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AN INTRODUCTION TO THE MINES IN THE ISLE OF MAN

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There is archaeological evidence that indicates that iron was mined way back in the Dark Ages. At Kirk Braddan there remains what is probably a bowl hearth dated about the thirteenth or fourteenth century. King Harold of Mann granted the Abbot of Furness mineral rights in 1246, and in 1666 mines were worked for 'Gould' and 'Silver', the Lords share from the ore raised in 1669 being 32 tons 13 cwts (what proportion of the total raised is not mentioned).

By 1700 private individuals were obtaining the mineral rights, in that year the Earl of Derby let his copper mines to 'Middleton Shaw of Uttoxeter, County Stafford'. The smelt house at Derbyhaven was smelting about 30 tons of lead from 1709 to 1713. The Duke of Atholl entered into an agreement with Sir John Askin in 1739 in which the Lords share was only one seventh in the dressed and washed ore, and all profits and expenses shared equally, this agreement was to last for three years and thereafter the Duke would have three-quarters of the profit.

Before dealing with the mines in detail, it may be interesting to show some of the costs involved in raising ore in the Isle of Man. About 1740 a shaft was sunk at Glen Chass for £1 per bing and William Ross paid ten shillings per fathom and five shillings per bing for sinking of a shaft seven fathoms deep and a level driven both North and South for ten fathoms. At Bradda Mine, a rate of twenty-five shillings a bing was earned, but the equipment was provided by the miners. At about this time., the ore mined was being carried to the smelt at about ten pence a ton (carriers unknown); to refine eight tons eight cwts cost £2-2-0. To cover costs, lead was selling at £12 per ton and silver at five shillings and nine pence per ounce (being recovered at about fifteen ounces per ton on average). The pay was fair at one shilling a day or as much as nine shillings a week. The carpenter would be paid a similar amount.

DETAILS OF INDIVIDUAL MINES

GREAT LAXEY MINE

The Great Laxey Mine is dominated by the 'Lady Isabella', a pitch back shot water wheel of 72 feet 6 inches diameter - a magnificent structure which was constructed in 1854 to pump water from the depth [34] of the mine, some 300 fathoms under adit.

The first real mention of the mine is in about 1781 but there seems to have been little production until 1822 when Thomas Satterthwaite obtained the lease (under the name of Lonan Mining Association). In 1836 a bad accident occurred when the river broke into the mines drowning five men. In 1848 the Laxey Mining Company was formed and it became a Limited Company

in 1862, and in 1903 changed its name to Great Laxey Limited. In 1919 a strike closed the mines and it was only re-opened with the aid of a government (Tynwald) grant of £400, by Williamsons of Laxey but with little or no success.

There is one other piece of large machinery of great interest other than the wheel itself. This is the man engine, located 90 feet underground in the Welsh Shaft. This engine consists of a vertically mounted cylinder housing a 2 feet diameter by 12 feet stroke piston, this piston being raised by water being fed into the bottom of the cylinder with an effective head of 250 feet. The piston was thus forced upwards and when it reached 2 inches from the top a valve was operated and the piston descended. The tall race of the man engine fed the Lady Isabella Wheel (the man engine weighs about 80 tons and is slipping). Connected to the piston were the man carrying rods, and to the wall were fixed platforms, thereby making movement up and down the shaft, an easy exercise. The shafts were deep ranging from 60 fathoms at Agneash Shaft, 247 fathoms at the engine shaft and 295 fathoms at Welsh Shaft. (These are not all the shafts but gives one a good idea of the depth of the mine and it must be remembered that all depths are measured from adit level which *is* as much as 250 feet underground).

The ore was brought out by two small steam locomotives called the ‘Ant’ and ‘Bee’. These were made by Messrs. Stephen Owen of Poole in 1870 and were of 19 inch gauge. The engine would pull from six to eight trucks, each truck about six feet long. The principle ore was lead with a very high content of silver, although at one time the mine was the chief producer of Black Jack in the British Isles.

THE FOXDALE MINES

The Foxdale Mines cover a very large area and there are twelve different workings and each will be dealt with individually.

UPPER AND LOWER OLD FOXDALE

The mines worked four main Lodes and seem to have consisted [35] of five shafts in 1740, three of which were engine shafts. The Isle of Man Mining Company took over in 1828 the deepest shaft at that time in Upper Foxdale was 40 fathoms and in the lower mine 13 fathoms. Lower Foxdale was obviously quite poor for in 1829 it was closed. Upper Foxdale however was incorporated with some older mines brought under its name., namely Old Flappy and Faraghers. The mines were closed in 1835 but in 1849 Captains Bryant and Rowe re-opened them. They did a good deal of work including sinking two new shafts; the underground workings were still being extended until 1893. The year 1902 saw the collapse of the metal market and the mine ceased work leaving shafts of 320 fathoms to fill with water.

FAR GIN (New Foxdale and Later Central Foxdale)
The veins were discovered in 1820 by Michael Knott who worked them until 1828 when they were taken over by the Isle of Man Mining Company. The mines were quite extensive by this time and were worked through seven shafts. It is presumed that the New Engine Shaft (the centre of the mines so to speak) was served by a steam engine but no real evidence of this remains. By 1835 the engine shaft was down to 60 fathoms at which time new trials were driven east along the vein. Work ceased about 1863. The mines were re-opened by another company in 1871 and worked until 1890 or so. The production figures show that the mine was very profitable during these years as the ore was of very good quality with a high silver content i.e. 1878 lead 360 tons, silver 6,074 ounces, and the best year, 1883 lead 530 tons, silver 15, 900 ounces.

OLD FLAPPY MINES
This is the third oldest mine in the area, it being in operation before 1749 and was worked until 1823 as a separate mine on the Old Foxdale vein. After 1823 Michael Knott took over, but did very little work here. In 1828 the Isle of Man Mining Company gained control and by 1829 it was in full operation, but was not actually connected underground with Old Foxdale until 1852, although it had been worked in conjunction with the latter from 1829.

MAGHIE'S MINE
The vein was discovered in a stream bed and is a cross vein of the main Foxdale Lode. In July 1884 a trial shaft was sunk, it being intended to reach fifteen fathoms below the surface. At ten fathoms (reached in 1835) a fine rib of lead ore was struck. At twelve fathoms water became a major hazard and this was drained by a line of rods from the Old Foxdale Wheel connected to a series of pumps [36] in Old Flappy Shaft, and a drainage tunnel dug to connect the two mines. In 1837 water again proved troublesome and a wheel from New Foxdale was erected at the head of the shaft, now twenty-seven fathoms deep. In 1845 a new wheel had to be erected and all work underground ceased for three years, after which the mine worked continuously until 1880 with the shaft reaching 124 fathoms.

JONES MINE, LATER TOWNSHENDS
The Isle of Man Mining Company worked this mine from its opening in 1837 to its closure in 1886. There appear to have been two main periods of work from 1837 to 1849 and from 1879 to 1886 Jones Mine was worked, with the sinking of three shafts. Mountain Shaft proved a bit troublesome and required pumping from the seven fathom mark., this being carried out initially by a small pumping/ crushing beam engine, but in 1841 hard rock was struck and an order with James Sims of Redruth was placed for a 50/90" combined cylinder engine; it was installed by 1843. In 1846 a further shaft was sunk to gain access to new ground at depth. In 1849 the mine closed with this new shaft down to 95 fathoms. Between 1866 and 1868 a series of trials were carried out to try and find a lode on the surface but with little success.

Work again started in 1879 but although a good deal of ore was raised it proved uneconomical, with the engine shaft at 140 fathoms.

FARAGHER'S JOHNSON'S, HODGSON'S OR THE LOUISA MINE

A vein between Old and New Foxdale was discovered in 1830 and was wrought by Faragher's Mine. By 1831 a whimsey shaft, day level and an east-west level was opened at ten fathoms, which struck a run of solid ore. At thirteen fathoms it varied from six to seventy-two inches wide but water caused very serious flooding at the sixteen fathoms level so in 1882 a water wheel was erected which enabled the continued sinking of an engine shaft. In 1833 a pumping engine was bought from Carregboeth Mine in Wales, and a ventilation shaft (Harrison's) was sunk. The new engine shaft in 1835 reached thirty fathoms and water again became a very real problem causing closure of the mine in that year.

In 1849 work re-started on the acceptance of a favourable report from Captains, Raw and Bryant. During the 1850's a new shaft was sunk (Potts) and by 1666 it was at sixty-seven fathoms and was then being made good as an engine shaft; by 1896 it had reached 200 fathoms. Work finally ceased in the early twentieth century. [37]

BALLERGHY OR CLUCA'S MINE, LATER BELL'S HOLE

Opened in 1835 this mine was also troubled with water. In 1836 the wheel from Faraghers Mines was moved to it to facilitate pumping the engine shaft after only seven fathoms had been sunk. By July 1836 the wheel was operating and the engine shaft was sixteen fathoms deep and by 1837, thirty-eight fathoms deep, with levels off at seven, ten, twenty and thirty fathoms. The mines appear to have ceased operation in 1839 and the wheel moved to Beckwith's. There have been several attempts at re-opening the mine but with little or no success and all that now remains of the surface works are some machinery mountings and a concrete buddle.

BECKWITH'S MINE

The Isle of Man Mining Company started this mining operation in 1831 by sinking a shaft to Beckwith Vein., it being also served by two adits, one from a ravine to the west, and after 1836 from Shimmin's Vein. Water again being a problem, a pendulum pump was installed in 1832.

The first adit revealed large amounts of ore and during the advance of the heading over 650 tons of ore were brought out with an estimated reserve of over 1000 tons. This was left in place as a shaft was needed to investigate the ground below the adit. This was Beckwith's shaft and was to remain the engine shaft throughout the mine's life. By 1836 the pendulum pump could not cope, with the incoming water so a small steam engine was moved from Far Gin at New Foxdale Mines. This engine alas, was still insufficiently powerful to hold down the water, so in 1837 a new engine from Coalbrookdale was installed, with the pump on one side and the crushing mill on the other.

The shaft was by this time only seven fathoms below adit. By November 1837 it was thirty-three fathoms below the surface with a level at twenty-five fathoms and a sump was sunk between the adit and the twenty-five fathom level. In February 1838, with the shaft at thirty-five fathoms, the engine failed to keep the mine dry so William Jones (the mine manager) ordered the removal of the crushing plant and the winding machinery and a waterwheel to be moved from Old Foxdale and resited in the valley below the engine shaft and the winding and crushing gear to be attached to that wheel thus allowing the steam engine to be released for pumping only. The engine was now good enough for the engine shaft to be sunk to forty-eight fathoms by October 1839. To add to all the problems the surface water was scarce. [38]

By February 1840 the engine shaft was down to fifty fathoms and another level was struck off in an East-West direction but a dry summer proved too much, and with a lack of surface water and too much underground, all work at the lower levels was stopped.

In 1840 the engine shaft was sunk to eighty fathoms with another level off at seventy-five. A further crushing mill was purchased from Belfast and a twenty inch engine was brought from Cross's Mine to power it, together with a twelve h.p. disc engine purchased for winding. Plans were made to improve the water supply at surface with two new water courses constructed from North Gill and Dixon's Mine respectively and the wheel from Johnson Is Mine was planned to be moved to the site. However by August of that year the mines were flooded to the thirty fathom level. Jones maintained that it was more economical to improve the surface water than to buy a steam engine for pumping (there is no coal on Man and it has all to be imported) but by November a fifty inch cylinder engine was bought from Gwernymyndd Mine near Mold. By this time many of the levels in the mine had collapsed.

By July 1843 the new engine was in place and working and the engine shaft had been sunk to eight-five fathoms with cross cuts at eighty fathoms and sumps between the sixty-five and eighty fathom level. From observation by Rowe and Bryant, the vein appeared to dip South eighteen inches in seventy-two inches, and on this they recommended the sinking of a new shaft further south to a depth of 150 fathoms. In 1843 the original engine shaft had still not reached ninety-five fathoms.

In 1849 a trial shaft was sunk at North Gill Lode and it was reported that the engine shaft had at last reached ninety-five fathoms but the engine was inadequate to de-water from this depth, and a new shaft was being sunk east of the engine shaft and the washing floors extensively modified. Records from this date are very sparse but' in 1911 it was estimated that 41,539 tons of ore had been raised between 1831 and 1862 at a value of £535,913. When the mine closed (no date) the engine shaft had reached 185 fathoms! There were various attempts to re-open the mine, but with little or no success.

CROSS'S MINE

Initial survey indicated that the extension of Beckwith's vein could be reached via Cronk vein, so in 1832 a shaft was started to the west of the original workings. By 1835 the shaft was ten fathoms deep. The company had had experience of the water problems in the [39] area before so they purchased a sixteen inch steam engine for crushing and pumping at a cost of £450. By February 1836 the engine shaft had reached thirty fathoms with no water problems, which was all to the good as trouble with the couplings on the steam engine had meant replacements coming from Chester. In November 1836 a level was driven east at the thirty fathom mark, and in April 1837 a level at forty fathoms was started. A North-South level at thirty fathoms was also begun and the east level linked to the old workings.

The steam engine was still not required for pumping which was very fortunate as trouble with the boiler had meant a replacement being ordered from W. Scott of Flint.

By November 1837 the east level at forty fathoms had been driven fifteen fathoms and a cross cut to test the vein was started. The shaft at this time was at the forty but it was decided to sink it another ten fathoms. It was also decided that Mr. Charles Morgan would be employed (from England) to execute various engineering repairs, including repairs to the engine. By February 1838 the old engine was replaced with a bigger one from Faraghers Mine! The old engine was used for winding from the shaft to replace the horse gin in operation from the beginning.

In August 1838 Richard Powning used pumping rods to de-water Dixon Mine using their new, bigger engine. In August 1839 levels were being driven at the fifty fathom level from the engine shaft.

In February 1840 plans were laid to replace the winding engine and an order placed with Rhydymwyn Foundry. In March, work started on joining the forty and fifty fathoms levels by a sump. The engine shaft was also deepened by fifteen fathoms.

During 1842 engine shaft was at the sixty-five and the east level at fifty fathoms was continuing towards Dixons Mine, also a sump was being sunk in the sole of the west level at the sixty-five fathom level. 1843 saw operations suspended. An Inspection in 1845 reported the mine de-watered by thirty inch pumping engine, the engine shaft a sixty-five fathoms with a level extending for fifty fathoms with sumps nine, six and three fathoms in its sole.

No further work appears to be done until 1866 when it was worked in conjunction with Beckwith's. The rights were sold in 1881 for £7,000.

DIXON MINE

The earliest reference to this mine is in 1835 when it is recorded by William Jones of the discovery of Dixon Vein. By 1836 a shaft had been sunk seven fathoms, but work was suspended as water became a serious problem. By May 1837 an adit had been completed to drain the mine to meet the shaft at the twenty fathoms level. Levels at seven and seventeen fathoms were driven both east and west with the ore being removed by rail. In 1842 operations were again suspended and trials were cut on the surface to trace the veins to the east. Work does not seem to have started again underground until 1866 and by 1868 the engine shaft had reached the forty-seven with levels at seventeen, thirty-two and forty-seven fathoms and a shaft, 280 yards to the east, had been sunk to seventeen fathoms with a level off at this depth. Later in 1868 work was suspended again and does not seem to have been restarted.

Although this is rather a factual description of some of the mines of the Isle of Man I hope it will give the reader an idea of what is there. It is gratifying to know that due to the lack of scrap dealers on the Island a lot of heavy (and less heavy) bits remain. Alas this does not include the 'Ant' and 'Bee' which were sold for scrap in 1935).

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UPDATE

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