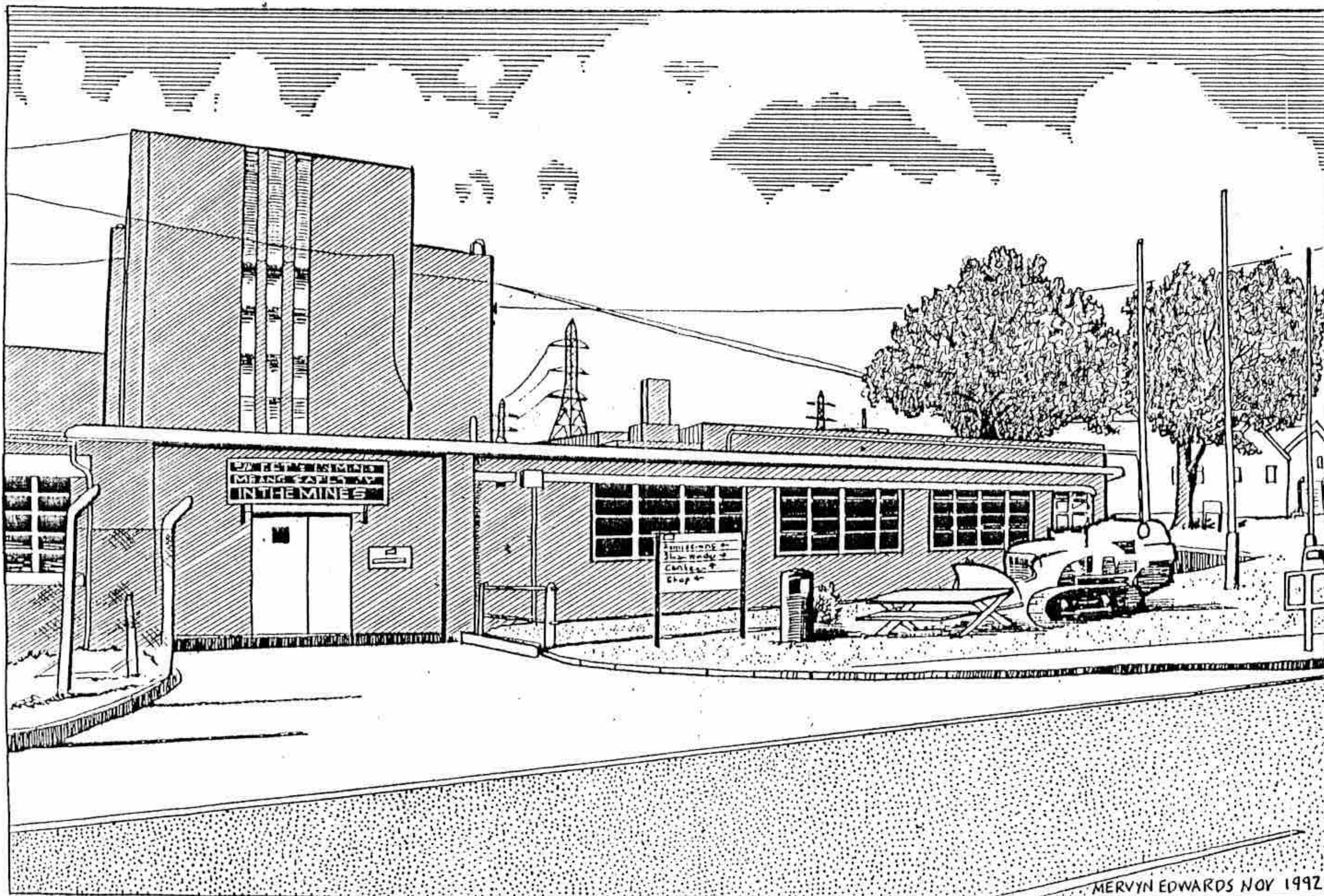
Dieticians were consulted in the preparation of menus, after the War. Inspection was carried out by the catering officer. Constant work was required to keep the place clean and free of coal-dust. Miners' family nights were introduced, whereby the miners' wives were allowed a Canteen meal.

A plaque was erected at the time of the opening of Whitfield's Pit-head Baths and Canteen. It reads:

"MINERS WELFARE FUND WHITFIELD COLLIERY PITHEAD BATHS. THESE BATHS ERECTED BY THE MINERS WELFARE COMMITTEE IN PURSUANCE OF THE MINING INDUSTRY ACT OF 1926 WERE OPENED AND HANDED OVER TO THE TRUSTEES ON 29TH JANUARY 1938".

HOTSPOTS:

1. Why was jam particularly favoured by miners about to begin their shift?
2. Assess the benefits to a miner's health made possible by the provision of pit-head baths.



Pit-head Baths and Canteen at Chatterley Whitfield.

Miners have not always been credited with possessing much religious fervour, but to many, prayer was a sustaining force in a dangerous working environment.

Up until the mid 18th century, however, no religious denomination really succeeded in touching the hearts of the mining communities. The Anglican Church, as the Established Church, largely ignored the spiritual needs of the miner, and was mainly patronised by wealthy industrialists- often by pit-owners.

The emergence of Methodism was due to the efforts of John Wesley, an Anglican whose wide-ranging, broad-based message was rejected by the Established Church. He advocated passionate "open air" preaching, and was therefore able to address those who were penniless, or who never attended church. Methodism offered much to the labouring classes, espousing a sober life style, encouraging thrift, and a better standard of living.

As a result, miners who practised the Methodist belief often blossomed into articulate and respectable people who were now better prepared to defend their rights. Methodists were often to the fore as trades unions became established. Wesley himself never encouraged radicalism, but he provided colliers with the spiritual means to fight for their beliefs.

In some mining areas, class division grew out of the Anglican/Nonconformist discord. Pit-owners were encouraged to build or patronise Anglican churches by the official Government Commissioners inspecting mining areas in 1850. Revolutions in France in 1789, 1830, and 1848 had made the British government sit up and take notice, and trade unions were just beginning to take hold in Britain. There was the fear that "anarchical, Socialist and infidel" popular movements would sweep the coalfields. Earlier in the century, the government had provided money for the building of new churches in growing urban areas, partly as a means of stabilising communities and lessening the threat of rebellion.

A Methodist splinter-group, the Primitive Methodists, were formed when the tenets of Methodism began to drift partly back to those of the Established Church. Evidence collected by Samuel Scriven in 1840 indicates the steady growth in popularity of Primitive Methodism, amongst miners. Joseph Cowper, an employee at Mr. Kinnersley's coal and stone pits, Kidsgrove, North Staffordshire, remarked:

"I cannot read; I cannot write. I went to day-school about three or four months at Ranters' (Primitive Methodist) Chapel in Kidscrew; I go to Church Sunday-school now regularly; I always go to church after that".

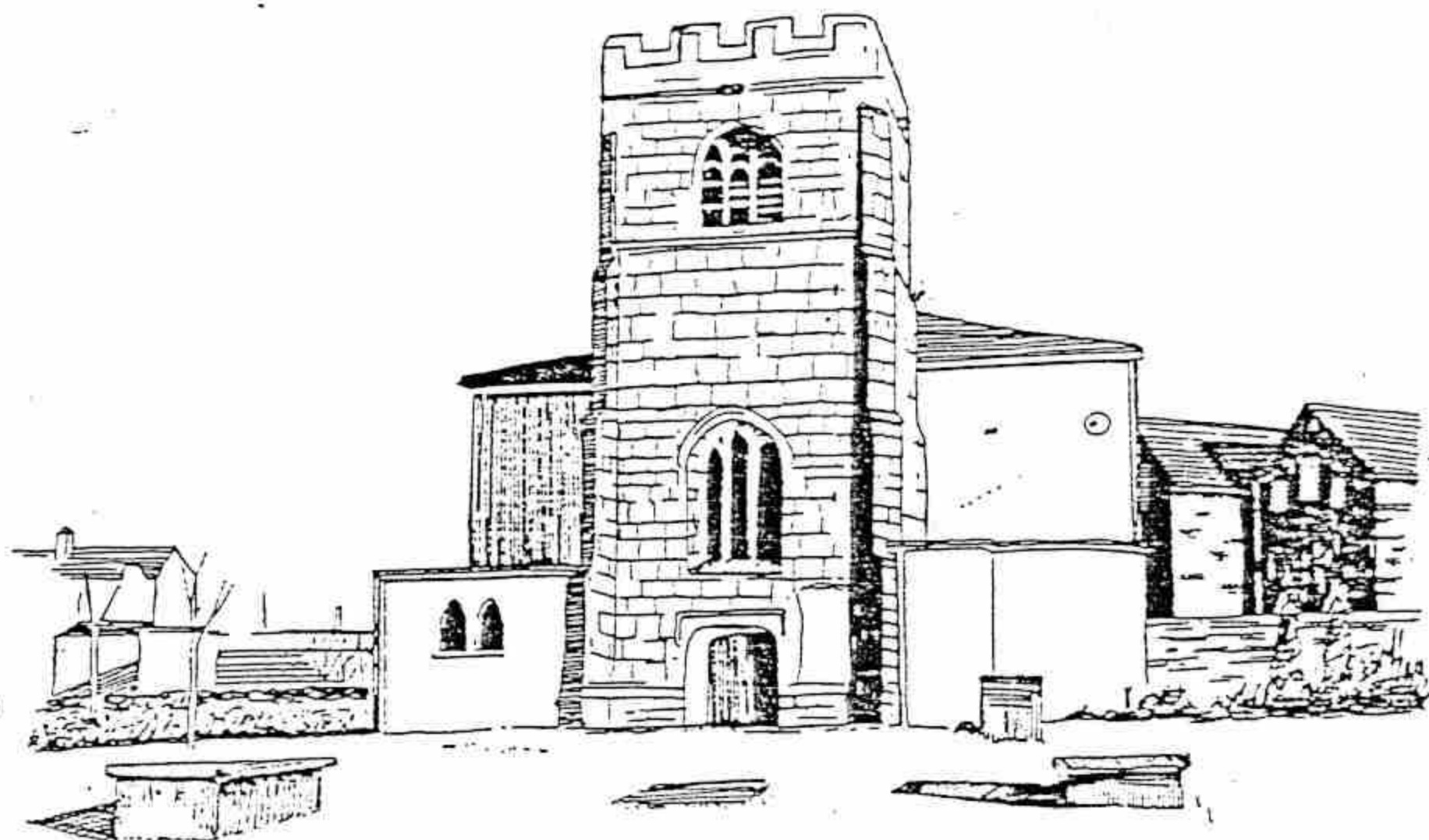
It was not until the second half of the 19th century that the Anglican Church began to consider the needs of the labouring classes.

In many instances, church or chapel helped to provide educational and social improvements within a mining community. Processions, galas and fellowship meetings were often offered as alternatives to bloodsports, drinking, and gambling, which were often miners' pastimes. Religion gave to the miner a sense of self-respect, and a means of coping with, or improving his lot.

HOTSPOTS:

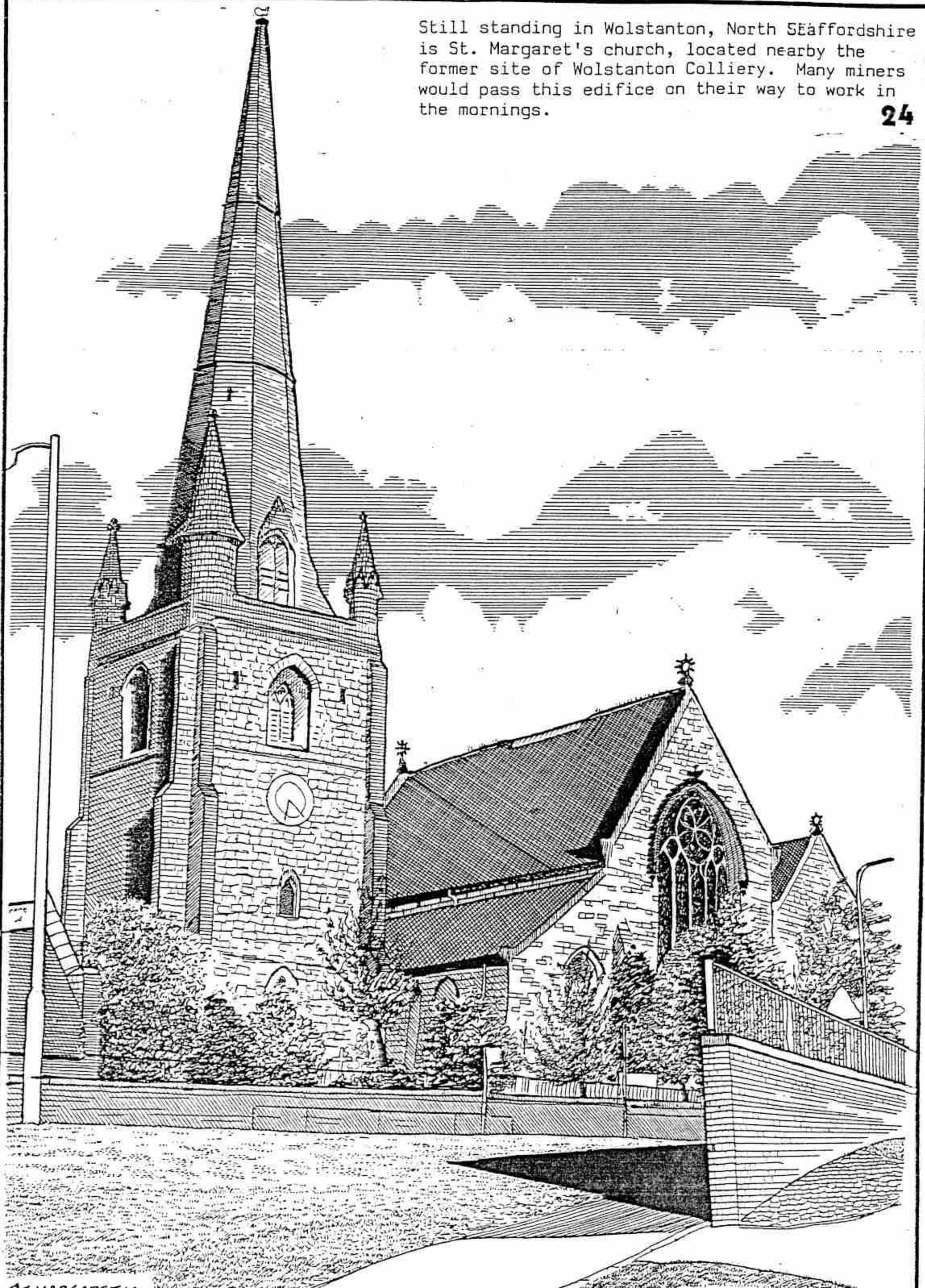
1. Why do you think the Anglican Church showed such little concern for the labouring classes?

2. What does the size and shape of the 19th century Anglican, and Methodist/Primitive Methodist churches tell us about those who worshipped within?

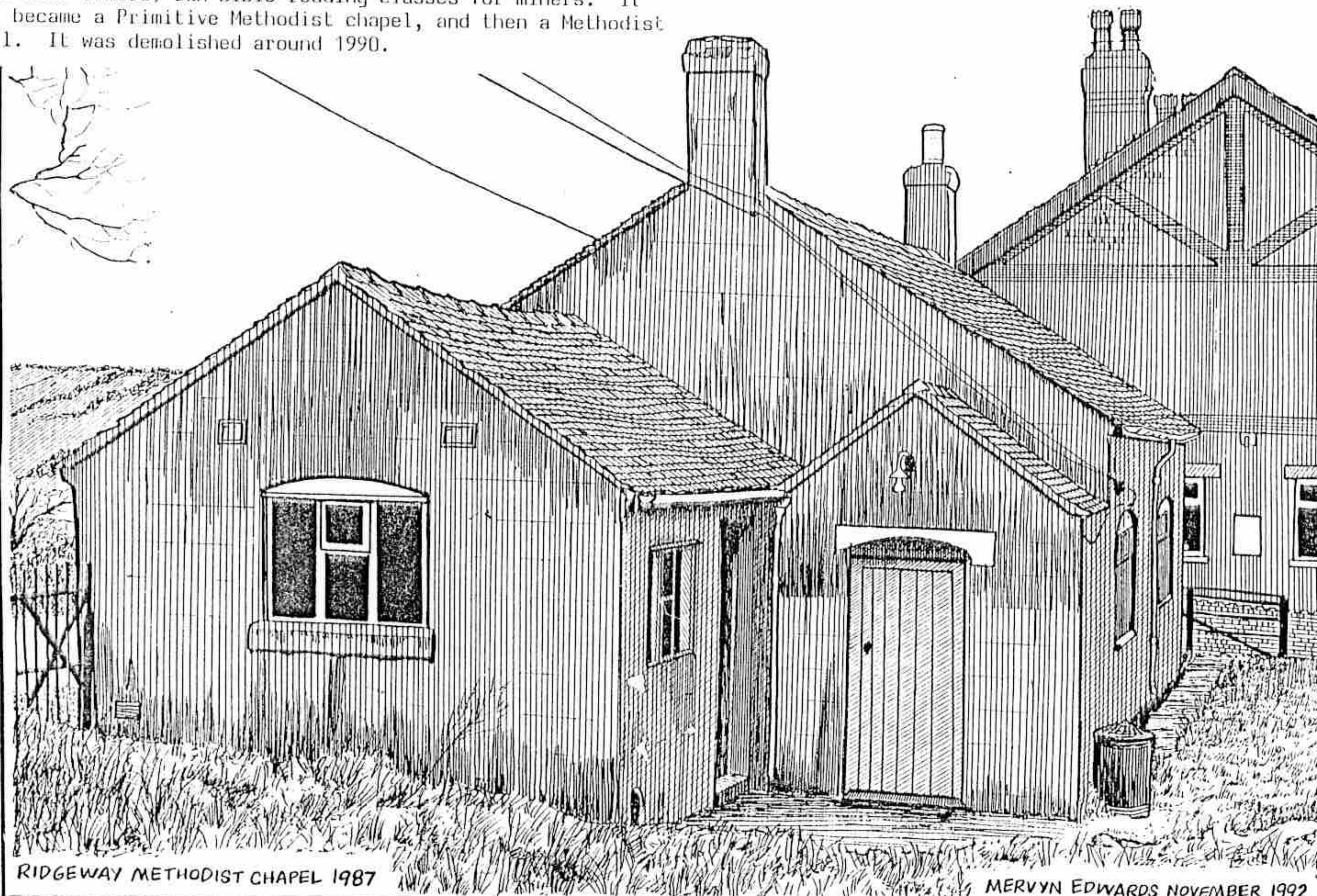


Still standing in Wolstanton, North Staffordshire is St. Margaret's church, located nearby the former site of Wolstanton Colliery. Many miners would pass this edifice on their way to work in the mornings.

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his plain building was originally a haulage house for a small
rift mine near to Chatterley Whitfield Colliery, before being
sed for religious purposes in the 1880s. The Heath family
local coal-owners) ran Bible reading classes for miners. It
ater became a Primitive Methodist chapel, and then a Methodist
hapel. It was demolished around 1990.



RIDGEWAY METHODIST CHAPEL 1987

MERVYN EDWARDS NOVEMBER 1992

SECTION NINE: THE MINER AND EDUCATION

In the middle of the 19th century, there were various types of school available for miners' children, and the working classes in general- few of them being the responsibility of the State. For the youngest, there were dame schools, whose main advantage was that they kept children confined, and quiet. Any man (or more usually) woman could set up such a service in his/her cottage living room, for which a fee of a few pence per week would be paid by the childrens' parents. The knowledge imparted to the children would be very sketchy indeed. Charles Shaw, who grew up in North Staffordshire in the early 19th century, described his dame school education in his book, "When I Was A Child". Shaw was fortunate, in that the rudimentary lessons provided by "Old Betty W." were far better organised than the norm:

"Betty's next grade, after the alphabet, was the reading-made-easy book, with black letters, making words in two, three and four letters. The next stage was spelling, and reading of the Bible. For those successful in these higher stages, old Betty had peculiar honours. They were allowed to take the ashes from under the fire-grate to the ash-heap outside the house".

There were also factory schools, which were ill-staffed and ill-attended, as well as Ragged Schools, for rough and shabby urchins such as some miners' children. Prior to the introduction of a national education system, elementary education was often provided by the churches of various denominations. By the mid 19th century, Wesleyan and Primitive Methodist Schools were increasing in number, to the benefit of the mining communities. As Victorian society became more enlightened, in the late 19th century, the Anglican Church, often bolstered by the support of the mine owners, began to play a significant role. Many miners had a desire for self-improvement and education, the achievement of which eventually helped them to form trade unions.

Some of the principal pit-owners were well to the fore in providing elementary education for their workers. Lord Francis Egerton (later the Earl of Ellesmere) who took over the Bridgewater Collieries in 1837, set up seven day schools for his colliers' children around his pits in the 1830s and 40s. The schools were well-equipped and efficiently-run. 1843 saw Egerton establishing the Walkden Moor Servants School, in order to provide female children of miners with training for a future in domestic service. This was in response to the 1842 Coal Mines Act, which ruled that females under the age of ten should not work underground.

Many coal-owners provided schools and chapels during this period, but not always for entirely philanthropic reasons. Standards of literacy and numeracy in mining districts was poor, yet those entering the industry obviously needed to understand written instruction in the potentially hazardous working environment. It was therefore in the best interests of the pit-owners to cultivate reading ability in their employees. Many industrialists evidently built schools and religious buildings in mining towns in order to emphasise their enlightened and benevolent attitudes- whilst they were blind to the evils going on in their own pits or

factories. It is ironic that some mine-owners were keen to end slavery in the West Indies, or to demand parliamentary reform, and yet they treated their own employees as if they were beasts. So much for moral crusades.

The Education Act of 1870 was a major breakthrough. It set up School Boards to levy rates for the building of new schools and to ensure that parents duly sent their children to their classes. Policemen and members of School Boards often rounded up children from the streets; in the poorest mining areas, truancy from school was widespread.

However, literacy levels across the nation improved. In 1850, little more than half the population of England could sign their names, but by 1900, only about 3% of the population were unable to sign their names in marriage registers.

In the early 20th century, many juveniles left school in their early teens, to pursue a life in mining, which was often a father-to-son profession. However, there was always night-school for those who were not too fatigued to pursue it, and for those who were serious about progressing in mining itself, there were pitmens' qualifications to study for. Whereas in previous years, raw recruits had been "shown the ropes" in the pits by experienced miners, it now became the norm for beginners to undergo organised training for the profession. Miners rightly came to be regarded as skilled workers, and nowadays, all newcomers to the industry undertake an extensive training programme.

HOTSPOTS:

1. What subjects would miners have been taught, in the middle of the 19th century?
2. What effects would the 1870s Act have had upon family life?

Over a century ago, miners had little time for leisure and recreation. Their holidays amounted to three days per year before the 1890s, falling on Christmas Day, Good Friday and Easter Saturday. Shortly after this time, three days holiday were permitted at Whit. Holidays with PAY, however, were not made compulsory by law until 1938. Miners generally worked between eight and ten hours per day from the early 19th century, over six days a week. Many of these diligent souls were too tired to bother with leisure pursuits on coming home from work, but for those who retained an active body and mind, there were many diversions.

Pursuits involving physical combat were often popular in the 19th century, such as parring, or clog-fighting, which took place in the more savage mining communities. Heavy clogs were used as weapons, and the combatants usually had to knock each others' shins and legs to bring each other down. The rules varied from district to district, but the pursuit often drew great crowds of people, who took bets on the contests.

Bare-knuckle fighting, or prize-fighting, was also popular among miners and the working classes, before the advent of the organised sport of boxing introduced a note of decorum in the late 19th century. Prize-fighters were often a great attraction at local fairs and wakes. In 1884, two men, a collier and a potter, were arrested for fighting in a meadow at the back of Hanley Deep Pit in North Staffordshire. They had fallen out over the result of a foot-race, and wished to settle the matter with their fists. This incident was reported by the "Evening Sentinel" newspaper, at a time when 'papers were helping to fuel public belief that colliers were a barbaric breed. It is worth pointing out that many of the 'papers of the day were run by manufacturers, and were therefore prone to bias against the lower classes.

Cock-fighting had over the centuries, been enjoyed by royalty, before becoming one of the most notable working-class pursuits of the 19th century. It took place quite often at pubs, where there were "cock-pits" to be found in back-yards. It was banned by law in 1849, but still went on surreptitiously. It is still legal in some countries even today. Bull-baiting drew big crowds among the lower classes, too, before being made illegal in 1835.

Other more savoury pursuits included knurr and spell, played in many mining areas, until the 20th century. In the original version of the game, a sprung trap projected a small wooden ball into the air, and the participant hit it on the rise, for as great a distance as he could, with a club-shaped wooden bat. Contests sometimes went on over a large area of land, the idea being to cover a given distance in the fewest number of strokes. Similar games were "Nipsey", "Piggy" or "Peggy", or "Billet and Stick". In Barnsley, there was even a "Nipsey" league, with the tables appearing in the local newspaper.

Long hours spent underground gave the miner a particular fondness for open-air pastimes such as gardening. In some areas, there were regular festivals and galas, with attendant sporting activities and entertainment of all kinds. There were well-kept garden plots and allotments, and sometimes horticultural societies were formed. Leek shows were particularly common. In difficult times, a miner's vegetables provided much-needed food for his family. In 1950, a Sid Chaplin wrote of:

"Trim lawns, flower beds, trees, and... the green lawns of Chatterley Whitfield".

There was also dog-racing. Whippets were popular colliers' pets, used for racing and rabbit-coursing. Before the start of a race, a general practice was to give the dog a taste of brandy (blown down its mouth by its owner). Pigeons were kept for racing purposes too.

Rugby and football were great attractions for miners. Famous soccer-players such as Jackie Milburn and the Charlton brothers came from mining backgrounds.

Music and dance have long been important to miners. Many mining communities had bands that entertained at holiday craft pageants and festivals. The character of mining songs usually reflected the trials and tribulations of the working classes. Ballads, filled with personal emotion, began to appear around the 1830s, and before long, there were songs about disasters, strikes, miners pastimes and other subjects. Miners often enjoyed singing. The Point of Ayr Colliery male voice choir, which won the male voice section at the industrial Eisteddfod of North Wales in 1986-7, was comprised entirely of miners. The Frickley Colliery Brass Band are of course, well-known. There was fierce competition between mining choirs in neighbouring villages.

The indoor game of darts is traditionally associated with public houses. The "Foaming Quart" is a pub which still stands in the former mining village of Norton Green in North Staffordshire. The tavern's darts team once reached the final of the People National Darts Competition, and eleven out of the twelve team-members were colliers. It is no wonder that there was so much heavy drinking amongst miners, considering the hot and dusty conditions in which they worked, and the pub was a focal point for the community. The alehouse would often be a larger building at the end of a row of cottages, and was used by other manual workers. Proper "collier pubs" existed in Northumberland and Durham. Parkinson wrote of an alehouse at Lambton in the early 19th century:

"The only place for social gatherings or recreation was the public house, formed by uniting two cottages, which, with a fenced cock-pit and a quoitground at the front, and a quiet place for pitch-and-toss just around the corner, provided opportunities for votaries of these sports, which, with the tap-room as their centre, were often accompanied by drunken brawls and fighting, with all the demoralizing influences arising therefrom".

The Miners' Welfare Fund of 1920 paved the way for numerous Welfare Halls and Institutes to be set up. Social, educational and cultural needs were now catered for, and a levy of one penny per ton of output of coal financed these improvements. Welfare Halls were an alternative to the pub as community centres, and some provided library facilities, giving miners the means of self-education.

1. In the 19th century, most newspapers carried full reports of activities at local fairs and carnivals, enjoyed by the working classes. Visit your local library and research some of the pastimes mentioned in this chapter, such as bull-baiting and prize-fighting.

2. What was pitch-and-toss?

3. How else were public houses used by mining communities, aside from venues at which to drink and relax?

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