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# THE ROAD TO THE SEA

An account of the circumstances surrounding the construction of the Saint Lawrence & Atlantic Railway and the Atlantic & Saint Lawrence Railway, between Montreal, C.E., and Portland, Me.

# by Robert R. Brown

he railway from Portland, Maine, to Montreal, now operated by Canadian National Railways, and its subsidiary, the Grand Trunk Railway, was perhaps the first great international railway originally planned as such. Its course lay across one province and three states, in two countries, and its construction required four charters. Nonetheless, it was a single, continuous railway line. Despite the fact that a rival route was completed at an earlier date, the Portland line was of such great importance that it seems desirable to examine, in some detail the various and conflicting influences which brought it into being.

The principal factor influencing the construction of this railway was a desire to make Portland the principal winter port of Canada. Undoubtedly, another port and an alternative route would have been found had it not been for the influence of several strong-willed promoters.

### THE SUTTLEMENT OF BRITISH NORTH AMERICA

During the first half of the nineteenth century, the name "Canada" was restricted to a much smaller area than now. The term embraced the valleys of the Saint Lawrence, Ottawa and Richelieu rivers, the north shore of Lake Ontario and the peninsula lying between Lake Erie and Lake Huron. The eastern part, between Montreal and the Gulf had been settled by the French, mostly between 1660 and 1745, followed after 1763 by a considerable number of English and American merchants who were interested in the fur trade. Following the American Revolutionary War, some 60,000 United Empire Loyalists migrated to the British North American Provinces. The great majority of them had been wealthy and prominent farmers, merch ants and professional men and their families from New England and New York, New Jersey and Pennsylvania. To these people, the ancient traditions and loyalties were more important than the confiscation of their property and banishment, often to a pioneer life in a northern wilderness. However, they re-established the selves quickly and they and their descendants proved to be Uncle Sam's greatest, though unintentional, contribution to the development of Canada. Following the Napoleonic Wars, large numbers of settlers emigrated from England and Scotland and, a little later, from Ireland. These six ethnic groups form the backbone of Canadian civilization. The "melting pot" idea never found favour in Canada, and the descendants of these groups still retain their diverse individualities and have great pride in their origins. This has advantages, but it also has disadvantages.

The "habitants" or French-speaking farmers of Lower Canada, were to a great extent self-sufficient. Practically everything they needed in the way of food, clothing, equipment and furniture was produced on their own farms or in their own villages. However, they contributed very little to the general prosperity of the country. This economic and social isolation was self-imposed, principally because they were suffering from a sort of inferiority complex as they felt that they had been deserted by France, and they were not quite willing to be adopted by England. Actually, they were treated exceptionally well by the British Government. The British people, especially the Scots and the Irish have always been ready and willing to establish friendly relations with people of other races and other languages but in Lower Canada, they soon tired of constant rebuffs from their French neighbours and the breach gradually widened. Happily, in recent years, the "Bonne Entente" has developed.

The English-speaking immigrants settled mostly in Upper Canada and in the southwestern part of Lower Canada, known inaccurately as the "Eastern Townships". From earliest times, they have been interested in cash crops and consequently a very large proportion of the import trade and a considerable part of the export trade of the country depended on their prosperity, and their prosperity, in turn unfortunately depended on circumstances over which they had no control -- a severe climate, difficult and very costly transportation, and tariff barriers in other countries. Prior to the opening of the canals, the cost of transportation between Montreal and Lake Ontario alone, usually exceeded the value of the merchandise.

#### THE END OF INLAND WATER SUPREMACY

The beginning of the fifth decade of the Nineteenth Century marked the end of a period of political turmoil and commercial depression. Responsible democratic government was firmly established, and an economy based on the products of the farms and forests, gave a moderate if not spectacular prosperity. By 1847, an extensive system of canals had been completed, permitting steamboats of considerable size to navigate from Lake Superior to the sea, giving great impetus to trade. The construction of these artificial waterways was only accomplished at tremendous cost; more than two hundred million dollars had been invested, and amounted, in effect, to a debt of more than \$100.00 for every man, woman and child in the Province of Canada, which had a population of a little less than 2,000,000, in the year 1840. During the four or five months of winter, the lakes and rivers were sealed with ice and all navigation For years, especially in Lower Canada, this had not been of much consequence but with a rapidly expanding commerce, the

annual winter tieup created a serious bottleneck. Canada was ripe for a change in its transportation setup and by 1845 it had become apparent that a winter port served by a trunk railway was an imperative necessity.

The first American Drawback Act in 1845 allowed goods destined for Canada to cross the United States free of duty, and the second Act in 1847 permitted Canadian produce to be exported in bond through the United States. This was helpful to the farmers of Upper Canada but as most of the freight would be routed by the Erie Canal and American railroads, it was thought, not without reason, that it would be ruinous to the shipping in Montreal and Quebec.

Matters were further complicated by the repeal of the British Corn Laws in 1846. Wheat and flour were always among the most imp-The Corn Laws of 1815 imposed high ortant exports from Canada. duties on such imports, nominally to protect the British farmers but really to raise funds to pay for the recent wars with France and the United States. The imposition of these statutory restrictionsvirtually closed the British market to Canadian exports until 1825 when the duty on Canadian wheat was reduced to five shillings a quarter; in 1842, it was further lowered to a nominal duty of one These tariff concessions and the later reduced cost of shilling. inland navigation were of great benefit to the Canadian farmers but they were offset by the high trans-Atlantic freight rates. 1847, the Navigation Act permitted only British ships to engage in the Canadian trade and since most of the ships trading between Canada and Great Britain and most of the steamboats on the Saint Lawrence were owned in Montreal and Quebec, the resulting tight little transportation monopoly was not so popular among the farmers of Upper Canada as it was among the merchants of Lower Canada.

Navigation of the lower Jaint Lawrence River was then very difficult and dangerous for sailing vessels and usually they had to be towed up the river from a point off the mouth of the Jaguenay River to Montreal, a distance of about 300 miles. A large number of paddle-wheel towboats were engaged in this service and their charges were fantastic. As an example, a sailing vessel 28 feet breadth of beam and drawing 15 feet, was charged £69/6/8 upward to Montreal and half rate downward, or a total of about \$500 for the round trip. Some of the larger ship owners had their own tugs on the river but most of the ships were at the mercy of the towboat operators.

The spending of large sums of public money on the canals came to an end in 1848, and combined with other circumstances brought about a severe commercial depression in 1849. So much so that a small group of prominent Montrealers — and it is perhaps significant that all of them were connected with shipping and forwarding — signed a manifesto suggesting political union with the United States of America. The idea was so unpopular and aroused such a storm of protest that they speedily recanted. Fortunately, the depression was of short duration and undoubtedly the beginning of railway construction was a contributing factor. The mere threat of this new competition brought about a reduction in freight rates by water and

thus, with lowered transportation costs, the Canadian wheat growers were able to retain their former position in the British market in spite of the loss of the tariff concessions. Thus it will be seen that the various factors influencing Canadian trade were fluctuating continuously between good and bad and only a cheap, reliable and uninterrupted form of transportation would permit the country to develop. That form was the railway.

#### CONTEMPORARY CONDITIONS IN THE UNITED STATES

Turning now to the south of the border, we learn about the sad state of New England. Its overseas shipping had greatly diminished and its people, by the thousands, were leaving its hilly and stony farms and seeking new homes in the West. Its cities had not yet begun to enjoy the great prosperity due to the tremendous development of manufacturing which took place in the years following. New York, Philadelphia and Baltimore were building railroads to tap the resources of the great west and were benefitting greatly thereby; as a consequence, Boston and other New England cities began to dream about busy railroads which would bring to them all the trade of the Great Lakes, the Ohio valley and beyond — a delusion that was to continue for many a day.

Down east, in Bangor, Maine, there was a young lawyer named John Alfred Poor, a big man, mentally and physically, who dearly loved his Pine Tree State. He had journeyed to Boston to witness the opening of the Boston and Worcester Railroad and the sight of a locomotive, on that occasion made such an impression on his mind that he was a railway enthusiast for the rest of his life. The idea of a line from the Maine coast to Canada was not new. The Belfast & Quebec Rail Road was chartered as early as 1836, but the Panic of 1837 put a stop to the project and there was little or no support for it in Canada. Other routes were planned, or, like Topsy --- "just growed" --- and much to Poor's chagrin, the first international through train operated over a rival route, from Boston to Montreal. The opening dates of the various components of this route are as follows:

Boston & Lowell RR	Boston	Lowell	Jun.26,1835	
Nashua & Lowell RR	Lowell	Nashua	Dec.23,1838	
Concord RR	Nashua	Concord	Sep.7, 1842	
Northern RR	Concord	West Lebanon		
Vermont Central RR	White River Jct.	Rouses Point	Jan.1 ,1851	
Champlain & St.Law. RR	Rouses Point	St. Johns	Aug. 26, 1851	
11 11	St. Johns	Laprairie	Jul.21,1836	

It is not certain when Poor first conceived the idea of a railway from the Maine coast to the Saint Lawrence river, but it must have been as early as 1840. For several years he explored the back country, mostly on foot, and, although not a surveyor, he carefully examined the various routes. By 1843, he was ready to act and he publicly announced his plans. With the then little city of Portland as a centre, he proposed, first, to build a railway from Portland to Montreal, and later, an extension westward from Montreal to Chicago and another eastward from Portland through Bangor and New

Brunswick to Halifax, in Nova Scotia, and a branch still further eastward to the Strait of Canso. The fact that all the lines he proposed were built eventually, is evidence of his breadth of vision. Poor next engaged an engineer, James Hall, to survey the proposed line from Portland to Montreal and Hall estimated that it would cost \$2,225,000 to build to the Canadian border. However, all this activity in Portland caused Bostonians to sit up and take rotice and soon the two cities were embroiled in a very acrimonious dispute. Boston hastily organized a rival project -- the Boston, Concord and Montreal Railroad, chartered in 1844, and set about persuading the supposedly naïve Canadians that Boston would be a retter winter port than Portland, even going to the extent of predicting dire consequences if Boston was not chosen. Actually, Canadians did not care very much which city won, provided the port was convenient and ice-free and would be available soon. It seemed for a time that Boston would be selected principally because the railway to that city was already partly built.

#### THE KOAD TO THE SEA

; In 'Canada, Poor had an enthusiastic collaborator in Alexander Tilloch Galt, the young Scottish commissioner of the British American Land Company. This Company, organized in 1833 to colonize the "Eastern Townships" of the Province of Quebec, acquired 251,336 acres of Crown land in Sherbrooke, Stanstead and Shefford counties; also an unsurveyed tract known as the St. Francis Territory, supposed to contain 596,325 acres. By subsequent purchases of Clergy Reserves and land from individuals, nearly 400,000 acres more were added to its domain. The area was served by the Craig Road, from Quebec to Richmond, and the Company built another road from Sherbrooke to Port St. Francis on the Saiht Lawrence river nearly opposite Trois Rivieres. In spite of this, transportation was very unsatisfactory and settlement was slow. Galt had his headquarters in Sherbrooke, now a very busy and prosperous city but then a little village, and he soon realized that a railway was necessary if the land company was to prosper. He knew also that Poor's project would serve Sherbrooke and most of the Company's best land but that the Boston, Concord and Montreal project would pass far to the west. Galt organized a meeting in Sherbrooke in 1843 and a provisional committee was appointed to promote the Portland railway. general election was to be held the following year, so Galt journeyed to Kingston, then the capital of Canada, and there he was told -- "we support those who support us". He returned home, conducted a successful campaign, and in the ensuing election, the Eastern Townships elected a solid bloc of Conservatives, which practically guaranteed the support of the Government in the selection of Portland as the terminus of Canada's road to the sea.

In February 1845, representatives of the Boston, Concord and Montreal R.R. went to Montreal to confer with the Board of Trade, which was taking a very active interest in the promotion of a railway to the Atlantic coast. The Boston people, hoped, if possible, to close an agreement with a Canadian group which would build from the terminus of the Champlain & St. Lawrence Rail Road at St. Johns, to a connection at the boundary. Poor was 300 miles away, in Port-

land, when he heard of this but he set out on February 5th, 1845, in one of the worst blizzards on record, and arrived in Montreal early in the morning of the 10th, in time to attend a crucial meeting of the Board of Trade. The Board had almost decided on Boston but Poor presented his arguments and succeeded in persuading the Board to postpone its decision. The discussions continued for days without result but finally, on the 15th, Judge William Pitt Preble of Portland, walked into the meeting carrying the charter of the Atlantic & Saint Lawrence Railroad, granted on February 10th by the legislature of Maine. This evidence of good faith convinced the Montreal group; they voted for Portland and went ahead and secured a charter for their own end of the road, with the name reversed — the Saint Lawrence & Atlantic Railroad.

At the same time, two westward extensions were planned from Montreal to the navigable waters of Lake Ontario. One to be built by the Montreal & Bytown Railway and the Brockville & Ottawa Railway, was to make a wide detour via Ottawa and Carleton Place, and the other, the Montreal & Kingston Railway, was to follow the Saint Lawrence river. Later, the Kingston & Toronto Railway would extend the line to Toronto. Thus, Poor and his Canadian allies envisaged the early construction of a continuous line of railway from Portland to Toronto, a distance of approximately 630 miles.

As a final test, a race was suggested and it was arranged that the next mail steamer from England would leave half of its mail for Canada at Portland, and carry the other half to Boston. would receive its share a day later but, as the railway was completed from there to Concord, it was felt that the Boston mail would reach Montreal first. The Portland mail had to travel all the way by horse and sleigh, but Poor was determined to win. road and he had fresh horses stationed at frequent intervals, men to keep the road open. The great day came and the Portland mail arrived in Montreal fifteen hours ahead of that from Boston, so there was no more argument -- Portland was to be the winter port of the Canadas. It was blessed with an excellent harbour, easily approached even in the worst weather, and for about seventy years it was practically a Canadian city, handling all of Canada's overseas trade during five or six months of the year.

#### CONSTRUCTION

The American company was incorporated in the State of Maine on February 10, 1845; the Canadian company received its charter on St. Fatrick's day of the same year, and, as it was found that parts of the United States line would have to be built in New Hampshire and Vermont, the company was incorporated in chose states on July 30th, 1847 and October 27th, 1848, respectively. Construction on the Portland section commenced on July 4th, 1846 at Portland, and the Canadian section was begun about the same time.

Early explorations by the S. & St.L. indicated that there were three feasible routes approaching the boundary, and at first it was thought that the best would be that adopted a few years later by the Connecticut & Passumpsic Rivers Railroad, that is to say, up

the Connecticut River, then by the Nalhegan and Clyde river valleys to Derby Line and Stanstead, and along the shore of Lake Massawippi to Sherbrooke, but subsequently, a route through Island Pond, Norton Mills and Coaticook, was adopted.

The capital stock of the Canadian company was set at £600,000 Halifax currency, or \$2,400,000 and it was expected that the whole amount would be raised from private sources, partly in Montreal and the Townships, but mainly in England. Local subscriptions amounted to but £100,000 so Galt was sent to England to raise the remainder. England was then in the grip of the Hudson railway mania but the disclosure of Hudson's fraud in the Eastern railway project occured while Galt was in London; consequently, all he was able to raise was £35,000. On his return to Canada, he found the Committee undecided but after some discussion, decided to proceed with the work. The Company was formally organized in April 1846 with George Moffatt, member of Parliament for Montreal, as President. The directors included A. N. Morin, John Torrance, Thomas Stayner, Peter McGill, Samuel Brooks and A.T.Galt. A.C.Morton, formerly of the Erie Railroad, was appointed engineer of both companies.

By wide canvassing, the Canadian subscriptions were increased to £200,000 but this was barely sufficient to build the line from Longueuil (on the St.Lawrence river opposite Montreal) to the Richelieu River. This section was completed in November 1847. Montreal subscribers were hard hit by the commercial depression, but in time most of them paid up in full. The subscribers in the Townships had even less ready money and they were allowed to make payments in kind, delivering provisions to the construction gangs along the line. One Sherbrooke shareholder, a director at that, tried to turn in a farm as payment on his subscription and when this was refused, he indignantly resigned.

Still short of money, Galt made another trip to England, late in December 1846, to sell a £500,000 issue of bonds but with the Oregon difficulty threatening war in America, the trip was fruitless. Finally, in desperation, the directors turned to the government for assistance and were joined by a group from Canada West, headed by Sir Allan MacNab, equally anxious to secure government backing for the Great Western Railway. This was the first of many requests by Canadian railways for financial assistante from the government and while it is now realized that it was a necessary and unavoidable evil, it was carried to such extremes during the early years of the present century, that it almost caused the financial ruin of the country.

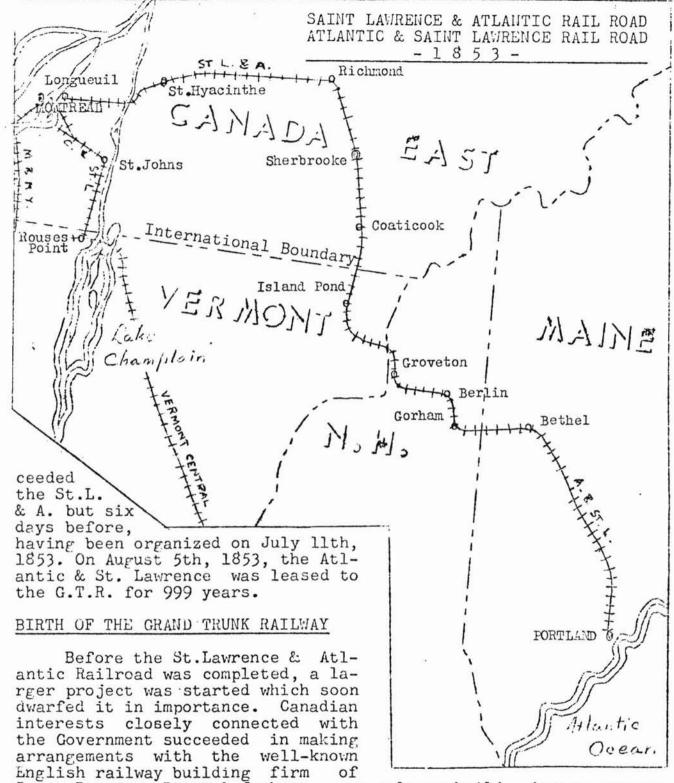
After two years of lobbying, Francis Hincks, Inspector-General in the Baldwin-Lafontaine ministry, brought down a measure based on suggestions made by the directors of the St.Lawrence & Atlantic RR, whereby any railway over 75 miles long, which had built half of its line from private resources, would be given a government guarantee of the interest, not to exceed 6%, on an issue of bonds equal to half the cost of the road. The government would be protected by a first lien on the whole undertaking.

The Canadian road was completed only as far as St.Byacinthe and it would have to find the funds to complete 33 miles to the St. Francis river before it would qualify for the government guarantee. A.N. Morin, the President, was too busy with politics to devote much time to the management of the railway, so, late in 1849, he resigned and was replaced by Alexander T. Galt, whose superior energy and business ability quickly injected new life into the project. Galt was ably assisted by John Young, a prominent merchant of Montreal and through the latter's influence, the city invested £100,000 (\$400,000) in preference stock, and the British American Land Company and the Seminary of St. Sulpice of Montreal, each took bonds to the amount of £25,000.

A contract was made with Wood Black & Co. of Pennsylvania, who had built part of the Canadian line and were building all the Maine portion, under which they agreed to complete the railway at a price of £6,550 (\$26,200) per mile. This was rather high but the contractors agreed to accept part of their pay in stock, which was at a discount of between 15% and 20%, and the rest in government bonds, when issued. This arrangement did not work very well; the contract with Wood Black & Co: was soon cancelled, and the railway continued the construction with its own organization under a new chief engineer, Casimir S. Gzowski, a brilliant Polish exile. Three generattions of this remarkable family served the St. Lawrence & Atlantic and its successors, the Grand Trunk Railway and the Canadian Nat-Under the new regime, construction was fairly ional Railways. rapid; the second section from St. Hyacinthe to Richmond was completed in October 1851, and the third section, from Richmond to Sherbrooke, in September of 1852. The opening of the line to Richmond was celebrated by a grand procession, dinner and ball. Triumphal arches were erected at various parts of the city, the finest being that placed at the corner of St. James and McGill streets, which was brilliantly illuminated during the evening. There was a big celebration in Sherbrooke to welcome the first train to that city, with the Governor-General and nearly all of the members of the provincial Parliament in attendance.

Meanwhile, the United States company had been having its troubles, too. The city of Portland had taken \$1,500,000 of bonds and an equal amount had been sold to individuals and a few thousand shares of stock had been sold, but the State of Maine, unlike the Province of Canada, was barred by its constitution from giving any aid to railways or other private enterprises, so the A.& St.L.RR reached the end of its resources sooner than the Canadian. It was arranged, accordingly, in 1851 that the Canadian company would build 16 miles south of the border to Island Pond, Vermont, and a special issue of 7% bonds amounting to \$438,000 was sold in London to cover its cost.

The goal was in sight. On July 16th, 1853, the railway lines from Portland and Longueuil were joined at Island Pond, and through service inaugurated. It was a great day for the St.Lawrence & Atlantic and its Yankee counterpart, but in a sense, it was perhaps a greater day for the Grand Trunk Railway of Canada, which had suc-



Peto, Brassey, Betts & Jackson, not only to build, but to arrange as well for the financing of the Grand Trunk Railway of Canada, to extend from the Creat Lakes to the sea. The line to Portland was acquired as an important link in the chain of transportation and would be connected with the rest of the system by a bridge at Montreal. As part of the Grand Trunk Railway, traffic on the Portland line increased enormously and through service had to be established before the road was even ballasted.

Meanwhile, the people of Quebec city began to realize that if the greater part of Canada's trade passed through Portland during the winter months, it might also continue to do so during the summer, which would be a major disaster to the ancient capital. The river steamboats, mostly owned there, would be idle, but worse than that, the great summer port activity would be greatly reduced, and the extensive shipbuilding industry ruined. Accordingly, the Quebec & Michmond Railway was organized in 1850 to build from Point Levis, opposite Quebec, to a connection with the St.Lawrence & Atlantic RR at Richmond. Construction started in 1852, and was completed on Hovember 27th, 1854 after it had become part of the Grand Trunk Ry.

The Portland line was always primarily a freight road; passenger trains operated at freight train speed and very often the express train would wait in a siding while five or six sections of a through freight train went by. In 1866, it took  $17\frac{1}{2}$  hours for the express to run through from Portland to Montreal, a trip which can now be made in about ten hours and still at a relatively low speed.

The northern terminus was a long wharf near the village of Longueuil on the south shore of the Saint Lawrence river opposite the city of Montreal and a ferry boat named the "Transit" served as a connecting link. When the Grand Trunk Railway took over, two large paddle wheel tow boats, the "Beaver" and the "Muskrat", were built in 1854 to carry passengers and tow car barges between Longueuil and Pointe St. Charles and in the following year, three large passenger ferry boats, Nos. 1, 2 and 3, were built. No.3 was destroyed by a boiler explosion after it had been running only a month and the many claims, arising from the heavy loss of life, were a serious burden to the company.

Following completion of the Victoria Bridge in 1859, the ferry boats were sold; No.1, renamed the "Clyde" was used as a transport by the United States Navy between 1862 and 1865, then it returned to Canada and ran on the Saguenay River for many years. The old Longueuil wharf can still be seen behind the Longueuil water works pumping house, and at low water, the remains of the Pointe St.Charles wharf can be seen about 100 feet downstream from the Victoria Bridge.

The railway created its own port facilities at Portland and regular lines of steamships ran to Boston, Saint John and to Hali-In 1854, the Allan Steamship line began using Portland as a winter port which it continued to do until it was absorbed by the Canadian Pacific Ocean Services in 1915. In time, the Canadians became more conscious of their national destiny and it became the policy of the government to promote the winter ports of Saint John and Halifax, so Portland rapidly diminished in importance. first blow was struck in 1915 when the Allan Line was taken over by the Canadian Pacific and the ships diverted to Saint John. Finally the port traffic ceased altogether when the Grand Trunk Railway became part of Canadian National Railways, in 1923. Today the local traffic is moderately heavy over the Canadian section of the line, and the whole line forms part of a very busy fast freight route between the New England states and the middle west, by-passing the congested terminals of United States railroads.

#### THE PROVINCIAL GAUGE

The Atlantin & St. Lawrence RR adopted the then unusual gauge of 5'6", which subsequently became the standard gauge for most of the railways in Maine, New Brunswick, Nova Scotia and Canada. Just why it was adopted in the first place is not entirely clear. A.C. Morton, the chief engineer, had come from the Erie Railroad and probably was impressed by the supposed adfantages of a wide gauge. However, it is more likely that Poor himself was responsible. Myles Pennington, the first Freight Traffic Manager of the Grand Trunk Railway and who was in a position to know, stated "On visiting Portland in 1853, I was curious to enquire into the history of the 5'6" gauge, and was informed that it had been adopted in order to make Portland the terminus of the Canadian roads and prevent the trade from going past Portland to Boston".

In 1851, the Railway Committee of the Canadian Parliament was instructed to investigate the Gauge Question and to decide upon a standard gauge for future Canadian railways. Many experts were consulted and it is significant that practical railway men favoured the Stephenson gauge of  $4^{1}8\frac{1}{2}$ ". The government engineer and the representatives of the St. Lawrence & Atlantic RR supported the wide gauge of 5'6", the principal reasons being:

- (1) The Montreal and Portland line had already adopted the broad gauge and it was thought that all the trade of the Canadas would pass over this line.
- (2) Due to the influence of Mr. Poor, the then separate provinces of New Brunswick and Nova Scotia had adopted the Portland gauge and many of the railroads in Maine had done likewise.
- (3) That trade with the United States should be restricted as much as possible and that the trade of Canada be forced to flow east and west, by artificial means if necessary.
- (4) That a break in gauge at or near the border would prevent or impede military invasion.

Rail historians south of the border are inclined to scoff at the last two reasons, but Canadians will never forget the several occasions when the United States tried unsuccessfully to conquer Canada by military force. It is now fashionable to speak of the long undefended border and 140 years of peace, but our neighbours to the south are astonished and bewildered when occasionally they learn how recently Canadians ceased to fear the possibility of an attack from the south. Fortunately, relations between Canadians and the people of the New England states were always on a friendly basis and as time went on these dislikes and fears were allayed.

The broad gauge of 5'6" was officially adopted as the Standard Gauge for the Province of Canada on July 31st, 1851 and by 1860, most of the lines in the Province were built to this gauge.

The need for gauge uniformity with other North American railways became apparent in the late Sixties. The Great Western Railway laid a third rail to 4'8½" width in 1867, thus creating a double gauge and a general conversion was made from the Provincial gauge to Standard gauge between 1873 and 1875, following the repeal of the 1851 Broad Gauge Act. Some of the smaller roads delayed conversion until 1881. Canada's last Provincial gauge railway was the Carillon & Grenville Railway, a portage line in the Ottawa River navigation route, whose 5'6" gauge track was dismantled during World War I, following the line's abandonment.

### LOCOMOTIVES OF THE PORTLAND LINE

The first three locomotives on the St.Lawrence & Atlantic RR, are shrouded in mystery.

About the "Longueuil", we know very little. The Annual Reports of 1849 and 1851 pefer to it by name, and describe it as a second-hand American engine, but by 1852, it was gone. Since we have been unable to determine where, in 1847, a second-hand American engine of 5'6" gauge could have been obtained, it must be presumed to have been rebuilt from some other gauge.

The "Britannia" and the "Princess", acquired in 1847-48, were long thought to have been new Kinmonds, like the "Montreal" and the "James G. Ferrier" of the Montreal & Lachine RR, and the "John Molson" of the Champlain & St. Lawrence RR. However, records now reveal that they were taken out of service in 1852, and scrapped in 1854, and it is therefore obvious that they were old and second-hand. Their appearance is quite well known. In the Chateau de Ramezay Museum in Montreal, and elsewhere, there exists a contemporary drawing of one of them at the Longueuil wharf station. The drawing is accurately proportioned, and although poorly detailed, clearly shows a 2-2-2 type. Also in the Chateau de Ramezay there is a working model of one of them, made in 1850 by one P. Rodier of St. Hyacinthe, showing it as a 4-2-2 type, to which these engines were presumably rebuilt. The model was well made, and the mechanical details are apparently accurate, but the proportions and scale dimensions are distorted.

When the Montreal & Lachine Rail Road was under construction in 1847, two new engines were ordered from Kinmond Hutton & Steele of Dundee, Scotland, and when they were shipped to Canada they were accompanied by W.L. Kinmond, nephew of the senior partner of the Dundee firm and Alexander Millar, formerly Locomotive Superintendent of the Dundee & Arbroath Railway, who became Manager of the Lachine railway. Kinmond was a slever engineer but he was also a competent salesman and he soon discovered that the St. Lawrence & Atlantic RR urgently needed locomotives but did not have the money to buy new ones. In C.F. Dendy Marshall's "Two Essays in Early Locomotive History", page 51, there is a clue:

<sup>&</sup>quot; --- no further engines with this cylinder arrangement were built for Great Britain until 1838, when Sterling & Co., of Dundee, made three six-wheeled singles for the Arbroath

& Forfar Railway 'then of the 5'6" gauge) named Victoria, Britannia and Caledonia, illustrated by Whishaw, plate 4, and Ahrons, fig. 41".

In 1846 and 1847, many of the small railways in Scotland were amalgamated into two large companies, the North British Railway and the Caledonian Railway -- and those which were odd gauge were converted to standard. Kinmond certainly knew that the North British still had the three Sterling singles which, though ten years old, were still serviceable and available for sale, and it is reasonable to suppose that they were the same engines. They were also of the same gauge as the St. Lawrence & Atlantic. It is circumstantial evidence, but men have been hanged for less.

All the other locomotives on the St. L. & A. were scrapped by 1874, except the "St. Francis", which was converted to standard gauge and sold to the Richelieu, Drummond & Arthabaska Railway in 1871. A year later is was acquired by the South Eastern Railway and for many years it was the switch engine at Richford, Vermont. It was scrapped in 1895.

St. Lawrence & Atlantic Railroad

NAME	TYPE	CYL3.	DRI.	WEIGHT	DATE	BUILDER		DISP	OSAL
Longueuil Beloeil	2-2-2				1838	Sterling	& Co	.Re G	T 5?
St.Hyacinthe	11				11	11		11	
A.N.Morin	4-4-0	15x22"	60"	47000	1848	Portland	(3)	***	
Montreal	11	11	66	46800	1850		(15)	tt	
Sherbrooke	11	16x22"	11	47400	1851	11 (	17)	TT	3
St.Lawrence	11	15x20"	11	46500	11	11 (	25)	. 17	
Richelieu	11	15x22"	11	48200	11	11	(26)	11	
Yamaska	11	11	60	48400	**	11	(27)	11	139
Queen	11	16x22"	11	11	1852	11 (	(34)	***	
Magog	11	16x24"	11	46900	11	Boston (3	380)	***	7
St.Francis	17	**	**	11	11	11 (3	384)	11	8
Coaticook	17	17	54	50600	11	Amoskeag	(62)	17	11
Nulhegan .	11	17	11	11	***	11	(63)	11	エん
Acton	11	16x20"	66	11	***	***	(67)	11	エノ
Massawippi	11	16x24"	60	57600	***	Portland	(35)	11	137
Atlantic & St. Lawrence Railroad									
Montreal	4-4-0	15x22"	60"	47000	1848	Portland	(2)	ReGT	101
Machigonne	11	11	11	11	**	11	(5)	11	102
Oxford	11	17	tt	45500	1849	11	(6)	11	103
Wm.P.Preble	11	16x20"	66	49400	11	11	(8)	11	104
Waterville	. 11	11	11	44700	***	17	(13)	11	105
Coos	11	TT	11	44800	1850	**	(14)	11	
Felton	17	15x22	60	tr	1851	11	(19)	17	107
Railway King	**	17x22	11	48400	11	11	(20)	11	108
Casco	11	14x20	T f	44700	**	11	(28)	11	109
Forest City	11	15x20	66	11	1852	**	(29)	17	
Danville	11	13x20	60	40000	11	17	(30)	11	111
Falmouth	11	14x22	56	45200	11	11	(32)	11	112
Daniel Webster	17	15x20	60	44900	**	11	(36)	11	113

Cumberland Norway	1,-1,-0	16x22"	60"	48400	1853	Portland	(40) (41)	re C	T114 117
Michigan	11	14x22	66	42900	11	11	(42)	17	115
Paris	***	15x22	60	47000	11	**	(43)	11	116
Gloucester	11	17	66	46800	11	11	(44)	***	12C
Yarmouth	***	***	60	48000	11	11	(45)	11	118
Amonoosuc	11	11	tt	11	11	17	(46)	11	119

The Editorial Committee would like to thank Mr. Robert R. Brown for his contribution, which is the result of a considerable amount of research. In dealing not only with the construction of the Portland railway, but in his description of the underlying economic and political forces which have played such an important part in undertakings of this kind, Mr. Brown's story is one which will be of considerable interest to the student of Canadian affairs. It is an epic of one of the many ambitious enterprises for which Canadians are noted, and which have made a great nation of our country.

The appearance of Bulletin 16, marks a resumption of the series of Bulletins started in 1937 and continued until 1940 when Bulletin 15 was published. It is hoped to publish bulletins from time to time devoted entirely to topical subjects. At a later date, the documentary evidence contained in Bulletins 1-15 will be reprinted and offered for sale to the members. In the meantime, there is a very limited number of copies of certain issues of the former Bulletin, and for those members and associates who would like to have copies for inclusion in their personal files, they are being offered at twenty cents a copy, postpaid. Copies available are:

Bulletin 3 - November 1937 Features accounts of the C&StL RR
" 7 - December 1938 RRs and Locos. of Gen.Mining Assn.
" 9 - May 1939 Story of the M&SC Ry. and Loco
list of the QCRy.

" 13 - May 1940 Steam Navigation on the Ottawa
River.

" 15 - December 1940 Part II of the story of the Intercolonial Railway of Canada.

Inquiries and remittances for back copies, should be made to the Association's Editorial Office, 6959 De l'Epee Avenue, Montreal 15.

Omer S.A. Lavallee, Editor.

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Don't forget the October 3rd-4th Open House weekend in Montreal.

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Charles Shops.

" afternoon: Visit to Youville Shop of ... MTC.

Fare: \$7.50 from " evening: Moving pictures.

Trip Committee, Sunday (all day): Fall Foliage trip to Labelle, via Can.Pac.Ry.