

BULLETIN
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Chateau De Ramezay
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RAILROADS OF THE GENERAL MINING ASSOCIATION, PART II

by
Robert R. Brown

Returning, the horses hauled the empty wagons to the summit and then rode back to the mine. The gradients were not too severe and, while the horses had quite a heavy load uphill, it is related that it was quite obvious that they enjoyed the ride downhill.

Some time in the early forties, the first modern mine, the Jacobs pit, was sunk and the railway was extended $\frac{3}{4}$ of a mile.

The line was worked by horses for almost twenty years but about 1854 two locomotives, named the "Halifax" and "Sydney", were imported from England. They were 0-6-0 type with 12x20 cylinders but no other information is known. It is likely that they were second hand. Next, about 1870, came two small second hand saddle tank engines built in 1867 by Neilson & Co., of Glasgow. They were 0-4-0 type with 10x18 cylinders and 45" wheels.

In 1872 the "John Bridge" arrived from Albion Mines where it had been used for a short time on the South Pictou Railroad. It was 0-4-2 type with side tanks and end bunker, 15x23 cylinders and 66" wheels, and was built by Fletcher, Jennings & Co., Lowka Engine Works, Whithaven. Tradition relates that it ended its career by running off the end of the pier at North Sydney.

The last locomotives acquired by the General Mining Association were two Baldwin 4-4-0 type engines bought in 1894. One of these, No. 7, was sold to the Maritime Railway and Coal Co., and it ran between Maccen and Joggins until about 1925. The remains of No. 6 still lie in the yard of the old steel mill at Sydney Mines.

The Sydney Mines and the railway were sold in 1900 to the Nova Scotia Steel Co. and are still operated by

that Company. Shortly afterwards the railway was extended to Florence and now it consists of a main line from North Sydney to Florence, 6 miles, and a branch at Sydney Mines about 1-1/2 mile long.

Lingan Colliery Railway

The Lingan Mine was opened by the General Mining Association in 1854 near the North Head of Indian Bay. The name Lingan being just a corruption of the French name L'Indien. A railway, about 1 mile long, was built from the mine to a small harbour at the gap in the Lingan bar, directly opposite the old terminus of the Bridgeport tramway. The Lingan Railway was narrow gauge, 3'6", and it had one locomotive and about 50 wagons. The mine was closed in 1886 and the rolling stock sold to the Gowrie Co. at Port Morien, which operated a short railway of the same gauge. The grade of the Lingan Railway can still be traced throughout its entire length.

Victoria Mines Railway

From 1867 to 1879 the General Mining Association worked a mine at Victoria near the south side of the entrance to Sydney harbour, and a railway was built from the mine along the shore to a pier on the inner side of the South Bar, a distance of 3-3/4 miles. About 40 wagons were in use and they were hauled by horses.

The mine was reopened in 1883 and one of the old locomotives of the Sydney Mines Railway was put to work. In 1884 a new mine was opened at New Victoria, 1-1/4 mile beyond, and the railway was extended to the new workings and in the following year a locomotive, the "C.G. Swan" was built for this line. It was 0-6-0 type with saddle tank, slab frames, 14x23 cylinders, 58" wheels and weighed about 35 tons. It was

built entirely in the machine shop of the General Mining Association at Sydney Mines and only the tires were imported. This railway was abandoned when the Victoria Mines were closed in February 1898 and later on the road bed became part of the highway between Sydney and New Waterford.

Joggins Incline Plane

In 1846 the General Mining Association opened a mine at Joggins, near the shore of the Bay of Fundy to supply coal to the city of

Saint John and other towns around the bay and, as the mine was on quite high ground, it was necessary to build an incline plane, 800 yards long, from the mine down to the wharf. The General Mining Association abandoned this mine in 1858 but, when the Joggins Coal Mining Co. took over the property in 1871, the incline plane was either repaired or a new one built on or near the same site; it is still used occasionally.

Locomotive List, III

Locomotives of the General Mining Association

Compiled by Robert R. Brown

"Samson", "Hercules" and "John Buddle"

The first three locomotives, the "Samson", "Hercules" and "John Buddle", were ordered, probably, in 1837 by John Buddle, a well-known mining and railway engineer who evidently was a shareholder or an official of the General Mining Association. They were built by Timothy Hackworth, at New Shildon, Durham, England, and were completed in August 1838, arriving at Pictou late in November or early in December. They were of a very peculiar type, similar to many of the locomotives of the Stockton and Darlington Railway, of which Hackworth was Locomotive Superintendent. The cylinders rested vertically upon cast iron box-like frames which formed part of a bonnet or hood which partially enclosed the valve gear, pumps, throttle, reversing lever and other working parts. The crossheads instead of being guided by slides, had an arrangement of levers giving a parallel motion. The dimensions of the cylinders are usually stated to be 15-1/4x16 but 15-5/8x18 is correct. The valves were actuated by a four eccentric gub motion working vertically from the rear axle. The wheels, which were 48 ins. in diameter, were of a very curious type, characteristic of the locomotives on the Stockton and Darlington Railway and those built by Hackworth. They were of cast iron, with a chilled tread, and were made up in two parts as there were no lathes in the Shildon shops large enough to turn the rims or treads of the wheels when fixed upon the axles. The wheel centres or 'bosses' were keyed to the axle and then machined true and then the outer part was put on and trued by the centre and made tight by wooden plugs and iron wedges. They were dotted with plug holes to ensure sound castings and reduce unnecessary weight and in actual use they were found to be extremely efficient. The boilers, with a capacity of 540 gallons, were 13'4" long by 48" in diameter and originally carried a pressure of 60 pounds but later reduced to 35. They had a single return flue, made of 3/8" plate single rivetted, 26-1/2" in diameter round the fire and diminishing to 18" at the base of the chimney. The fire was made on an iron grate set in the bottom of the flue and these grates had to be renewed frequently. The engines had no frames; the axle bearings were bolted to brackets which were rivetted to the under side of the boiler. Individual springs were fitted to the front and middle wheels but the back wheels, to which the main rods were attached, had no springs of any kind. The tender was pushed in front of the engine and, because of the position of the fire door, the stoker had to shovel the coal in left handed. There was

a powerful back-draught and every time he opened the door a huge cloud of black smoke emerged.

The engineer sat in solitary state in a little iron chair at one side of the small platform at the rear end of the engine but, at frequent intervals he had to leave his perch and clamber over and around the right cylinder and then out on the running board to check the dry cocks on the side of the boiler. There was no cab or protection of any kind but Donald Thompson, who was driver of the "Samson" for 40 years, claimed that in spite of the cold damp winters he never shivered once. These Scottish engineers took great care of their engines and old Thompson was fond of saying, "Indeed I was far more careful of her than of the good wife".

These engines weighed about 38,000 pounds, and, with a supply of spare parts, cost £2140 Halifax currency (\$10,560) each. They were retired about 1885 and the "John Buddle" was immediately dismantled; the boiler being used for many years for a stationary engine. The other two were left on a siding for 7 or 8 years and in 1892 or 3 the "Samson" was bought by the Baltimore and Ohio Railroad and sent to the Chicago Exhibition. It was then lost sight of for many years until it turned up at the Fair of the Iron Horse, at Halethorpe, in 1927. Shortly afterwards, on June 21st. 1928, the Baltimore and Ohio Railroad presented it to the province of Nova Scotia and since then it has been kept in the Union Station at Halifax.

"Vulcan"

The next engine on the line was the "Vulcan", a 2-4-0 type tender engine, with cylinders 15x24, 60" driving wheels and 36" leading wheels. It had outside horizontal cylinders and a long boiler with a haystack or Gothic firebox. Most accounts state that it came out to Nova Scotia in 1853 but the builder's plate stated:

VULCAN
built by
R. B. Longridge & Co.
Bedlington Engine Works,
1848

Perhaps the engine was second hand and five years old when it arrived in Nova Scotia. It was retired about 1885 and scrapped shortly afterwards.

"Albion" and "Pictou"

The locomotives "Albion" and "Pictou" followed in 1854 and the "Albion" is still in existence; it was at Chicago in 1893, at Halethorpe in 1927 and is now kept at the Nova Scotia Exhibition grounds at Halifax.

The "Albion" is the subject of a very curious controversy; in Nova Scotia it is quite generally known that the "Albion" and "Pictou" were built in 1854 by Rayne and Burn, of Newcastle, but, in other parts of the world, much ink has been spilled in an effort to prove that the "Albion" was built by Hackworth in 1839. To anyone who is familiar with Hackworth's practice, it is obvious that he had nothing whatever to do with this engine as it is quite unlike anything he ever built, especially in certain important details such as the type of boiler, wheels, cylinders and valve gear. The most ridiculous argument is one advanced by the Baltimore and Ohio Railroad, that after the Hackworth works, at New Shildon, were closed, a name plate bearing the name "Albion" was found, which evidently proved to the finder's satisfaction that the Hackworth had once built an engine of that name for the Albion Mines Railway. As for the Rayne and Burn plate, Mr. Cromwell, of the B & O., tried to dismiss it as evidence of a repair job or a replacement of the part of the frame to which it was attached but that is most

unlikely as the cost of shipping the locomotive to England and back would be almost more than it was worth and there would be no need of sending over to England for so simple a piece as a boiler brace. The shops of the G. M. A. were equipped to handle any repairs and, indeed, a few years later a complete locomotive was built. An examination of the corresponding brace on the opposite side of the engine shows that at one time there were two builders' plates, one on each side. Enquiries made in England indicate that these were probably the only locomotives ever made by Rayne and Burn but they made mining machinery and tools and the name was well known at Albion Mines.

These two engines were 0-6-0 type, with 15x24 cylinders, 48" wheels and weighed about 40,000 pounds. They had wood and wrought iron sand-wich type frames, multi-tubular boilers, wheels individually sprung and steeply inclined cylinders. The design was antiquated, even for 1854, being really a throw-back to the "Invicta" of the Canterbury and Whitstable Railway, built by Stephenson in 1850, but it was also almost identically the same as the "Picnear" of the St. Andrews and Quebec Railway, built by Stephenson in 1850. Then too it must be remembered that the "Albion" and "Pictou" were not road engines but simply shunters; they were built for use in a remote spot where fuel was cheap and plentiful and simplicity, durability and reliability were much more important than speed or efficiency and probably they were so designed that they would never need any major overhauling. Perhaps too the builders' lack of experience and the necessity of paying royalties for the use of a more modern design had something to do with it. These two engines were retired in 1886 and evidently the "Pictou" was broken up soon after but the "Albion" was preserved.

"John Bridge" and "Sir George Elliott"

The next locomotive was the "John Bridge"; it was delivered to the Albion Mines Railway in the spring of 1872 but remained there only a couple of months. In that year the General Mining Association sold all its properties in Pictou County to the Halifax Coal Company but the "John Bridge" was not included in the sale and it was then shipped to the Association's railway at Sydney Mines, Cape Breton.

In 1880 the Halifax Company ordered the "Sir George Elliott" from Black and Hawthorne, of Gateshead. It was the first engine on the line to have a cab, it was a 0-6-0 saddle tank type, with 15x24 cylinders and 48" wheels. It was sold later on to the Maritime Bridge Company, of New Glasgow, and scrapped about 1925.

The present motive power consists of a small 2-4-2 type saddle tank engine built by Baldwins and a small 0-6-0 shunter probably bought second hand from the Intercolonial Railway.

Memoranda:

Principal Sources of Information, "Railroads of the General Mining Association"

Books, Newspapers, and Printed Material:

1. A History of the County of Pictou, Rev. George Patterson, 1877
2. One of the Oldest Railroads in Canada, H. S. Poole, 1893
3. Timothy Hackworth and the Locomotive, Robert Young, 1923
4. Foreign Railroads of the World, D. McArthur, 1884
5. Markland, Robert R. McLeod, 1903
6. The Coal and Iron Industries of Nova Scotia, C. Ochiltree Macdonald, 1909
7. "Colonial Patriot" and "Mechanic and Farmer" (Newspapers),
Eastern Chronical Office, New Glasgow
8. "Acadian Recorder" and "The Novascotian" (newspapers), Provincial
Archives, Halifax.
9. Various Government Reports.

Oral Information:

1. James Calder, Lourdes
2. Don F. Fraser, New Glasgow
3. John C. Fraser, Fox Brook
4. W. H. Graham, Sydney
5. Charles W. Lunn, Truro
6. D. H. McLean, Stellarton
7. Edward B. Mitchell, Stellarton
8. Judæe George Patterson, New Glasgow
9. J. J. Robertson, Sydney Mines
10. Charles Ross, Riverton.

NEWS OF THE ASSOCIATION

Resumés of the Minutes

N.B : Unless otherwise stated, it is to be understood that the meetings were held in the Chateau de Ramezay with the President acting as chairman.

Meeting of September 14th: This was the first meeting of the 1938-9 season. A new order of business was introduced by which the lecture was presented early in the meeting and routine business held over to the end. Among the donations to the Association was a number of old-time railway lanterns, the gift of Mr. C.L. Terroux. Mr. Richard Pennyoyer of London, England, was elected an out-of-town member. The entertainment of the evening was provided by a group of moving pictures, presented by courtesy of the Passenger Departments of the Canadian National and Canadian Pacific Railways.

Meeting of October 12th: The Secretary presented a report on a second inspection made of the hull of the S.S. "Vermont". Mr. R.J. Ryland of San Jose, Calif., was elected an out-of-town member. A most interesting gift was received from the management of Quebec Central Railway, number plates of locomotives, Nos. 24 and 26; a headlight; mechanism of a stub switch; a locomotive-makers plate; etc. The lecture of the evening, "Some Facts about Railway Signalling", was delivered by Mr. A.J. Kidd, representing Mr. E.S. Taylor, Signal Engineer, Canadian Pacific Railway. Mr. E.S. Becksted was present to illustrate it with lantern slides.

Meeting of November 9th: The Secretary read a report on the Glen Yard Inspection Trip. Among the numerous gifts received were two volumes of Poor's Manual, dated 1877 and 1900, the donation of Mr. McMahon. Mr. A. de Champlain of Ottawa was elected an out-of-town member. Mr. Loye, the President, presented in the form of a paper the evidence which goes to show that the S.S. "Vermont" was the first steamboat in Canadian waters and that its hull now rests in the Richelieu River off Cantic, Que.

Excursions

Sherbrooke Excursion of Sept. 11th. Nine members and five guests traveled via C.N.R. to Sherbrooke, Que., to inspect the shops of the Quebec Central Railway at Newington. The inspection of the "Boneyard", roundhouse, and the shops lasted from 2.30 to 4 p.m. and was made under the guidance of Mr. Thomas Mc Connell, assistant foreman. It was well publicised in the local newspapers.

Inspection of Glen Yard Signal Tower, October 15th. Under the guidance of Mr. E.S. Becksted, Signal Supervisor, Quebec District, the equipment of the signal tower of the C.P.R. at Westmount, Que. was examined by a party of eleven members and nine guests. It was thus possible to watch both main line and to see the outdoor switch and signal mechanisms.

ANNOUNCEMENT The Annual Meeting of the Association with election of officers will be held in the Chateau de Ramezay on Wednesday Evening, January 11th, 1939.

The Executive of the Association
and The Editorial Committee of the Bulletin

Wish All the Members and Their Friends

A MERRY CHRISTMAS AND A HAPPY NEW YEAR