

## PARC MINE, LLANRWST. NORTH WALES

by

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This mine is one of a number in the Llanrwst lead field which is contained in a small triangle bounded at the apexes by Bettws-y-coed, Gapel Curig and Trefriw. The area is well above sea level and there are several lakes which have provided a source of water power for mining operations.

The rocks in the area consist of sediments and volcanics of the Ordovician period, and mineralization occurs in the shales, mudstones and volcanic ash. The lodes are normally about four feet wide at the dip between 65 and 80 degrees, and contain the following in order of abundance; calcite, quartz, pyrite, galena and sphalerite, but only the two latter minerals have been exploited economically. It is probable that the first workings commenced in the early 17th century, but not much was done until the middle of the 19th century; the heyday being reached around the period 1860 to 1900. The mine is located in Nant Gwydyr about one mile south west of Llanrwst. The date of the first working is not known, the earliest official record of output dates in 1860, but it is certain that there were workings on the pipe of galena on the Gors lode long before this date. Between 1860 and 1888, working was confined to the Gors pipe, the mine being operated by the D'Ersby and Gwydyr Co. The Principle lode which runs approximately east and west with a dip of about one in three, was discovered about 1900 possibly by Brunner Mend & Go who had a lease on the Parc and Aberllyn mines, and who concentrated on production of blende at the latter mine.

In 1905, Mr C.R. Holmes, an American from Montana took a three year "take note," or lease on the mine, from the Gwydyr Estate. The rent was £35 per annum on the area of 207 acres, and the royalty was one twentieth of the output of dressed ore. If the royalty in any one year amounted to the annual rent, then the rent was not payable for that year.

Mr. Holmes was quite an interesting character, having had very little experience in mining. He was born in 1869, his father being a colliery manager in Illinois and who later became Superintendent of the Chicago tramways and was responsible for the conversion from horse to cable traction. After a brief schooling, he sent his son to Los Angeles to gain experience. From there he became Superintendent of the tramway system in Anaconda, Montana, and later obtained a post with the Anaconda Copper Mining Co. as manager of the Electrical Department. In 1897 he came to England to work on tramway construction in London, and it was during a vacation in North Wales that he became acquainted with the Conway Valley and the Parc mine, and it was purely on impulse that he decided to take the lease.

For the first few years he kept on with his work in London, and operated the mine with a succession of managers. As this was not very satisfactory, he decided in 1912 to devote his whole time to the mine and built himself a house close by.

At that time the 30 ton per day dressing mill contained a Mareden stone breaker, three sets of Cornish rolls, four Hartz jigs and a Wilfley table for slimes. Power was supplied by a 60hp. Robey undertype compound steam engine supplemented by a 30ft x 2ft 6in water wheel. Having worked at Anaconda, he was familiar with compressed air drills which at that time had never been employed in the Llanrwst district, so he purchased a second hand Tangye 85bhp suction gas engine and an air compressor. Later he enlarged the plant by purchasing a National suction gas engine and compressor at auction on a local lead mine.

About 19179 a rather curious incident occurred concerning the “salting” of an adjacent mine and quotations from his notes are very revealing.-

“Around this time there appeared in the Nant and neighbourhood an Individual who said his mm was Joseph Aspinall.

He claimed to be a mighty mining man with huge interests in that line, both domestic and foreign, He took a take note on quite a piece of land north of Pare mine and extending over the hill to the northern end of Gerionydd Lake.

This ground contained a couple of prospecting tunnels of no great length which had not found any mineral. One tunnel was not far above the main road, and the other was the hill near the northern end of Gerionydd Lake and close to an old dressing mill at that place.

He put to work several men and cleared cut every particle of loose dirt and dust from the roof, walls and floor of both tunnels. At about the time when the cleanout of the tunnels was completed, he called to see me, his object being to purchase my galena concentrates for which he would pay 50% above the ordinary market price. When I expressed astonishment, he explained In STRICTEST CONFIDENCE that the lead ores in the Conway Valley contained in addition to the minerals therein, a further ingredient, extremely valuable and rare and unknown to metallurgists, the presence of which he had discovered and which he alone possessed the knowledge and scientific skill to extract. I told him that I had no concentrates for sale and that all mine were under contract with the smelter.

Some weeks later I learned at the Railway Goods station that some 20 tons of lead concentrates had arrived from Cornwall, consigned to the Devon & Crafnant mining Syndicate Ltd. which was the name under which Aspinall did business.

This seemed an odd route for concentrates to take on their way to the markets of the world. The mystery deepened when all this stuff in bags was carted up to Aspinall's two projects. The plot thickened further when every inch of the interior of the tunnels was subjected to a squirt of some mucilaginous liquid which had a powerful grip when dry, and the rock so treated was at once thoroughly dusted with lead concentrated. When thus completed, the two tunnels glistened like a Jewellers shop. Then Aspinall began taking on a staff of men for both places, but the remarkable feature of their employment was that they were required to do practically no work. There was only one real requirement; they could loll about all day as they liked. but upon hearing two short ‘toots’ of a motor horn as Aspinall's car came up the hill, all must bustle Into Instant activity, half the men forming a strong guard around the mouth of the tunnel and the others running around the place like ants on an anthill, carrying things and generally displaying intense activity.

Then he began arriving with parties of visitors, mostly consisting of richly attired elderly women of the ‘Dowager’ class. Sometimes there would be parties of dark skinned youths, who were for some time a mystery, but proved to be natives of India, the sons of wealthy parents, who had been sent to London to be educated and wrote home to their parents of the magnificent business opportunity they had discovered In Wales. As silver was not unknown in India and such a glorious chance should act be missed, their Papas remitted to London heavily.

The custom was to bring down the parties from London in a First Class railway carriage, guests of Aspinall of course, who shepherded carefully, and the first night was spent in a fine mansion on a small estate on the outskirts of Conway which Aspinall had leased and filled with gorgeous furniture and liveried servants.

In the stables were four or five racehorses, and he maintained a moderate size but luxurious yacht on the bay, in which the victim were given a joy ride in the evening in suitable weather after which a banquet was held at, which of course, the champagne flowed like a waterfall.

Next forenoon they were brought up to the tunnel near Pare and enormously impressed. Then through Llanwrst and via the east road back to Conway for lunch. In the afternoon back to Trefriw and up the hill to the super prize exhibit of all; not only the second dazzling tunnel, which it was explained was directly headed for the other, and when they met there would be fully disclosed the vastest deposit of pure virgin silver in the whole world, some two miles thick; but the highly interesting milling of the said silver in addition. When Aspinall took over the mill there was a stone breaker and a few jigs. He made no use of the jigs but put in a Wynne shaking table, patterned somewhat after the Wilfley but larger and it had a long stroke of 4 1/2 inches. Not much good for ore separation, but that did not matter for there was nothing to separate from the pure silver but it made quite an impressive noise. Then he erected a launder from the stonebreaker to the head of the table and the installation was complete.

In the operation which commenced when the two 'toots' of the motor horn announced the arrival of guests and ended right after their departure, the lead concentrates were fed into the stonebreaker and thence via the launder to the table, on leaving which they became virgin silver. If any customer desired a sample as a souvenir, Aspinall willingly obliged, taking it personally before their very eyes. A little sleight of hand was all that was necessary for the thrilled sucker to receive a couple of ounces of granulated silver of the purest quality.

When this bizarre business had been in operation for some time, I happened to be in London with an idle hour on my hands and so went around to Piccadilly to view the Head Office of the Devon & Crafnant Mining Syndicate Ltd. This I found was an elaborate affair of some four rooms, lavishly furnished with beautiful mahogany furniture; Persian carpets an inch thick on the floors and the walls decorated with tastefully framed Photographs of various mills, mine headgears and large metallurgical works intermingled with paintings of racehorses. Aspinall I found was absent for the day, but I conversed with his Private Secretary to whom I introduced myself as 'Charles Robinson' an Australian just arrived in London for the first time and was looking for a safe and bound investment for considerable money. He was greatly interested and deftly tried to learn the extent of my financial resources. The photographs on the walls he explained were of some of the many mines and works that the Syndicate either owned outright or controlled at home or abroad.

Mr. Aspinall would be back next day and he was sure would be glad to talk to me. At the moment he was developing an immense deposit of silver in Wales.

On leaving, after promising to call next day, I proceeded to Somerset House where after expending one shilling for the privilege, I was permitted to inspect the file of the company which I found was registered as a private limited company, with an authorised capital of £100 and a paid up capital of £2. Their Purchasing Agent was a wonderful man to have provided so much splendour on such meagre funds.

En route home and whilst waiting at Llandudno Junction, I noticed on a newsstand a Welsh newspaper which I had not seen before.

Out of curiosity bought a copy, and on one of the back pages found a most interesting Item.

It read:

### GOOD NEWS FOR THE BRITISH TAXPAYER.

It can now be revealed that there exists in one of the Welsh mountains an enormous deposit of pure silver. This was known as far back as Mediaeval times, although its vast extent was unknown until recently. The reason why the Welsh fought so furiously against the English for centuries was to prevent all this Treasure from falling into the hands of their enemies.

As time went on and people died, the matter became almost forgotten.

The property has been closely held in one family for over 1,000 years, but now, for Patriotic Motives it has been decided to realise this colossal wealth, and under the auspices of the World Famous, Grafnant & Devon Mining Syndicate Ltd.

Active operations are under way for the purpose of assisting the Government to finance the war.

Mr. Homes goes on to relate how he sent a letter to Scotland Yard detailing all the operations as they appeared to be a large scale fraud. In January 1922 Aspinall was tried at the Old Bailey and sentenced to twenty months' hard labour for fraudulent conversion.

In 1930 there was a very heavy slump in the price of lead, and production ceased at the mine. During the period from 1905 to 1929, some 1,000 tons of lead and 500 tons of zinc concentrates were produced.

Mr. Holmes returned to the United States in 1932 leaving the mine on a care and maintenance basis.

The mine was idle until 1936 when Watende Ltd. (previously Watende Mining (Kenya) Ltd.) purchased the mine materials from W. Holmes and proceeded to develop the Principle lode. They recovered some 500 tons of lead concentrates during the period to 1939 and then reconstructed the mill.

Milling restarted at the beginning of 1940. In all they recovered some 1700 tons of lead concentrates before the mine was again stopped in 1941, due, it is said, to labour troubles.

There was a gap of eight years until the mine was prospected in 1949 by Llanwrst lead Mines Ltd., the results being sufficiently favourable to warrant the erection of a new 300 ton per day mill.

This was designed and erected by R.O. Stokes & Co. Ltd. Diesel haulage was employed on No. 3 level on the Principle lode. The new mill which started work in June 1952 employed a Parker Jaw crusher feeding to a Nordberg Rod Deck Screen, oversize passing to a Symons cone crusher. The fine ore was fed to two ball mills and thence to a flotation plant with twelve lead and twelve zinc cells. The grade of ore sent to the mill averaged 2.5% lead and 1.5% zinc. The lead concentrates were sent to Chester and the zinc to Avonmouth for smelting. Up to the middle of 1957, over half a million tons of ore had been processed realising 15,000 tons of lead and 7,500 tons of zinc concentrates.

Milling continued until July 1958 producing a further 2,500 tons of lead and 1,000 tons of zinc concentrates, but owing to the drop in base metal prices and the low ore grade, it became necessary to put the mine on a care and maintenance basis.

In 1960 the Warren Spring Laboratory of the Department of Scientific and Industrial Research decided that a project should be put in hand to provide the basic data

necessary for the automatic control of mineral treatment processes,, and that a full scale experi-ment on an actual mine plant was desirable.

The search for a suitable plant eventually narrowed to the Parc mine. This was chosen as all the unit processes of extraction, crushing, grinding. Froth flotation, thickening and filtration were all on one site, and where the equipment was readily adaptable for instrumentation. The experimental approach was designed by the Laboratory and Elliott Automation with the co-operation of mining houses and instrument manufacturers. A description of the project can be found in Mine & Quarry Engineering., January 1963.

Preparatory work in commissioning the mine, and overhaul and modification of the mill was started in January 1962 by the owners, Hawkswood Investments Ltd. who had taken over from Llanwrst Lead Mines Ltd. Underground mining started in June, and milling in September.

Mining continued until December, and the mill was finally closed down on February 27th 1963 when the necessary experiments had been completed.

During this period of operation, some 350 tons of lead and 180 tons of zinc concentrates were produced.

A year or two later most of the mill machinery was removed but the Parker crusher was used for a time by the Pengwern & Gwydyr Quarries Ltd.

Now only the empty buildings remain.

I am indebted to Mr. Justin Brooke for checking "The Times" index at the Guildhall Library and providing the references to the proceedings at the Central Criminal Court. From "The Times" January 21st 1922.

"Before the Common Sergeant (Mr. H.F. Dickens. K.C.), at the Central Criminal Court yesterday, Joseph Aspinall., 48, mining engineer, was indicted for misappropriating sums amounting to £7,600, the property of the Crafnant and Devon Mining Syndicate, Limited of which he was a director. The defendant pleaded "Not Guilty".

Mr. Percival Clerks, who appeared with Mr. H. D. Rooms for the prosecution, said the syndicate was formed in 1918, but Aspinall and Mr. Robert Denholme, the other director, only subscribed £1 each.

Mr. Denholm had been told by Aspinall of some wonderful mines In North Wales, in which, if they could be developed, there was untold wealth.

Mr. Denholm had not much money to invest himself, but he was so taken in by the defendant that he induced his friends to subscribe £5,000 or £6,000.

Approximately £133,500 was obtained by this syndicate from the gullible British public. The defendant used the money to pay the rent of his flat in Kensington, his country house at Conway, and his seaside house at Rhos on Sea, in paying the wages of his servants, in furniture, clothing, jewellery, sporting guns, and motor cars. In fact he was living like a fighting cock upon this money.

The amount of £7.600 mentioned in the charge did not pretend to exhaust the alleged misappropriation, which was much more like £35,000."

From "The Times", January 31st 1922.

"At the Central Criminal Court yesterday, the trial was concluded of Joseph Aspinall, 48, mining engineer, on the indictment charging him with converting to his own use sums amounting to £7,600, belonging to the Crafnant and Devon Mining Syndicate, limited, of which he was a director.

The jury found the defendant Guilty on all the counts except one, and the Common Sergeant (Mr. H.F. Dickens, K.O.) sentenced him to 20 months' imprisonment, with hard labour.

After the verdict had been returned, Mr. Clarke said the case was regarded as one of very grave importance and of iniquity, because ruin had been brought on a number of persons, many of them women. The defendant started life as a Waggoner at a colliery near Bolton.

In 1902 he began business on his own account as a manufacturer of collier appliances, and later took a lease of a colliery near Stoke on Trent.

In his spare time he was a Salvation Army bandsman. As a result of the defendant's answers in his bankruptcy proceedings in 1912, he was convicted at the Central Criminal Court of fraud. In the present case it appeared from the statements of a number of men he employed at the "Klondyke" mine in Wales that a lump of metal, brought from Cornwall was supposed to be used for the purpose of decorating the mine, and persons who visited it went away thinking that there was untold wealth in it."

Teuthill. Frodsham.

May 1969.