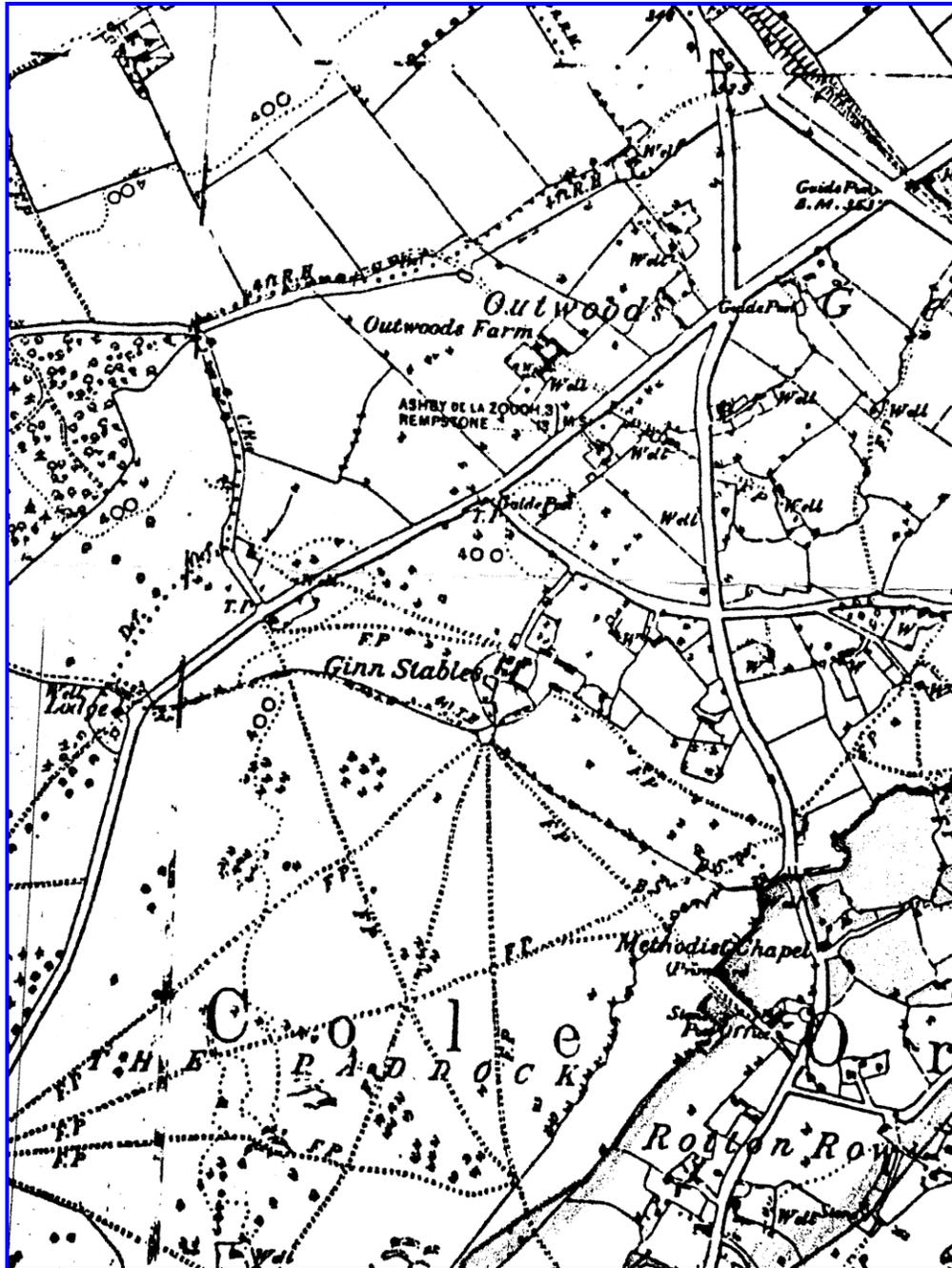


**THE GINN STABLES – 17th / 18th CENTURY
WORTHINGTON PARISH**



1881 SURVEYED 6 INCH O/S MAP

BY SAMUEL T STEWART

The location of the "Ginn Stables" is shown on the map on the front cover. Although usually referred to as being in Coleorton, as the land on which they were situated was part of the Beaumont Estate, they were actually located in Worthington parish.

Mainly because records have been lost or destroyed, there is little written information available on the Ginn Stables. As can be seen on the map, the entrance to the stables was via a track off Outwood's Lane, which cuts through from Lower Moor road to the Rempstone road. Although the Ginn Stables which later became Ginn Stables Farm has all disappeared now, the original track remains and now leads to a hamlet of recently built new houses. A familiar story!



**Time for a glass of Ale and a pipe of baccy
Taken outside the Ginn Stables**

(At the time this photograph was taken, late 19th century?, it is assumed that the workshops were only being used for general estate work etc.)

Horse Ginns were common in the Coleorton and Swannington areas during the 17th and 18th centuries and some of the horses operating the Winding Ginns in the area were kept at the Beaumont Estate Ginn Stables. It would appear that components for the Winding Ginns were also made in the workshops here.

The horses would have been hired out to the coal mine managers on a daily basis together with horse minders. In the more high output mines, this would probably have required four shift changes. Evidence still exists of many Ginn Pits in the area. These exhibit the appearance of a mound of earth with a central depression caused by backfilling of the shafts collapsing, which leads to the inner rim subsiding.

The Ginn Stables had their own workshops, and apparently, when the Estate workshops were sold in the 1930's, the timber components of an old Horse Ginn were found, but these were burnt in the general clean up operation as they were not of interest at the time.

Swannington Heritage has in fact constructed an example of a Horse Ginn on the site of a former Ginn Pit.

The Beaumont estate office was located at the Ginn Stables over a period, and apparently during the clean up fire there, much of the Beaumont Estate records were destroyed.

"The Sporting Baronet", Sir George Arthur Hamilton Beaumont, 11th Baronet of Coleorton Hall, kept some of his horses there which were ridden locally at Uttoxeter and Nottingham. This would have been during the period from 1901 to 1926 when the Abel Smiths' were leasing and residing at Coleorton Hall, and they were using the stabling facilities there.

The Ginn Stables were purchased by the Martin Bros c.1930, which they continued to run as a farm, namely "Ginn Stables Farm". They were well known for breeding race horses there.



**Sir George Arthur Hamilton Beaumont, 11th Baronet, 1881-1933
Seated on one of his horses (probably "Coleorton") in his racing colours of a
scarlet cap and French grey blouse**

DEVELOPMENT OF HORSE GINNS

In relatively shallow mines, like those at Coleorton in the 1570's, coal was hauled up the shaft by a hand-operated windlass, but from the mid sixteenth century, various kinds of "Horse Ginns" were employed, such as the "whim gin" employed at Swannington in the 1720's. By the 1780's, the output being produced by the largest collieries was becoming so large, that horse-power was becoming inadequate and more powerful winding devices using steam power were introduced. Horse powered winding devices were widely used in the 17th and 18th century, and underground haulage was originally by means of manpowered sledges pulled along on wooden rails.

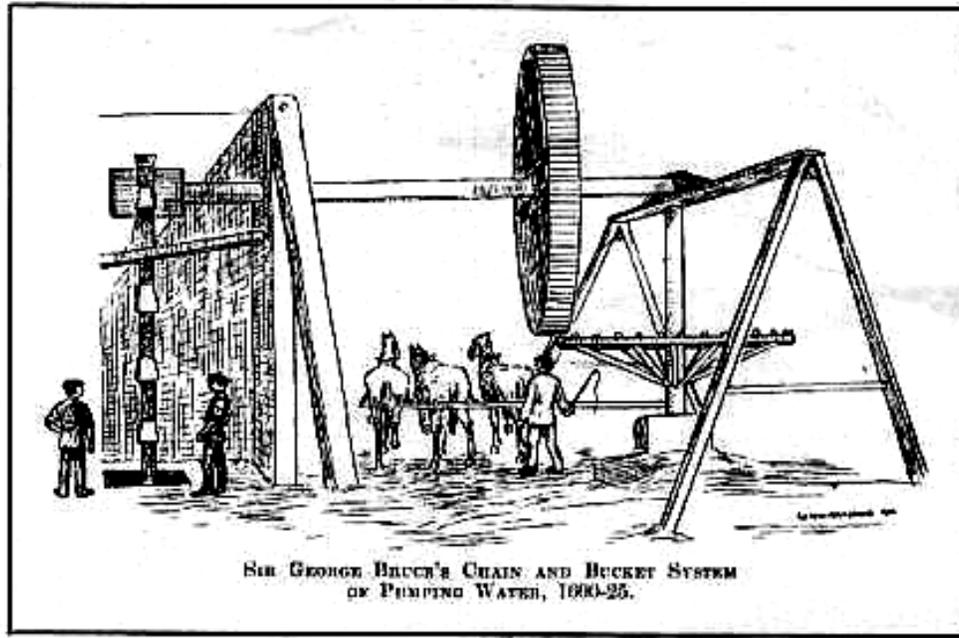


Illustration of coal being pulled along in Corves (hazel twig baskets) on sleds or sledges by a woman and child

Water was a constant problem, and Thomas Beaumont for example was forced to abandon his Measham mine in the early 1620's for want of an answer to drainage problems there. Towards the end of the century, flooded workings at Coleorton Colliery – despite extensive southing (drainage) – brought about its closure.

Elsewhere, at Oakthorpe, water was being raised by means of a "Water Ginn" with assistance from a "Windmill Ginn", and coal was raised by "Horse Ginn", probably of the cog-and-rung type. These techniques became widely used, and the necessity of employing the latest methods would quickly have spread to and from the neighbouring coal fields.

A "Water Ginn" was said to have been used at a pit in the vicinity of the "Woolrooms", in Worthington parish, but no actual records of this have been located.



The principle of how the “Water Gin” (Egyptian Wheel) based on the “Cog-and-Rung”, principle worked. As described below, the chain and buckets could be replaced by a rope and a Corve (wicker basket) to raise coal from the pit bottom.

The cog-and-rung (Egyptian Wheel) gins were a development of the hand operated windlass, and had a continuous rotating chain drum or leather strap suspended over the pit shaft, which went down to a sump at the bottom. A series of leather buckets, called dippers, were attached to the continuous chain or strap, and worked with a dredger action to scoop water up as they rotated around the return drum at the bottom. Their contents were discharged onto an inclined board at the top of the shaft and then into a wooden trough. The water was then discharged into a nearby stream or watercourse. The horses harnesses were attached to a stout lever bolted to the vertical cog-wheel pivot shaft, and were driven around in a clockwise or anti-clockwise direction. This caused the rotation of a wooden horizontal rung-wheel pivot shaft and chain / strap drum via the engagement of the rung wheel with the cog wheel. This method of raising water from wells had been used by the Egyptians hundreds of years prior to it being employed in the coal mines in Great Britain.

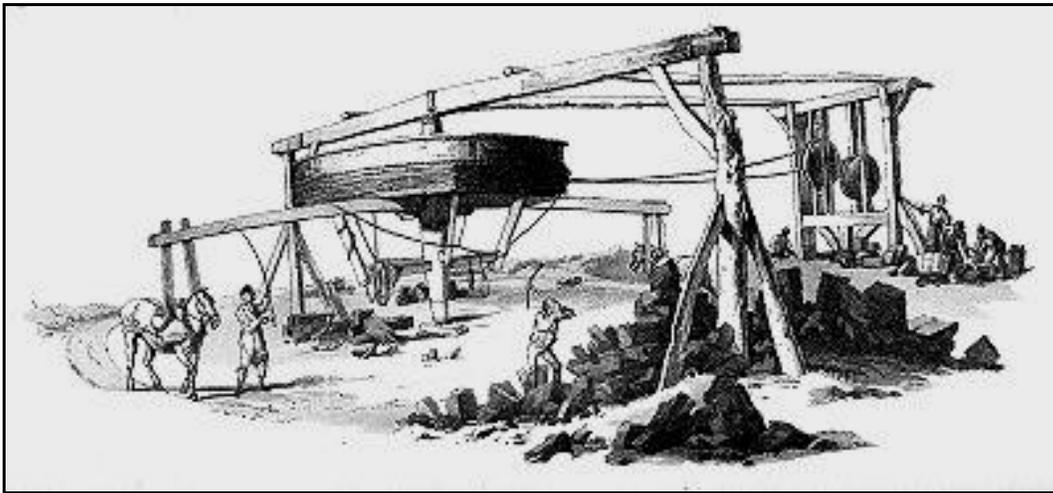
Over a period, the limitation of the chain of buckets method was soon found to be inadequate to meet the ever-increasing wants of the coal miners. The wear and tear was excessive, and due to the vibration of the chain and leakage, much of the contents of the buckets were spilled before they even reached the surface, and water was continually pouring down the pit in a deluge. If a bolt broke, then the whole set of chains and buckets would fall to the bottom of the pit, with dire consequences. The buckets were made out of leather or carved out of solid logs of wood. Wooden barrels were also known to have been used also.

The above illustration shows an Egyptian Wheel developed by the famed colliery engineer Sir George Bruce in order to re-open the colliery at Culross, in Perthshire. A disadvantage to this system was that it needed to be placed near to the pit mouth, due to the limitations in the strength of the components like the rung wheel shaft whose length would be limited.

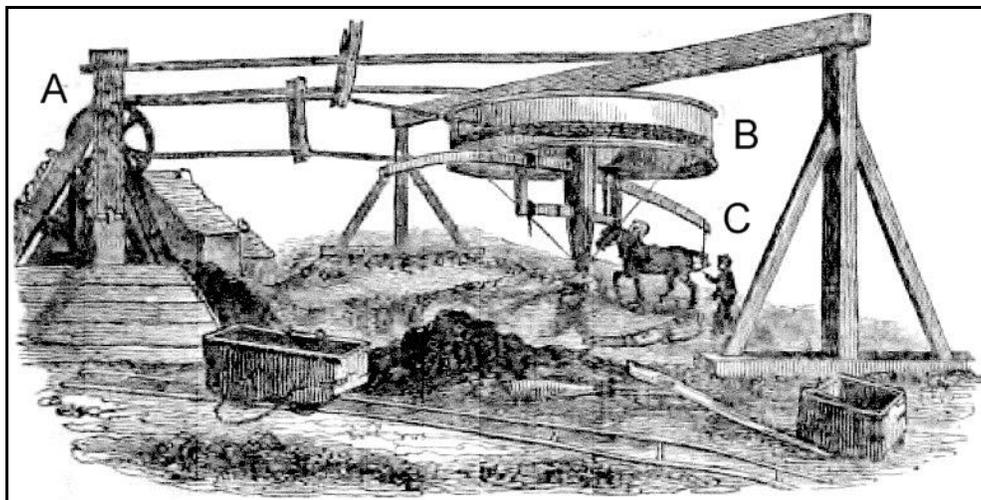
A development of the “Water Ginn” system was also used for hauling coal to the surface. In this, the chain drum was basically replaced by a rope drum. The ropes were made of hemp, and were about one inch in diameter. A corve (hazel basket) was attached to the end of the rope.

When this system was used for hauling coal from the pit bottom, each corve (basket) contained about 4½ cwt of coal. For the deeper pits, an output of twenty-one scores of such baskets, or about 90 tons was considered to be a good day's work. A ginn was worked by one or two horses at a time, and four shifts or relays of horses were required to carry out the day's work. These figures are taken from "A History of Coal Mining in Great Britain", but they seem rather high.

A further development of the cog-and-rung coal hauling gin was the "Whim / Whimsy Ginn", introduced towards the end of the 17th century, and again worked by horses. The drum was sited some distance from the mouth of the pit, with the winding rope taken over pulleys suspended over the shaft. **This gave uninterrupted access to the pit top.** This was a major step forward in hauling coal up the shafts. As well as the pit mouth being left free from obstruction, the diameter of the drum could be enlarged without inconvenience, and the number of horses applied to the levers increased as required. The direction of the horses was reversed dependant on whether the baskets were being raised or lowered in the shaft. At this time of course, the miners were also lowered and raised in the baskets.



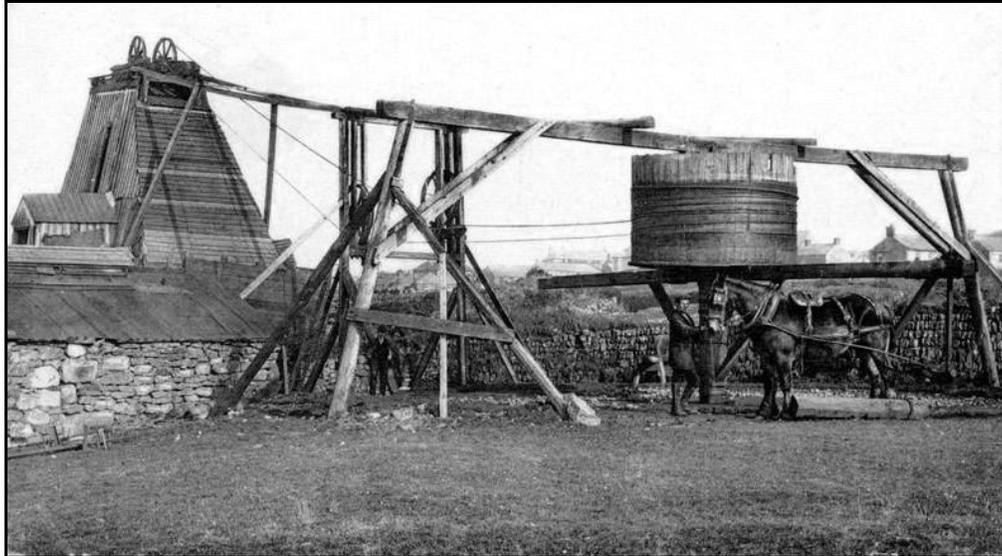
Whim or Whimsy Gin (Horse powered winding wheel)



A - Mine shaft head frame and pulley

B - The hoisting rope is taken up on the reel

C - Horse operating the Gin



**An old photograph of a working “horse powered Gin” at a Cornish mine.
Note that this was situated at a distance from the pit head, thereby freeing up the space around it.**



**Illustration of corves (baskets of coal) being winched up the mine shaft.
Note - the corves are now being transported in a tram on rails instead of on a sled**

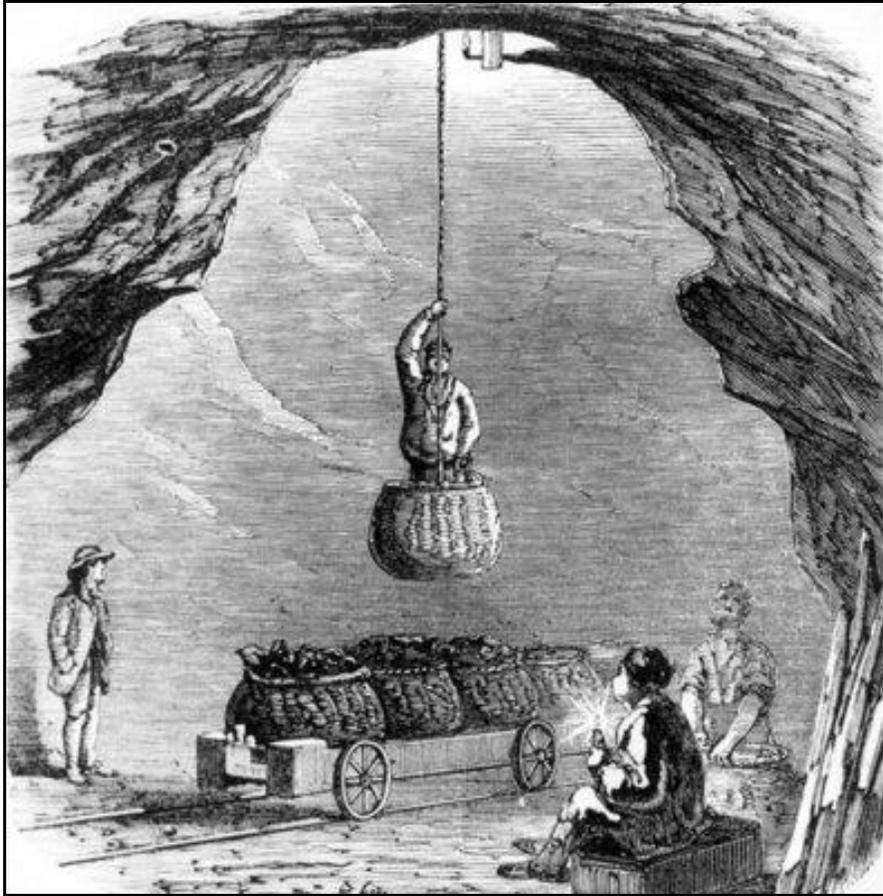


Illustration of descent down the pit shaft in a corve