

MINING ON THE OLDBURY COALFIELD

by Chris Cooper

Where and what is the Oldbury Coalfield?

The intention was to restrict the scope of this article to the current boundary of Oldbury, which includes Langley and Warley, but the limits need to be extended somewhat. Although the title refers to the Oldbury 'coalfield', and the article concentrates on the major resource of coal, there were, of course, many other extractive industries within the boundaries of Oldbury, Langley and Warley, for example, ironstone from beneath the coal measures, pebbles from the area around Barnford Hill Park, and fireclay or marl extracted in huge amounts from above, and to a much less extent beneath, the coal measures. This list excludes the roadstone or 'Rowley Rag' quarries just outside the Oldbury boundary, but many a working man from Oldbury earned his living there. It is also clear that many men and women worked in collieries and brickfields outside Oldbury. Of the twenty-nine deaths that have been traced at the Ramrod and Ramrod Hall Collieries, just over the border into Rowley, twenty-two had Oldbury addresses, so such areas on the fringe are included, where Oldbury folk would have 'sweated and given blood'.

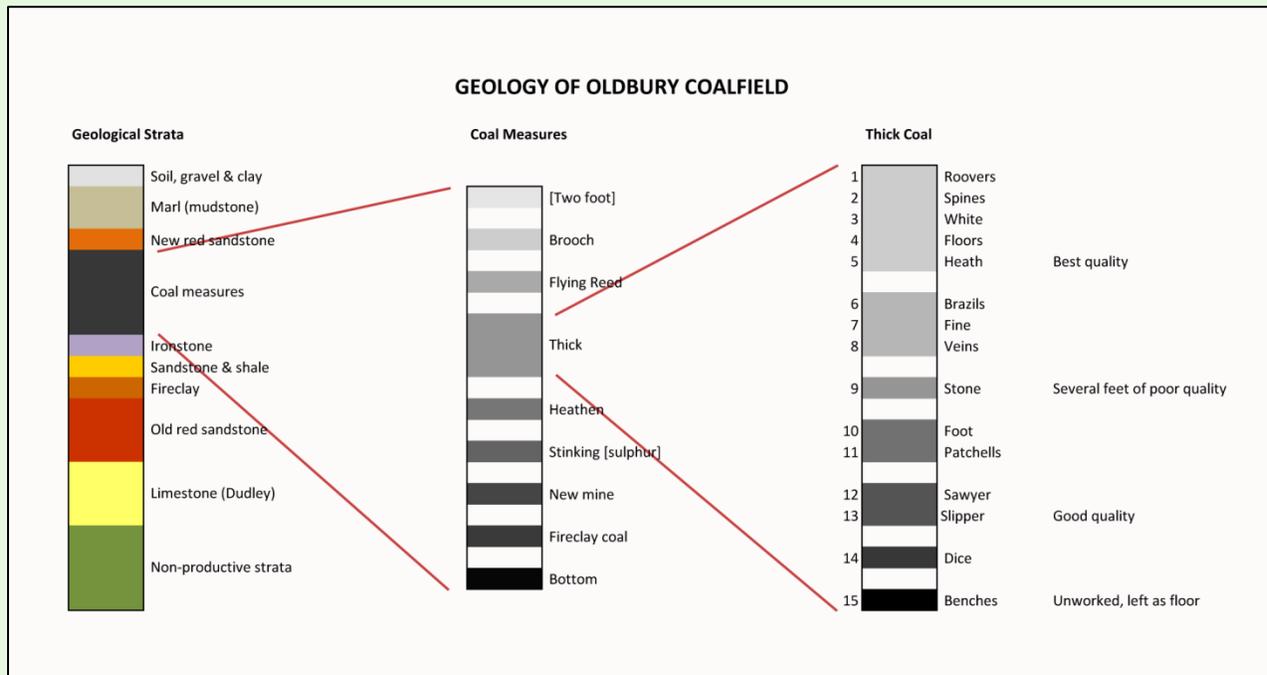
The task of defining the 'Oldbury coalfield' was made easier by the 1873 Mines Drainage Act, which sets the boundary of the 'Oldbury Mines Drainage Area', and which is taken as the 'Oldbury coalfield' in this article. It defines the Oldbury Drainage Area thus: from Dudley Port butting up to the Telford Canal, forming a sweep around the Rowley Hills, and from there to Spon Lane and back to the Telford Canal as its northern boundary.

What lies beneath our feet has made our area what it is today within the bigger industrial region of the Black Country. It is with the surface geology of that larger region that we start, before digging deeper to discover what drove so many of our ancestors to spend much of their working lives in a subterranean world. All four of the author's great grandfathers were coal miners on the Oldbury coalfield.

The actual surface beneath our feet is covered in the soil that we use to grow our plants and vegetables: peel this away, however, and we find the treasures on which the region developed so rapidly in the late 18th and early 19th centuries.

Geology of the area – formations and strata

A simplified geology map of the Oldbury area can be opened in a separate window: [geology map](#). The oldest industrially useful formation in the region is the limestone laid down around 395 to 425 million years ago. Oldbury folk will readily know about the Dudley limestone mines, but the formations around Walsall, though less well known, are very much larger.



The next formations to be laid down were the 'Productive Coal Measures', including the region's world famous 'thick' coal. During this Carboniferous Period, however, the region also had valuable deposits of Ironstone and marl (or brick clays) deposited. The coal measures were laid down in conditions of tropical swamp at a time when the planet's water and atmosphere contained much less oxygen, so the trees did not easily rot, allowing the slow formation of coal. Evaporation of minerals in the tropical swamps left behind the balls of ironstone found underneath the coal. At this time Oldbury was roughly on the earth's equator, and joined to the land mass we now call Europe. It was also during this period of 300 or so million years ago that Dolerite, or 'Rowley Rag', was extruded from deep within the earth. The only true remains of a volcano in the area is Barrow Hill close to Pensnett Church in Dudley. The Rowley and Wednesfield extrusions are lateral along old rock strata, and this caused damage to the coal being laid down at the same time, particularly for the mines close to Rowley. The final major strata capping the region are sandstones, which are dozens of feet thick in places.

During a particularly active period for earth movements around 300 million years ago, the region was subject to a great deal of pressure that twisted and distorted the layers of strata and resulted in a considerable number of fault lines. To the north, the great Bentley Fault isolates the region, whilst along the Western edge runs a major fault from north of Wolverhampton to the west of Sedgley, turning to cut between Stourbridge and Brierley Hill, and thence towards Lickey End. This fault gives rise to the hills in the region to the south, and plunge the productive coal measures in these parts to over 1,000 feet deeper than in Dudley. It was along this fault line that the Gornal Earthquake occurred in 2002. The Eastern boundary fault runs roughly northwards from Brandhall, then close to Barnford Park and on to Flash Road, leaving Oldbury and skirting west of West Bromwich and east of Walsall. These faults twisted the layers, allowing subsequent ice ages to remove massive depths of rock and expose the coal

and the much deeper limestone measures near to Dudley, and then lay down the pebble beds. The ice sheets of the last great ice age receded about 10,000 years ago but did not quite reach Oldbury: they stopped roughly in a line from Wombourne, through Bilston to just south of Walsall. There is no evidence of open-cast coal mining in Oldbury, the 'thick' coal being mostly mined at depths of between 200 and 400 feet. The Oldbury area was particularly subject to faulting, which caused great problems for local miners.

It is very difficult to plot a general geological section for the Black Country as the twisting of the strata and the action of the ice sheets has given many structural variations across the region, but the diagram on page 2 shows the typical pattern of the basic rock strata.

The coal measures are interesting in that they show that it is not just the **'thick'** coal, for which the region is famous, that was worked, but there are several other workable measures, not all of which are present in all part of the Black Country. Oldbury has one additional mined seam called the **'two-foot seam'**, which is often ignored elsewhere as not being economically useful coal: it lies above the brooch seam. The **'brooch'** (or 'broach') is so named because it is usually the first coal broached before getting to the 'thick', but such was the economic value of the 'thick' that the brooch was often ignored until late in the life of a colliery. Below the 'thick' the **'heathen'** was often mined after exhausting the 'thick'. The seam below this, locally called the **'stinking'**, was often, but not always, considered to be too dangerous to mine in Oldbury because of the poisonous sulphur gas it held.

It is generally thought that the 'thick' was a single seam comprising 30 feet of coal, a vast seam. It was not a constant seam of coal: well over 30 feet in parts of Dudley, and Oldbury generally had a fair share at around 28 feet, but it thinned considerably to the north of the Black Country. It is probably unique in the world because it is so thick, but it comprises at least fifteen different seams that miners recognised. Its uniqueness arises because it has no infill of shale or partings of mudstone or sand between its layers. Many areas in the world have a total of 30 feet of coal, but not in such an easily extractable, and therefore economic, situation. In truth, most of the thick seam is not a very good quality coal, the best being at the very top of the seam.

James Keir was a Scot who lived much of his life in West Bromwich. He was a Fellow of the Royal Society and a member of the Lunar Society, who is credited with the invention of modern soap, and introducing systems, structures and innovation into both the Stourbridge Glass Industry and the Soho Company. However, he is relevant here because he submitted a paper to the Royal Society describing almost inch by inch what a section of the local strata looked like in a coal shaft in the region.

His paper is very detailed and the table here only includes data on productive strata. He was particularly keen to talk about the 'fire clay white', as he believed that it was the finest clay available for making smoking pipes. He ignored the 'two foot seam' at 158 feet, and said that he broached the first coal at 182 feet, and the 'thick' at 301 feet, noting ironstone below this. He owned a colliery in Tividale, but this paper may be about a Rowley Colliery, which he mentions often in his work. In either case it is local to Oldbury, and was almost certainly on the 'Oldbury Coalfield'.

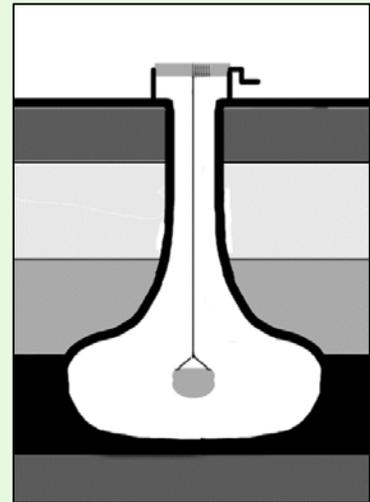
James Keir FRS – A Hole in the Ground

Depth	Stratum	Thickness
Surface	Soil	1' 0"
Then	Brick clay	5' 6"
@ 7' 6"	Blue clay	1' 0"
@ 158'	Clunch (or Two foot coal)	1' 6"
@ 160'	Fire clay (white)	3' 0"
@ 182'	Coal (brooch)	3' 9"
@ 301'	Coal (the 'thick')	28' 3"
@ 334'	Ironstone	3' 0"

Getting the coal

There is evidence of the Romans mining in the region at Woodsetton, but this was probably only for the ironstone which was to be found underneath the coal measures. It is of course possible that the ironstone was partly exposed by faulting and the scouring of the surface during the ice age, but the Woodsetton example is said to be undertaken locally, and there is documentation of extraction at Dudley, Pensnett and Coombeswood. These early miners were called 'foot-ridds' or 'grubbers' as they undertook opencast and soil removal open cast mining. When the mineral became too dangerous to extract by open cast, or was hampered by faulting, then a bell pit was used. These rarely went below 20 feet in depth and 12 feet in diameter, and were bell shaped which gave them their name. Minerals at Oldbury were too

deep for this method, and most local bell pits were dug close to Dudley. One was exposed when foundations were cut for the Netto (now Asda) supermarket near to top church in Dudley. The wealthy burnt coal in their homes during the reign of Elizabeth I, and at the same time considerable quantities of ironstone was being used locally.

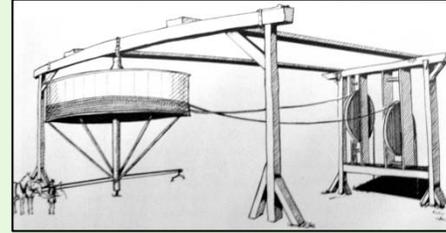


Bell-pit with hand-operated drum winding mechanism

The Victoria County History for Shropshire quotes the Lord of Oldbury Manor, Robert Robsarte requesting a tenant who was digging a well in 1607 to go deeper looking for coal because a neighbour had recently found coal nearby. This is probably the earliest reference to finding coal in Oldbury. In Oldbury deep shaft mining was undertaken with men, women and children lowered in skips at the start of a day's 'stint' and raised again at the end of the 'stint'. The product of their toil was raised as the day

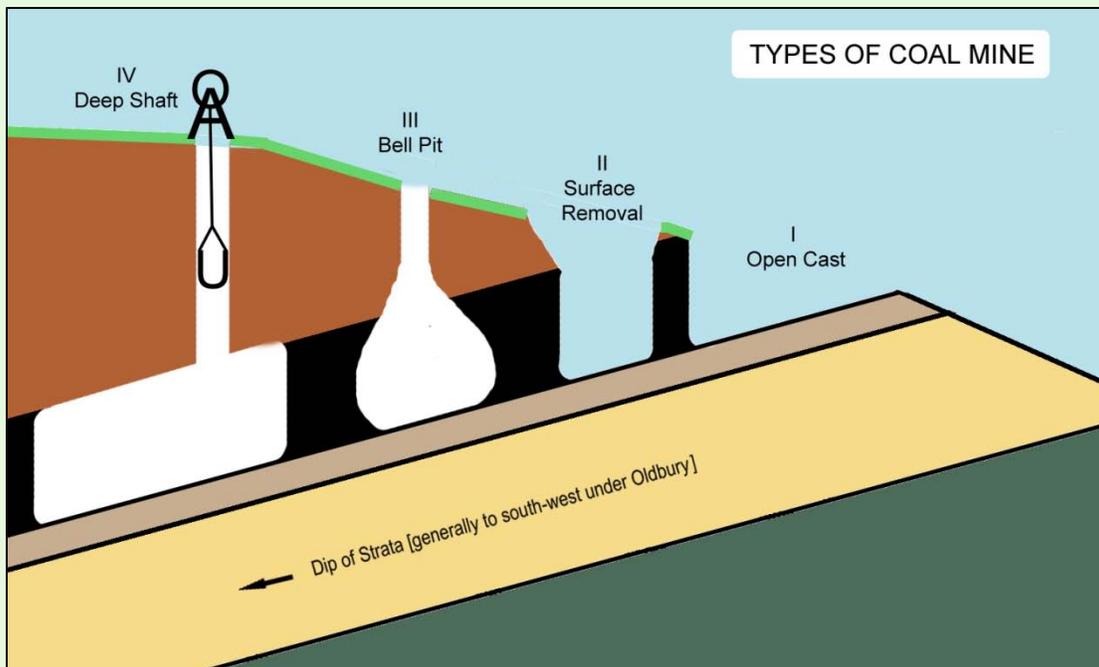
progressed. The shaft traffic was driven initially by horse power, called 'gin-head' working, and later by mechanical engines.

Coal mining was subject to a great deal of 'Luddite' practices from the huge number of charcoal burners, particularly those around the Pensnett Chase area. Good quality charcoal fetched £7 per ton whereas coal was £4 per ton. What really ignited the demand for coal was the innovation developed by two Black Country men, who were related and who lived overlapping lives: Dud Dudley and Abraham Darby made iron by the process using coal rather than charcoal.



A Horse Gin

Deep shaft mines were dug throughout the Black Country, usually with a 4 foot wide shaft and no more than 50 deep. These were often in a straight line to avoid excessive danger when extracting the 'thick' coal: a shaft would then be abandoned when the area around its base was worked out, and another cut just a few yards away. It is little wonder that we have problems of the ground sinking into uncharted, and, therefore, unknown, mine shafts.



Mine owners were responsible for all aspects of mining from the pit shaft including general maintenance, whereas the 'Butty' or Charter Master was responsible for all processes underground in getting coal to the pit shaft. The Butty was probably the most disliked person in mining areas, and Oldbury was no exception. Miners were said to be well paid: around 1820 the underground or coal face worker received 3 or 4 shillings a day, a skip loader (often members of the face worker's family) received 12 shillings a week, and a door boy (starting at 6 years of age) 6 to 8 pence a day. They also had a drop of beer and a free coal allowance. Compared to Irish farm labourers at 8 pence a day, and Lancashire

factory weavers at around 10 shillings a week, the pay does seem relatively good. Using 'average real earnings' (basic pay plus bonus etc) to compare wages with today's rates, the multiplier is 120, so the underground worker would be earning about £125 per week, the loader about £70 and the door boy about £3.50. These wages probably reflect a boom period in mining resulting from the Napoleonic wars when coal reached £20 per ton. The value of coal dropped in the late 1820s to £8 per ton, with mines in the region at a standstill, and little or no pay for miners. The industry seems to have followed a path of boom and bust since this point, with understandable consequences for its workers.

Conditions and accidents

The first reports of deaths in Black Country pits occur in the late 1500s. Christopher Deyle was killed in a pit at Wednesbury in 1577, and William Price at Pensnett in 1581. Apart from the obvious fall of rock, there were five other common causes of death in early mining: spontaneous combustion of slack, use of naked lights (candles), release of poisonous fumes, winding accidents, and sudden flood, usually from abandoned workings. Tragically, all these reasons remained relevant until the late 1800s. In addition to those recorded as injured or killed in the mine, there are many who died from related medical conditions. Amongst the most unusual is an incident at a Bilston Colliery, where a gin horse fell down the shaft as six miners were being lifted, killing all of them and the horse.

Five deaths at the same time or in the same incident were needed for the authorities to label an accident as a 'mining disaster', otherwise it was just classified as an accident. One such accident killed two of the author's great Grandmother's brothers, James and Samuel Saul, on the same day in 1857 at the Brades Colliery. This was no doubt a disaster for the Saul family if not for the authorities!

The first recorded deaths traced in an Oldbury mine were the result of an accident that took place near to the Red Bull Public House, Dudley Road, on 30th August 1833, where thirteen miners lost their lives as the result of an explosion of 'firedamp' (a flammable gas, usually methane). It was reported at the time that flames were burning from the mine shaft for some time after the explosion, and that the skin fell from the bodies as they were carried to the surface. The worst disaster in the number killed in an Oldbury Colliery occurred at Rounds Green New Colliery on 19th November 1846 when nineteen miners lost their lives from an explosion of firedamp that was reported at the time as containing a large amount of sulphurous gases.

A further large scale loss of life happened at the Ramrod Colliery on 13th August 1856, when eleven died as a result of lighted coals being taken into the shaft by the butty. The final large scale loss was on 23rd August at Titford Long Meadow colliery: following a sudden rush of hot air along a gallery, five miners left the mine apparently fit and well but died soon afterwards from burning to the lungs.



*Testing for gas,
Ramrod Colliery, 1890*

The author has traced over two hundred recorded deaths in Oldbury mines from about 1850, when an Act of Parliament made it a legal requirement to report accidents in coal mines to the Home Office. There will be other deaths where Oldbury men worked in collieries just outside Oldbury, for example, in West Bromwich or Rowley. The author is aware of at least two missing names from the published list, members of his family, so there must be hundreds more not listed.

Slow improvements in conditions

The Rounds Green New Colliery disaster of 1846 caused questions to be asked in Parliament [see the separate report to the Home Office]. It resulted in one of Samuel Cooke's famous posters highlighting social problems, his 'How Many More' poster. More significantly, concern was expressed in the House of Commons where safety was becoming a real issue, in particular the use of women and children in mining. It had been decided in the late 1830s to collect evidence from a range of people involved in the industry, from owners and managers to the colliers, including women and those who had worked in pits as children, as well as doctors, educationalists and representatives of various churches.

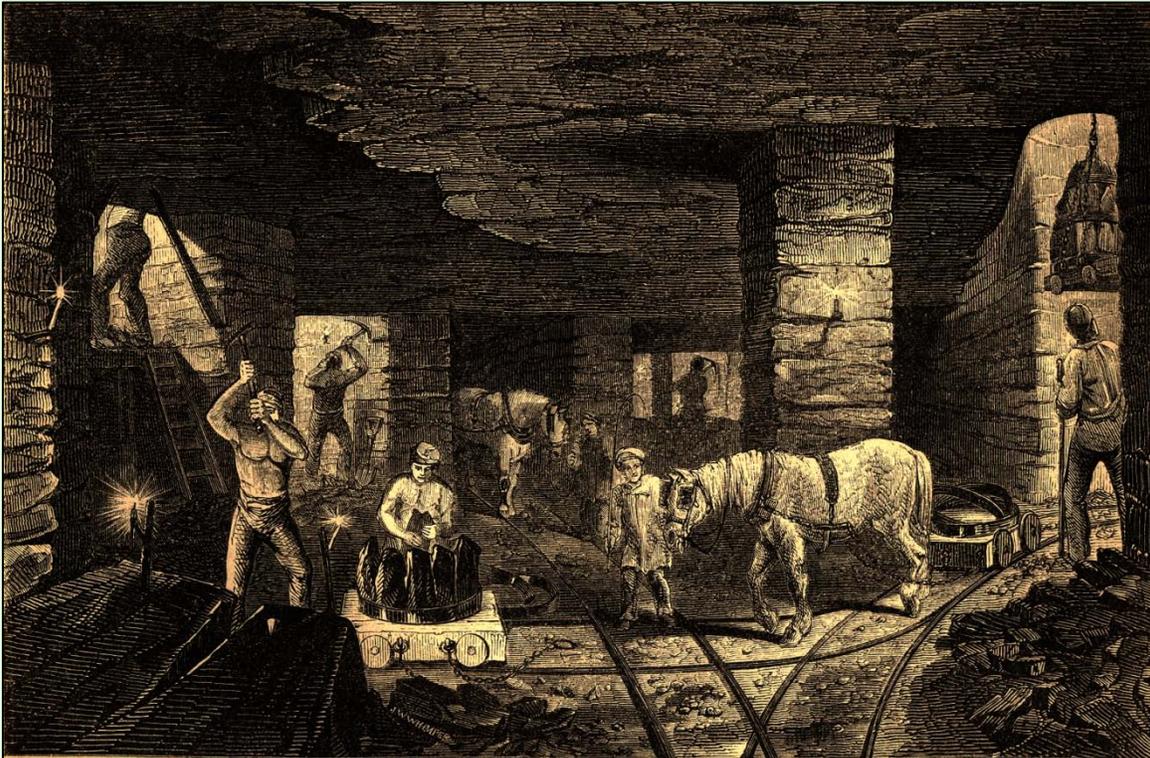
'The Employment of Children in Mines' includes evidence from people in West Bromwich and Dudley, but the evidence for women comes from the Lancashire Coalfield. Women were mainly employed as 'drawers' taking coal from the face to the bottom of the shaft. The method of moving the coal would surely be classed as barbaric today: women wore a large belt around their waist from which a chain ran between their legs which was then attached to a sledge, or, where rails had been laid, to a skip. These weighed up to half a ton, and the evidence shows that a distance eight miles of drawing each day was normal, often helped only by a young daughter pushing from the back, as shown in the contemporary drawing.



The evidence collected in Lancashire notes how very difficult this was for the female form, especially in times of pregnancy. One woman reports having given birth down the mine and taking the new born out in an apron: the compiler is doubtful of this evidence and questions her closely, but she is adamant. All women talk of working all day in wet conditions likened to rain from the roof, and wading in water always over their clogs and sometimes up to their thighs. The employment of women underground was outlawed in 1842. However, seven Oldbury women still reported on the 1851 census that they were 'coal miners' (underground workers).

The evidence collected much closer to home about children working underground is equally shocking. From the age of 6 years boys were employed to open doors, and they seem to be at the mercy of any grown up who cared to abuse or beat them. They grew into more skilled jobs, but still suffered hours without sunlight, or light of any description, particularly during winter months, with rats and mice, and many biting bugs for company. Several reports at this time question why there are no boys aged

between 9 and 16 years in local workhouses. The answer is simple: the butties had taken all but the most infirm as bonded apprentices. They received no pay apart from the odd few coppers a week as pocket money, but the butty provided them with communal board and lodgings until they were 21. Butties also ran the 'Tommy Token' system, whereby anybody who worked for him was not paid in the coin of the realm, which could be spent anywhere, but in his own tokens that could be spent only at his own shop and pub. This was the main factor which made the Butty the hated person he was at this time. It was still possible to employ boys aged 10 years and above to work in narrow seam mines, but, fortunately, this region had none.



Mining the thick seam, South Staffordshire Coalfield

Further safety measures were introduced in the 1850s that saw 'single-link chain' (where a single breakage meant the chain failed) for raising skips outlawed, and huge numbers of unfenced redundant shafts made safe. Even so, as late as 1866, three boys 'wandered' into an old shaft at Bromford and were gassed. It was also at this time that Inspections were started to ensure all safety measures were carried out, but it did not stop huge numbers from dying: it was estimated that there was one miner dead in England for every 620 tons raised. This region alone raised over 10 million tons of coal, and 1 million tons of ironstone in 1864, with the resultant loss of life and injuries. There were about 620 deaths in Black Country pits between 1840 and 1845 alone. Single-shaft pits provided poor ventilation and, therefore, great danger from gas: when these were outlawed in 1862, there were still eight working locally. Clearly, the lessons from poor ventilation in the Rounds Green New Colliery disaster had still not been learned.

Decline and closure

The peak of production in the Black Country was during the 1870s, with annual production levels of

Coal:	11,000,000 tons
Ironstone:	300,000 tons (down from 1 million tons in 1860)
Limestone:	300,000 tons
Fireclay:	220,000 tons

It was estimated in 1871 that there was as much as 200 million tons of coal left in the region, with much of it at newer centres around Himley and Baggeridge, and to the north east of West Bromwich, but at a much greater depth than had been worked previously. It should also be remembered that the system employed underground left pillars often as big as 30 feet by 30 feet to support the roof after removal of the 'thick' coal. About 10 years ago a survey was undertaken along the canal line past what used to be the Brades to investigate the possibility of open cast mining in Oldbury: nothing has been heard since, and it seems that Walsall would be a more likely area for any new activity.

Decline in Oldbury was rapid with many of the smaller pits being worked out (and re-worked out), but the main problem in the South Staffordshire coalfield was water. The high ground at Rowley is a water shed with run-off to the south west joining the Severn via the River Stour, and that to the north east, including Oldbury, going to the River Trent via the Tame. One of this river's sources feeds from Rowley and Brandhall to join and flow through Langley and then on to Low Town. This surface water percolated the mines. By 1920 owners needed to pump out 20 tons of water for every 1 ton of coal they raised, mining in Oldbury had simply become uneconomic, and most mines were abandoned to flooding.

The Great War increased the demand for coal for a while, resulting in the re-opening of some closed mines, and others being kept open longer than they would otherwise have been. Demand fell after the war, and this, together with a gradual breakdown of agreements between owners for drainage and backfilling, inevitably meant colliery closures, the last to shut in Oldbury being Roway in 1925.

OLDBURY MINES 1918

Grange: (closed January 1919)

Lion: (closed 11 May 1923)

Mill Farm: (not working late 1918)

Railway Brick Works: (closed 1919)

Ramrod Hall: (closed 1923)

Rounds Green New: (closed February 1919)

Roway: (last to close 1925)

Speedwell: (closed 16 May 1919)

Deep mines continued to operate at Himley and West Bromwich (Jubilee and Sandwell Park), and the last Black Country Mine to close was Baggeridge in March 1968.

WRITEN REFERENCES:

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ELECTRONIC REFERENCES:

Mainly from the Coal Mining History Research Centre: www.cmhrc.co.uk

These include;

The report of Commissioners into the Employment of Women and Children in Mines 1842.

The Mining Disaster Database.

Mining terms and language where appropriate.

The Durham Mining Museum: www.dmm.org.uk

The Black Country Geological Society: www.bcgs.info

Work of James Keir: www.revolutionaryplayers.org

Early ordnance survey maps www.british-history.ac.uk

The Birmingham Journal: several copies held at Birmingham Reference Library.

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