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## HORSES IN SHROPSHIRE MINES

### Ivor J. Brown

#### SYNOPSIS

This article deals with the use of horses at Shropshire mines, principally those in the Coalbrookdale Coalfield, but it must not be overlooked that mines in all the Shropshire minerals fields employed horses. The article concentrates on the use of horses underground for it would be difficult to distinguish between the multifarious uses of horses on the mine surface than for any other industrial activity. However there is one use that is associated principally with mining; that of the use of horses in horse-gins and in gears for winding up shafts. Some very old illustrations are available showing horsegins at Shropshire pits, the gin being the most imposing structure present at many of the early mines.

Another early use of the horse is that of a pack animal and from this developed the system of measures used in the Shropshire area long before any standard system was set up. The system basically had three units, a load (or horseload of about  $3\frac{1}{2}$  cwt.), a 'dozen' being either 12 or 13 loads, and a 'stack' which was often called a 'ton'. This 'ton' however bore very little resemblance to a modern ton and its weight depended very much on the type of mineral being referred to. These units persisted even into this century. From the beginning of the tramway age in the 18th century the load began to be associated with what a horse could pull on wheels rather than what it could carry, a load often being about 52 cwt. Horses carrying coal, using such terms as loads and dozens are first found in papers relating to the Broseley mines in the 1650s.

There are mentions of horse gins in the inventories in the early years of the 18th century, for example, in 1737 the widow of Richard Hartshorne had, "one gin and horse engine" valued at £12. In 1747 an inventory of the "stock and implements at Madely Coleworks, Lane Pitt," probably near Hill Farm, Ironbridge Bank, includes 2 gins at £20, 2 tons of hay £6 and 2 horses "in the pit" £8. This is the earliest reference to horses underground that has been found.

Towards the end of the 18th century visitors to the area were noting the use of horses. Erasmus Darwin, for example, in 1788 describes seeing a horse in the Tar Tunnel, "the eyes of the horse, which was drawing a cart from within towards the mouth of it, appeared like two balls for a long time before any other part of the animal was visible". In the early years of the 19th century many visitors to the area noted the use of horses. R. Warner in 1801 described seeing horses drawing limestone from the mines and quarries at Lincoln Hill while E.T. Svendenatierna, a Swede, described the use of horse gins in his tour of the area in 1802-3. He refers to the use of gins on shafts rarely more than 8 to 10ft deep near Bedlam Furnaces.

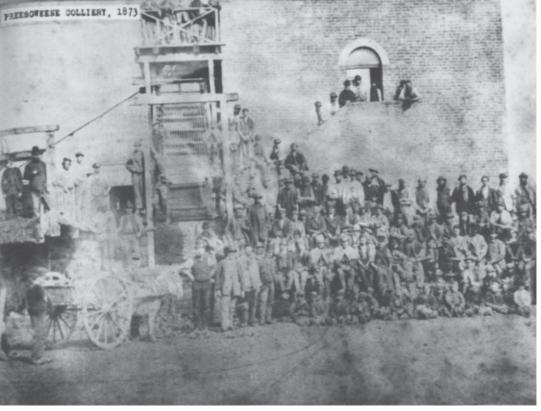


Plate I. Preesgween Colliery in 1873; donkey and cart at shaft top.

## **Early Accidents**

An old broadsheet produced following an accident at Meadow Pit, Madeley, in which four men died, illustrates the common destiny of both man and his horse when a disaster such as an underground fire occurs.

"If standing in the wild explosion, men and beast in fumes are bound". In this instance however it would appear that 13 men and 8 ponies were got out of the pit safely during the fire, the four victims all dying in the fumes present during the reopening operations. Great numbers of ponies must have died underground throughout these early years but the incident was not considered worth recording.

The Report of the Commissioners inquiring into the employment of children in the late 1830s and published in 1842 gives considerable insight into the life of the time. All the larger mines had 'horseways' where horses hauled the wagons underground but, like the smaller mines, many still used small boys in the low workings to mobby, that is to haul trucks or sledges using a chain fastened to a girdle around the waist.

Dr. Mathew Webb gave evidence on this and said that boys with girdles were used where the workings "were so low as to prevent horses of the smallest size or asses from being used". Asses, or donkeys, were used underground at many of the smaller, poorer mines. In the same evidence the Coalbrookdale

ompany representative said their mines tended to be larger so that, "there is room for small horses and donkeys and, in some of them, for larger horses".

A description of a 'horseway' is given at the Hills Lane Pit; it was about 6ft high and wide enough that the walls on each side could just be touched by stretching out both arms. In the middle were the rails, 22in apart, "on which low carriages with low wheels" are pulled by horses. It was just possible for a person to stand close to the side of the tunnel and keep out of the way of the horse and carriages. At this time the horses were looked after by young horsedrivers often only 11 or 12 years of age although this tended to increase as the twentieth century approached. The Tar Tunnel of Coal port is a good example of a typical 'horseway' as used underground. When the mines were relatively small and shallow the horses could be brought out at the end of each shift. One witness told the Commissioners that "at the Shortwoods Limestone Mine there was a long tunnel by which the horses were taken down in morning" and "go up every night of themselves as they are ungeared". Another witness described how he once had a Welsh pony which "had an acute ear, when he heard the least noise of a stone move he would observe and jump out of the way". Stories of the extraordinary sensitivity of ponies to warnings of impending danger were commonplace throughout the mining fields.

Recording of mine accidents by Mine Inspectors began in the 1840s and by the 1860s these were quite detailed. Horses are seen to have been involved in many accidents in which persons were killed. At Madeley Court a 16 year old boy died after being kicked by a horse, a not uncommon incident, while such accidents as 'a horse pulled wagon over boy-driver' and 'crushed between horse and load' were prevalent. These were dangerous times, in 1862 for example, 35 persons were killed from all causes in Shropshire mines although 25-30 deaths was nearer the average.

Horses were also involved in disasters of a larger scale. The Wellington Journal described in 1863, for example, a large fire at Hills Lane Colliery, Madeley in which some horses died. A horse also featured in one of the area's worst mining accidents on September 11th 1875 when 11 men died. The accident occurred at a pit at Donnington Wood thereafter called the 'Slaughter Pit'. At 6 o'clock in the morning two parties of miners, one of 6 and one of 5 were lowered down the pit, a horse was then lowered down. The men at the surface shouted down but got no reply from those below. A man was then sent down another shaft (the downcast or fresh air shaft) but quickly returned to say the pit was full of fumes. Another party went down, formed a circuit of good air using sheets and found the bodies of the two men who had been waiting to receive the horse, under the dead horse itself. The other nine bodies were found 25 yards away where they had apparently been waiting for their colleagues. The chartermaster of the pit was Henry Guy, who had remained on the surface, but 5 members of the Guy family Immanuel, David, Edward, Alfred and James were among the dead.

## **Mine Organisation**

John Kendall described a visit to a local mine in a series of articles in the *Shrewsbury Chronicle*, April - June 1859,

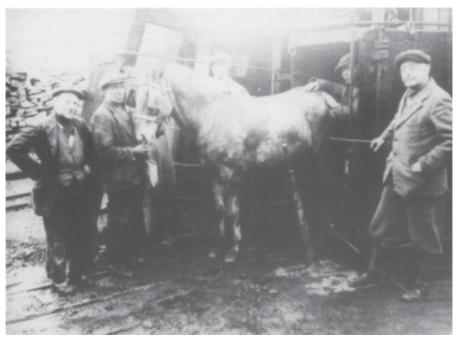


Plate II. Hanwood Colliery in 19305; horse being loaded into cage.

"you commit your self once more to the basket, to which are fitted four narrow wheels that run on rails. A sleek pit pony is hooked to and the 'jockey' seated in front, gives a crack of his whip, a "Gee-up Fanny" and you are off at a trot. You have a candle, stuck into a bit of moist clay -. With this, your eyes have become accustomed to the gloom, you can now explore the mine. You pass the stables which in a pit have a curious, indescribable smell".

Another description of a visit 10 years later is given by Mr. J.P.G. Smith in a letter to his wife. Mr. Smith was accompanying Sir A.H. Brown, M.P. on a visit to a mine at Madeley, probably the Meadow Pit.

"The stables were near the foot of the shaft and a narrow tramway of iron was laid throughout the mine on which tramway run the trucks. Sometimes these are pushed along by boys - otherwise they are drawn by horses". The Lilleshall Company also employed many horses at its mines at this time. At the Woodhouse Pit near Oakengates which was a relatively small one, the workings were some 500 yards from the pit bottom in 1870 and it needed 9 horses and 8 ponies to carry out all underground haulage.

Like miners, horses also suffered redundancy on occasions, an advertisement dated 4th September 1877 states "At the Smithfield, Shrewsbury. Sale of the 'Celebrated Snailbeach Mine Company's Horses', 10 cart-horses, powerful, upstanding, seasoned, of good ages, 17 hands high, etc. For sale in consequence of the completion of the Snailbeach District Railway which will render haulage by road unnecessary".



Plate III. Matt Owen (left), horse keeper and Sam Holcroft of Kemberton Colliery, crossing Lane Pit Mound c1926.

The surface at a mine was not always safe for a haulage animal and there are several reports of animals falling down shafts or being swallowed up in ground collapses. Don Fletcher once told the writer about a pit called Spratts Castle near his home at Dawley; early this century a vertical boiler was placed near the pit top and a donkey was tethered near to it. During the following night the shaft collapsed, the ground ran in and nothing was seen of the donkey or boiler again. A similar story is told of the mine at Lincoln Hill. On December 31 1901 a subsidence occurred above the limestone mines and beneath "Welling's stables". Bricks and mortar were seen to be falling but at first this was ignored, then a great hole appeared, the stables and Mrs. Page's donkey vanished and "were never seen again".

Mr. C.F. Peskin, who recorded the above incident in his diary also noted that donkeys were used in the limestone mines to draw wagons and at the end of each day they were walked out to the surface. The horse-drivers tended to be rough lads and there are many reports of them getting into trouble. In 1905 the Madeley Wood Company, for example, took a horse driver to court "for failing to obey the order of a fireman and using abusive language. He was fined 5 shilling with 10 shillings costs. Two years later the same company took a horse driver to court, the case however being dismissed since the Court considered the lads "3 days suspension from work to be sufficient" punishment. In 1914 the same company prosecuted a horsedriver for 'kicking his pony' but the penalty is not recorded. The Madeley Wood Company in 1905 took seventeen of their horsedrivers to court, each was charged with "absenting himself from work" and fined about 2s with 6s costs.

Gordon Richards (later Sir Gordon) says in an autobiography that in 1912, when 8 years of age, he was riding the Lilleshall Company's "old pit ponies, brought up from the pits to finish their days on the waste-mounds of the district". At 13 he started work for the Lilleshall Company and, naturally travelled back and forth to work on a pony. In 1920 he became a professional jockey, at 16 years of age, and held the top position in this field for many years.

Mechanisation of the mines early this century also proved a problem for the horsedrivers and their charges as is shown in the following incident which occurred at Kemberton Pit in 1910. At the top of an incline the rattle of chain associated with other equipment "startled a horse waiting there with a load to go down and it set off down the bank at a good speed". There was already a horse and wagons and a driver going down the incline, the driver at the top shouted, the second horse would not stop, and the driver of the horse already on the incline did not hear. He "was knocked down by the horse and crushed by the load against a prop" used for roof support.

According to the Inspector of Mines report there were 386 haulage animals underground in Shropshire in 1900. These included 124 horses, 234 ponies, 2 mules and 26 donkeys. By 1921 the number of animals had fallen to 298 and by 1938 to 207. Of these animals the Madeley Wood Company had 60 in 1911, 37 in 1920 and the Company's mines still employed 8 in 1952. This company had five mines in the Madeley area, Kemberton, Halesfield, Meadow, Shawfield and Blist's Hill but all except Kemberton were relatively small. There was considerable interchange of haulage animals depending on the work underway at each mine and during the longer strike periods most of the horses were taken to the surface and allowed to graze.

## **Kemberton Colliery Horse Record Book**

Every colliery employing horses had to keep a Horse Record Book with details of all the incidents involving horses. The horses and the Record were the subject of regular inspections by the Government appointed Horse Inspector. One such record book has survived for the Kemberton Colliery owned by the Madeley Wood Company and covers the years 1918 - 1922. In October 1919 the Inspector visited the underground stables to see the horses used in the Little Flints Seam. He was not happy and complained about "bad grooming". The book records that following this "3 horsekeepers were charged to take their turns round" presumably to give 24 hour per day care. However one month later the Inspector, Mr. Evans revisited the stables and "expressed satisfaction at the improvements of grooming".

At this time there were over 30 horses at Kemberton Colliery but although described as 'horses' all of these were in fact ponies being less than 14.3 hands high. During 1919 the book lists 7 horses as entering the pit and gives their colours, ages and height. In the same year 9 horses were taken from the pit, of these one had died, one was sent to the Company's Meadow Pit, horse 'Turk' was killed in a roof fall, horse 'Farmer' died after breaking his neck in the stables, Colonel was sent to be sold, 'Lion' was taken out "for kicking", another was removed in "bad condition" and two were sent out to rest.

Duke Billy Blackbird Ben Snowball Gordon Nelson	(9) 13.0 (8) 11.3 (11) 12.3 (7) 12.1 (12) 12.1 (4) 12.3 (8) 11.3	Turpin Peter Tommy Joel Sergeant Redman Bowler	<ul> <li>(9) 13.0</li> <li>(7) 12.2</li> <li>(20) 12.3</li> <li>(7) 12.2</li> <li>(11) 12.2</li> <li>(14) 14.2</li> <li>(7) 12.2</li> </ul>	Jack Ted Charley Briton Marshall Baron Banks	$\begin{array}{ccccc} (16) & 14.3 \\ (11) & 12.2 \\ (9) & 12.1 \\ (7) & 13.1 \\ (5) & 12.1 \\ (8) & 13.2 \\ (15) & 12.2 \end{array}$
Buller Trooper Tichbourne Roger Douglas	$(11) 12.3 (9) 12.1 (9) 12.2 (5) 12.2 (4\frac{1}{2}) 12.2$	Captain Jock Corporal Bruce Bobby	$\begin{array}{cccc} (9) & 12.3 \\ (9) & 12.1 \\ (10) & 12.2 \\ (9) & 12.3 \\ (4\frac{1}{2}) & 12.2 \end{array}$	Victor Gilbert Lister Tinker	$\begin{array}{cccc} (6) & 12.3 \\ (9) & 12.1 \\ (12) & 11.2 \\ (12) & 11.2 \end{array}$

At the census of horses, on November 8th at Kemberton Pit, their names, age (in years) and height (in hands) were as follows:

Prince and Dolly are also listed but no heights are given. In addition Traveller (12) 12.2 was working at the neighbouring Halesfield Pit.

Tommy at 20 years, was obviously the oldest, he had been at Kemberton since 1910, as had Redman. Redman was by far the biggest horse at 14.2 hands. Most of the horses were 7, 8 or 9 years old but a few were as young as 4 years. All exceeded 11 hands in height. Tinker left the pit on the day of the census, he was sent up for a rest and returned two months later on 26 January 1921. Peter and Marshall were also sent up the pit for a few months rest a little later. Marshall had been injured, he suffered a "lanced rump" but he recovered. Peter also recovered from "a cut neck". During the next 12 months Jack was apparently retired, Snowball died of "stopped bowels". Captain died in an "accident" and Victor also died. Victor had his hind leg broken in the Clod Seam and his wagon ran over him. He was "destroyed". Prince, a brown horse, had been transferred during 1920 from Meadow Pit where his name had been Turpin. Two horses are described as being "fresh", Douglas was black, 4½ years old and Bobby was a "brown bay" also 4½ years old.

The life of the horses can be followed over several years; Victor, for example, had been taken down the pit on October 3rd 1919, he was black "with a star" aged 4 years and 12.0 hands. The census showed that he had grown a little to 12.3 hands by November 1920. By the time of the accident that led to his death on 21st December 1920 he had been in the pit only 14 months. Tichbourne entered the pit on April 30 1918, he was described as a 'Roan Strawberry'. At the census in 1920 he was 9 years old, 12.2 hands but on March 5 1922 he died in the stables. He was "taken weak" during the weekend with "bowel trouble", the horsekeeper stayed with him but he died on the Saturday afternoon at 2.00 p.m. The final report on Tichbourne showed that "while struggling he ruptured his diaphragm" and this was the cause of death.

The nearby Halesfield pit had only one horse underground and the Company's other pit, the Meadow, did not at this time have many more. There was obviously much interchange of horses between the pits depending presumably on their requirements.



Plate IV. Watsall Mine c1904. Twenty nine men, five horses and two dogs!

The Shropshire mine shafts were small in diameter usually 8ft, so horses were not always carried on cages, they were carried in a large net slung beneath the cage. Persuading the horse to position itself in the net while the net was raised around it was always a difficult tasks. Alternatively a cradle made of straps was used.

In more recent times horses went down when four years of age and remained until their death. Multi-deck cages were used in the shafts and sadly there was not always room for suspending a net beneath it, smaller horses or ponies had to be used and these could not be brought out alive. A mask was kept in the pit bottom office and if a pony had to be destroyed the mask was fitted over the animal's head and a sharp chisel blow struck through a specially positioned hole into the animal's temple. Death was instantaneous. In 1913 when there were 282 horses underground in Shropshire the Inspector of Mines recorded that 12 died or were destroyed following an accident, 5 died due to a disease, 82 cases of injury were reported together with 2 cases of ill treatment. The ill treatment cases usually ended up in court for example, in 1909 a Lilleshall Company horsedriver was fined 2s 6d with 24s 6d costs for "sticking a horse with a pick behind the ear causing a wound 3in deep".

## The Last Years

Very little changed at the surface of the Shropshire mines until the Second World War. In 1939, for example, the Wellington Journal described the surface

arrangements at the Lilleshall Company's Lawn Pumping Shaft. This included an 1805 beam winding engine, a 1841 beam condensing pumping engine and "an old horse windlass used for heavy loads". The late Jim Roberts described the mine surface at the Deep Pit, Broseley at this time. Here an old steam engine wound the clay to the surface in a cage but there was a stable "where the donkey stood looking through the door till the cage came up, then he would walk out on his own, stand in front of the wagon to be hooked on - to take to the tip. Then he would walk back again and wait for the next".

In 1952 there were six ponies underground at the Kemberton Pit with two horses on the surface at nearby Halesfield Pit. At Halesfield the stables were on the surface behind the small workshop, a large horse was used to haul a tip-up cart mainly carrying light loads between the two collieries. Occasionally it had other duties as when in the early 1950s a worker named Nicholls was hurt at the railway sidings. He was taken home by cart. Traditionally the horse ambulance for the pits had always been kept at Halesfield and the garage remained intact until the 1960s.

A few years earlier the horse had an unusual duty, pulling empty mine tubs through the local streets. As a very young boy in the 1940s the writer watched his grandfather and others tip the 10 cwt loaded waste trucks sideways down the tips near Halesfield but occasionally the trucks went over too far and bowled down the tip. When half a dozen were so placed the horse was sent round to bring them back and to watch the returning horse with up to four trucks in tow, without rails to guide them, and snaking all over the road was something of a sight. Down the Shifnal Road through the centre of the hamlet of Cuckoo Oak, up the Dawley Road, past Tweedale and back to the pit. With so much traffic on the roads it would be difficult to do this today.

The six ponies underground at Kemberton were all stabled near pit bottom, although previously there had been stables in all the main seams at distances up to a mile away. The stables were lit by electric light, and airy, they had white washed brickwalls but were always warm and humid. The smell was unique but in the 1950s not particularly unpleasant. The boys in pit bottom, including the writer, would sneak off to the stables for a rest. There were always empty stalls as the number of ponies had decreased. The head horsekeeper Matt Owen kept the place quiet since at all times the ponies not on shift would be resting, being permanently underground there was never a night time for them as the lights were always on and the mine was worked around the clock.

The ponies were used mainly in repair work on the old airways which had to be maintained, some fourteen miles of which existed in the 1950s. They were intelligent, for example, if food was left unattended in bags or jacket pockets they would pinch it although each day when the pony was led out of the stable he was given his own lunch bag suspended around his neck. The ponies could also open the large wooden doors which controlled the air current underground by pushing with their heads, but only if they opened away from them. About 1953 the writer helped pull a 13 cwt capacity metal tub off the cage, it contained a pony that had died in an accident involving some doors. The air current had been changed at the weekend and the doors now had to be opened against the pony, not away as it had always done previously. But no-one

had told the pony and he was trapped between the door which would not open and his truck. Shortly afterwards two other ponies became redundant and were humanely destroyed. It was a sad sight to see such surprisingly small bodies coiled up in the mine tubs to be sent up the pit, there to await collection by the slaughterer's van and then, we young lads were told, to end up as dog meat.

The writer worked with the last three ponies in the connecting tunnel between Kemberton and Halesfield pit bottoms. This was a very old roadway in solid rock with occasional timber squarework. It was a low, undulating passage with three large timber doors to control airflow. The ponies generally pulled only one 13 cwt steel tub which always had one pair of wheels scotched using a bar to prevent over-running.

Sammy, Bangor and Ned, these last three pit ponies, survived until 1955 when they too were put to rest humanely. Many workers were sad to see the ponies go, they had been good friends and companions to the Shropshire miner and, with him, had suffered the many agonies and problems of pit life.

Horses however were not the only 'animals' to be found underground in Shropshire mines. In evidence to the Commission in the 1830s Henry Canning age 13, a wagon pusher, said that in addition to the four horses in the Madeley Wood Company's mine where he worked, "there were many rats almost as big as rabbits, quite as big as half grown rabbits. They rob our bait bags and tear at the candles sometimes. They have caught a lighted candle in their mouths and run away with it, and have exploded gas. They eat the horses corn. We have had cats down but they (the management) took them up. We have thousands of gnats and many spiders – and forty legs, and earwigs, and black bats (beetles)". He added "Mushrooms will grow in the stables fifty yards from the shaft" and that "we have no mice but there are many in other pits". Mice were the scourge of nearly all stables. They entered the mines with the horses food and remained in their thousands even fifteen years after the last ponies left as happened at Kemberton Colliery in the 1950s and 1960s.

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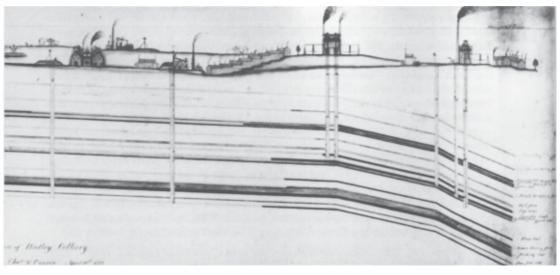


Plate V. Part of a section of Hadley Colliery by Charles Pearce, 1812. This shows horse gins and steam pumping arrangements.