

Just A. Ferronut's Railway Archaeology

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I had planned to cover some of the railways around Halifax, Nova Scotia this month, however, the confusion arising around my moving back to Toronto, has caused me to delay this for a couple of months. So this will be a chance to bore you with a few small stories that keep building up and to add a little more to some of our recent columns.

Some Added Details

In our January-February and April Columns we spoke of some of the various train-ferry crossings along the St. Lawrence River. Sandy Worthen has sent along a few extra tidbits. The "S. S. Leonard", the design of which was "different" by North American standards, had been delegated to the British Admiralty. They based their design on a similar ship constructed for an Indian railway for use across the estuary of a large river in that subcontinent. While I am going to save Sandy's material comparing some differences in the operations of various train-ferries, he has reminded me of three other up-river crossings that I should have included. So with help from Dana Ashdown's book, *Railway Steamships of Ontario*, some details including a glance at the railways accessing them.

The earliest of these up-river car-ferry was operated between Cape Vincent, New York and Kingston, Ontario. I reference Cape Vincent first, since the rail cars from the American side never did get onto a Canadian railway. The Watertown & Rome Railroad had been chartered in the state of New York in 1832. However, nothing happened until 1848, when Watertown demanded action. Construction started in 1849, but it was September 1851 before the first train reached Watertown over the seventy-two mile route from Rome, New York. The spring of 1852 saw rail operation start into the riverside community of Cape Vincent, twenty-five miles north-west of Watertown.

Across the St. Lawrence, John Counter, a Kingston businessman, led a group that foresaw the advantages that this American railroad could provide in accessing the seaports of the eastern United States. The first railway incorporated to take advantage of the then proposed American railroad was the Wolfe Island, Kingston and Toronto Rail-road Company that was chartered in 1846. In 1851, the Wolfe Island Rail-way and Canal Company was chartered. Railway bridges were first proposed, but plans were changed to use ferries with a canal across Wolfe Island. This would provide a form of shelter for ferries crossing between Kingston and Cape Vincent. Construction of the canal started in 1853, but bankruptcy overtook the operation before the canal was finished.

John Counter, besides being a promoter of the river crossing, was also the mayor of Kingston and owner of the Kingston Marine Railway Company. A company, called John Counter & Company was formed to own and operate the ferry. They arranged to build a ferry called *John Counter* at the Kingston Marine Railway Company. The *John Counter* started

service on December 1, 1853.

Things looked good for this ferry service, except for two small items. The main one was the fact that it would late 1856, before the Grand Trunk Railway's line would be opened through Kingston. The other which was a problem that occurred in numerous places in the early years, was the difference in railway gauges between Canada and the United States. To compensate for these short comings, the American rail cars were left on the ferry when they reached Kingston. They were unloaded and reloaded while they remained on the *John Counter* at the dock.

The lack of the Wolfe Island Canal meant that the *John Counter* took much longer to make its river crossing than planned. This and the lack of Canadian rails, reduced revenues, and this caused the Company's creditors to have the Sheriff on June 24, 1856 issue a Notice of Sale. The sale was set for September 27, but for some reason it was rescheduled and finally took place on December 20, 1856. The *John Counter* was sold to Nelson McLaren Brockus of Montreal and was scrapped in 1857. If you had a suspicious mind, you might wonder, noting the dates of events during 1856, if the G.T.R. may have encouraged the creditors to foreclose, especially since the Wolf Island Canal was finished in 1857.

The data and dates on the Watertown & Rome Railroad are from *MEN AND IRON, The History of the New York Central*, by Edward Hungerford, again courtesy of Sandy.

Sixty-five miles down the St. Lawrence, the communities of Prescott, Ontario and Ogdensburg, New York face each other across this waterway. These communities were joined by a car-ferry for about 107 years.

The 1850s saw the Grand Trunk Railway of Canada under the name Montreal & Kingston Railway parallel the St. Lawrence River through Prescott. At the same time the Bytown and Prescott Rail-way was constructing their line between their namesakes. In fact their line from what is now Ottawa to Prescott was opened in 1854, ahead of the G.T.R. The G.T.R. crosses over the Bytown & Prescott by a grade separation on the outskirts of Prescott. The mention of this structure always remind me of a discussion that I was involved in a number of years ago over seniority at this crossing. While indications were that the land deeds may not support the same position, William McNab, a senior engineer of the G.T.R. had with a hand-written memo accepted being junior. The disclosure of this memo caused a number of Canadian National Officers at the time to have long faces, since it meant they would have to pay for repairs to this decaying grade separation.

The Bytown & Prescott Rail-way, since their line reached docks on the St. Lawrence, looked at the American railways, and constructed their line to standard gauge. The Grand Trunk's line was on the inland side of Prescott, and it was constructed to the 5' 6" broad or provincial gauge.

While perhaps not needed, but lets capsulize a few points to remind us of the 1850 setting along this part of the St. Lawrence Valley. Prescott and Ogdensburg are just up-stream from what at the time were the St. Lawrence Rapids, since covered by the St. Lawrence Seaway project. It should also be remembered that at the time, there were no railway bridges over the St. Lawrence, or rail line to the Maritime provinces, so the ports of Portland, Boston and New York were all anxious contenders to handle as much inland and Canadian traffic as possible with Europe.

The first train from Rouses Point, New York, arrived at Ogdensburg on September 20, 1850. This line, just south of, and paralleling the Canada – US boundary, was constructed by the Northern New York Railroad Company. Without getting too far into the details, this line was supported by the City of Boston and the “Central Vermont Railway system,” and opposed by the City of New York.

Since the Northern New York Railroad was opened before the G.T.R. and the Great Western Railway, it was able to attract western traffic moving through the Great Lakes. The opening of the Great Western and its connections with the railways that were forming the New York Central, cut into the N.N.Y.R.R.’s traffic, and of course the extended route of the G.T.R. took its share. Also, because of the poor access to the Ottawa lumber mills, the Bytown and Prescott Rail-way didn’t generate the amount of south-bound lumber traffic expected for shipment to the United States.

Traffic during the 1850’s was handled across the St. Lawrence by steam ferries that were not capable of carrying rail cars.

In 1855, the recently opened Bytown and Prescott Rail-way on the brink of financial failure was reorganized under the name Ottawa and Prescott Railway with power to lease or grant running rights on its line. The end of the Crimean War in 1856 led to a major economic recession that applied further pressure on business for about the next three years.

The Northern New York Railroad struggled through until 1864 when its financial woes drove it to reorganization as the Ogdensburg and Lake Champlain Railroad Company.

However, as early as 1856 the G.T.R. provided some financial help to the Ottawa and Prescott Railway. By about 1860, the Grand Trunk was eyeing the Northern New York Railroad and its route to increase its share of traffic between Europe and Canada West. So in the fall of 1862, the Northern New York Railroad and the G.T.R. reached an agreement to handle rail cars from Prescott through Ogdensburg.

Since the Grand Trunk had considerable influence over the Ottawa and Prescott Railway, it quickly obtained concurrence to establish running rights over the O&P to their docks in Prescott. As mentioned these two Canadian roads had different gauges, so a third rail was laid along the O&P from the G.T.R. to the docks. As these arrangements were being finalized, a contract was let to Harrison C. Pearson of Ogdensburg for construction of a 244-ton, two track train-ferry.

The summer of 1863 saw this new car-ferry, christened the *St. Lawrence*, finished and ready for service. Her wooden hull was sheathed in iron that permitted it to operate most of the year. Her two broad-gauge tracks could carry six loaded freight cars. As Dana points out in his book, the tracks on the *St. Lawrence* may have been changed to standard gauge, since by 1871 a “change gauge car pit” had been built at Prescott

Junction.

By the time that the *St. Lawrence* started service, Ogdensburg had its second rail line. A branch of the Rome, Watertown & Ogdensburg Railroad provided a connection to the southwest and eventual connection with the New York Central Railroad.

By 1868, the Ottawa and Prescott had gone through more financial woes and had been again reorganized, this time as the St. Lawrence and Ottawa Railway Company. In 1870, the Central Vermont acquired the Ogdensburg and Lake Champlain Railroad (formerly the Northern New York Railroad to Rouses Point).

Three years later, in 1873, after ten years of service, the hull of the *St. Lawrence* was found badly rotted. The decision of the railways was to get a private operator to take over this ferry-service. With this decision, the *St. Lawrence* was withdrawn and abandoned.

The private rail-ferry service, operated by Isaac D. Purkis, a coal dealer from Prescott, started in 1874 after a gap of several months with no service. This service was started using the 141-ton, single track ferry named the *Transit*. Since the G.T.R. has converted to standard gauge, the *Transit* came from its builders, the Robert Davis and Z. W. Right’s shipyard, Clayton, New York with its three-car track with that gauge.

While Purkis expanded his non-rail steamship operation, his next car-ferry was the *Jumbo*, a 150-ton barge, that like the *Transit*, was capable of carrying three rail cars. The *Jumbo*, purchased in 1880, was normally moved across the St. Lawrence by one of Purkis’ other ships.

During this period the rail scene was continuing to change around these ports. In Ogdensburg, a third rail line, the Utica & Black River Railroad had arrived in 1878. This line would be absorbed by the Rome, Waterdown & Ogdensburg Railroad in 1886, and the R,W&O was taken over by the New York Central System in 1891.

At Prescott, the St. Lawrence and Ottawa Railway Company was again in the hands of the receivers by 1884, and under a lease dated September 26, 1884, the Canadian Pacific Railway took control for 999 years.

Meanwhile, a few miles up-river, at Brockville, the success of Purkis’ marine operation was being watched by Captain David H. Lyon. Brockville, like Prescott had two railways. While the Grand Trunk paralleled the St. Lawrence River, the Brockville & Ottawa Railway was constructed to join the Ottawa River Valley with the waterfront at Brockville. After a struggle of about 7 years, that included the construction of a tunnel under the G.T.R and Brockville’s downtown, the B&O started passenger train operation on its broad gauge line into Brockville from Perth, Ontario in January, 1859. The B&O soon started working with the Central Canada Railway on extension of the rail line up the Ottawa valley. This venture ended with a merger in 1878 under the name of the Central Canada Railway.

Across from Brockville, Morristown, New York, was one of the riverside communities that received rail service when the Utica & Black River Railroad constructed its Ogdensburg line.

Within this setting, Captain Lyon considered the time was right to get into shipping. In late 1876 he had the steamer *William Armstrong* launched in Ogdensburg at A & J. W. Wood’s shipyard. The *William Armstrong* started life as a passenger steamer.

The Central Canada Railway remained broad gauge into Brockville until it was amalgamated with the Canadian Pacific Railway effective June 9, 1881. The C.P.R. regauged the line and Captain Lyon then foresaw enough lumber and coal traffic moving across the St. Lawrence, so that in 1882 he converted the *William Armstrong* into a car-ferry with a 3 car capacity.

However, the route through Brockville was sort of a one day wonder. Part of this was probably due to the C.P.R.'s growing control on Canadian traffic at both Brockville and Prescott and partly due to the importance effect of the grain elevator's at Ogdensburg, that had been initiated by the Northern New York Railroad had on traffic.

This decline in traffic at Brockville enabled Captain Lyon to make his car-ferry available to Purkis at Prescott to move any back-log of traffic there. The reverse also occurred if traffic backed up at Brockville. This cooperation continued until 1888, when Captain Lyon incorporated the Canadian Pacific Car & Passenger Transfer Company that amalgamated the two ferry services.

The nine car capacity of the above three car-ferries, owned by the Captain Lyon's company continued to handle traffic until 1890, when on April 14, the *South Eastern*, a 5-car ferry was purchased. This ferry had been built in 1881 for operation across the St. Lawrence at Montreal, and was included in our discussion on the La Compagnie du Traverse de Chemin de fer d'Hochelaga, in our April Column.

In 1896, Captain Lyon completed the merger of the two ferry operations by shifting his remaining operations from Brockville to Prescott. The Canadian Pacific Car & Passenger Transfer Company continued through the 1890s with its car-ferry fleet that had a total capacity of 13 rail cars, although the *South Eastern*, as mentioned in April, burned in June 1897, but was soon rebuilt as the *International*. During this time the majority of rail traffic was being exchanged between the C.P.R. and the N.Y.C.

The cooperation between the Central Vermont and the Canada Atlantic, especially after the February 19, 1890 opening of Canada Atlantic's Coteau bridge provided an easier alternative to the use of the Prescott ferry service. The Central Vermont's financial problems of the 1890s that resulted in the Grand Trunk acquiring a substantial financial foothold in the C.V. had to further help this shift.

The Canadian Pacific Car & Passenger Transfer Company retired the ferry, *Transit* in 1901. The barge *Jumbo*, along with the *William Armstrong* and *International*, remained in service. In 1906, Captain Lyon ordered a new train-ferry. It was a steel-hulled ship with three 6 car tracks on it, but because of its design it could only carry either a string of up to 6 cars on its centre track, or up to 12 on its two outer tracks, but clearance was too tight to use all three tracks at once. The 1,658 ton ship built by the Polson Iron Works in Toronto, was launched in December 1907 was called the *Charles Lyon*. This new train-ferry went into use in the spring of 1908, and since it had a larger capacity than the three ships previously in service, the older smaller ships were soon taken out of service. In 1909 the *International* was sold and served as a sand barge until it was scrapped in 1914. The *William Armstrong* was also sold and was renamed the *Mons Meg*, and was finally abandoned in 1938. The barge *Jumbo* was kept in reserve for any peaks in traffic until the 1920s.

Captain Lyons continued the operation of The Canadian Pacific Car & Passenger Transfer Company until his death in 1929, when the company was sold to the Canadian Pacific Railway. Canadian Pacific convinced the New York Central to purchase 50% of the ferry company, and to acquire a new tug and a car float. A 320 ton tug called the *Prescotont* was built by the Davie Shipbuilding, Lauzon, Quebec, while the 1,405 ton steel car float called *Ogdensburg* was built at the American Shipbuilding Company, at Lorain, Ohio. This barge could carry 18 rail cars, and the new pair went into operation on November 2, 1930. The *Charles Lyon* was kept to help in busy period until 1935, when it was taken out of service. The *Charles Lyon* spent the 4 years between 1937 and her 1941 scrapping as a barge.

The tug and barge rail-car service continued until the ferry dock at Ogdensburg burned on September 25, 1970. It was decided not to reconstruct the facility, and, so all rail-car ferry operation across the St. Lawrence ceased until May 27, 1978. That was when Cogema started their service, that started our look at train-ferries across the St. Lawrence back in January.

The *Prescotont* and *Ogdensburg* were sold to a Detroit barge operator in January, 1972.

Stations

Back in April I mentioned a couple of stations along the now abandoned Temiscouata Railway. Dave Hanson has sent along some notes that hopefully clarifies the question over whether these stations are original or not.

Our conclusion is that at Cabano, the station is the original station restored. As mentioned, the restoration has included clap-board style siding and the placement of trim around the doors and windows of a style common in the late 1800s.

Again based on Dave's notes, and site observations, the conclusion is that the station-like building at Dégelé is a replica. Dave also pointed out that in the old timetables this station was listed as Ste. Rose. The full name for this community is Ste-Rose-du-Dégelé. The Dégelé portion of this community is named after rapids in the vicinity that do not freeze.

While at present I haven't obtained much detail, but the CNR roundhouse at Charney, Quebec has been declared a federal heritage building. This designation is apparently under the Historical Board designation, not under the Heritage Stations Protection Act.

Farnham

On a recent outing, an east bound St. Lawrence & Hudson (C.P.R.) train caused me to travel to Farnham, QC. In passing, I noted a shiny CP locomotive near the Farnham station. A closer inspection revealed that it and a caboose are now on static display. CP No. 4723, a MLW M-636, and a caboose with No. CP 472396. While some of our equipment specialists can confirm it, but this number sounds a bit phoney! The first four digits are the same as the locomotive, and the last two being the year of its placement. Anyway this equipment is placed on a short section of track north-east of the station, painted in C.P. colours with their multi-mark logo. The cupola of the caboose has the words "Cyclo Parc" and the town's logo, which to me is a stylized railway signals, on it. It would appear that the caboose is to become an information centre for some of the cycling trails that have taken over some of the abandoned rail lines radiating from Farnham.

Locomotives

Finally, a little more detail on the British locomotives that arrived in Canada aboard the *H.M.S Erebus* and *Terror*, with the 1845 Franklin expedition, as we mentioned in our April column. Again this information is thanks to Dana Ashdown.

Both of these ships were just over a 100 feet long, and with a beam (width) just under 30 feet. It was decided that as part of the modifications for the expedition, the two ships were to be fitted with auxiliary screw propellers, steam heating for the mess decks using a small boiler towards the bow and a few other minor changes.

To avoid royalty payments to screw propeller patent holders, the Admiralty opted for its own design. Early in 1845 Sir Edward Parry, Comptroller of the Steam Department, sent for the draughts of the two vessels "to enable him to judge of the practicality of fitting small auxiliary engines and screw propellers;" and having satisfied the Admiralty on the benefits, a system was devised in co-operation with Oliver Lang, then Master Shipwright at Woolwich Dockyard, which was to make use of second hand railway locomotives. The firm of Messrs. Maudslay Sons & Field of Lambeth (well established machinery suppliers to the navy) was contracted for the installations and it was evidently they who actually purchased the engines: one from the London & Birmingham Railway for the *Terror*; and the other from the London & Greenwich Railway for the *Erebus*.

R. H. G. Thomas, in *London's First Railway, The London & Greenwich* (B. T. Batsford Limited, London, 1972 & 1986) relates that the London & Greenwich engine was the No. 4 *Twells* delivered in December 1836, one of four 2-2-0 Planet-type locomotives supplied by Messrs. William Marshall & Sons of Tipton, Staffordshire. The Number 4 featured 5 feet drivers 3 feet leading wheels, inside connected cylinders 11 inches by 18 inches and weighed 92 long tons.

Maudslay rebuilt the locomotives and saw to their installation, although it is unclear as to whether the drivers were replaced by plain cranks or retained as flywheels. After the first trials were held on the Thames in early May 1845, some adjustments were made but they were ready by mid-month. Thomas notes the 24 May *London Illustrated News*' references to the *Erebus*: "The screw propeller is worked by an engine of 25 horse power, which formerly ran upon the Greenwich Railway."

He also quotes from a letter from Lieutenant John Irving of the *Terror*, penned 16 May, 1845 to his sister, three days prior to their departure:

"..... We tried our screws and went **four** miles an hour. Our engine once ran somewhat faster on the Birmingham line. It is placed athwart ships in our afterhold, and merely has its axle extended aft, so as to become the shaft of the screw. It has a funnel the same size and height as it had on the railway, and make the same dreadful puffings and screamings, and will astonish the Esquimaux not a little. We can carry 12 days coal for it; but it will never be used when we can make any progress at all by other means."

An engineer, three stokers and a copy of Gregory's book on locomotives were assigned to each ship. Thomas also notes that while it was not usual to reuse locomotives as marine engines, there were at least a couple of cases of such in England prior to 1845: "One from the Wylam Waggonway was used to drive a tug on the Tyne in 1822, and in 1842 a steamboat *The Locomotive No 1*, ran between Adelphi Pier and Greenwich, fitted with a locomotive engine removed from its wheels to drive the paddles.

As auxiliary screw ships, the *Erebus* and *Terror* relied chiefly upon sail for their propulsion, only resorting to the engines in calm weather or confined waters like rivers and harbours. The propellers were so designed that they could be raised vertically from the water through an overhead well or shaft when not required, thereby reducing underwater drag when under sail alone.

Dana closed by pointing out that he didn't have any details on the London & Birmingham engine, but it probably was similar to the London & Greenwich's. And while these locomotives may be safe from acquisitive rail fans, and if they have survived would be the oldest surviving locomotives in Canada, provided that is, that the iron-eating bacteria that they say are having a nice time devouring the *Titanic* hasn't found them.