The True Story of the Provincial Gaug by Brian Gilhuly

If you have read any previous account of the 5' 6" "Provincial" gauge in Canada, you will find many familiar elements missing from this version. That is because, contrary to what you may have read:

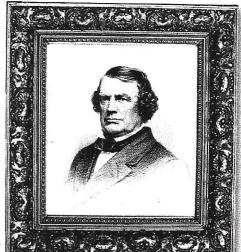
- There was no Canadian committee or commission on gauges in 1845;
- The British Government did not promote the broad gauge for Canada, for military or any other reason;
- The Canadian Legislature did not pass a law imposing the broad gauge on Canadian roads, or even making it a condition of government assistance;
- The Provincial gauge was not imposed in 1851 and
- The Provincial gauge was not repealed in 1870.

What did happen, as recorded in the original official documents, is described below.

The Broad Gauge Comes to Canada

In 1845, the Legislature of the Province of Canada granted charters for two radically different international railway projects: the Great Western Railroad (GWR)1 and the St. Lawrence and Atlantic Railroad (SLA)2. Both aimed at capturing the export trade of the US Midwest and neither charter mentioned gauge. Apart from that, they could hardly have been more different.

The GWR was championed by Sir Allan MacNab, businessman and Speaker of the Canadian Legislative Assembly (comprising Ontario and Quebec) during the 1844-47 Tory Government. It was an eminently practical proposition to connect Niagara Falls with Windsor, to create a link from New York to Detroit shorter than the all-American route south of Lake Erie. All but one of the US lines it would connect had been, or were being, built to the 4' 81/2" gauge, so it was always the GWR's intention to adopt that gauge. Difficulty in raising capital was to delay the start of construction on the GWR to 1851.



American Father of the Provincial Gauge - John A. Poor of Portland, ME, was determined that no Portland-bound traffic be diverted to Boston or New York, so he insisted that his line to Montreal be built to a unique gauge The choice of 5' 6" seems to have been a matter of happenstance. Collection of the Maine Historical Society.

from Portland to the border and the Province of Canada chartered the SLA from the border junction to Longueil.

By April 1846, the international partners had agreed on a specification for the entire line that included the choice of 5' 6" as its gauge. It had been a given from the outset that the gauge would not be 4' 81/2" and the companies had hired a Chief Engineer, A. C. Morton, who had worked on the 6' gauge Erie Railroad and was a broad-gauge proponent. But Morton had no previous experience with 5' 6" and his writings provide no clue about the choice of that specific dimension.

The most likely explanation is that the gauge was chosen because the company could get a deal on two used locomotives of that gauge. Those two, originally built by James Stirling & Co. of Dundee for Scotland's Arbroath and Forfar in 1838-9, had been made redundant by the choice of 4' 81/2" as the British standard in 1846. Built as type 2-2-2 and named Princess and Britannia, they were rebuilt as 4-4-2s St. Hyacinthe and Beloeil, and put to work on constructing the Longueil to St. Hyacinthe section, which opened in early 1847.

Realizing that a bi-national undertaking would be permanently at risk of disruption by one or the other government, the promoters of the Portland

road came up with an ingenious defence - what today's business journalists would call a 'poison pill'. A contract was signed between the ASL and the SLA in April 1846, laying out the specifications that must be followed, including gauge. If either party failed to adhere to those specifications, the penalty would be the confiscation of its entire capital stock by the other.



Practical Promoter – Allan Napier MacNab of Hamilton, soldier, politician, landowner and businessman. Knighted for his role in putting down the 1837 Rebellion, Sir Allan was the chief promoter of the Great Western Railroad, intended as a bridge line for American traffic from the Midwest. For that purpose, the 4'81/2" gauge was the sensible choice. Courtesy of Toronto Public Library. (After a painting by Théophile Hamel).

Government Gets Involved

Events soon demonstrated the utility of the poison pill.

On June 18, 1847, Britain's Secretary of State for War and the Colonies, Earl Grey, wrote to Governor General Lord Elgin in Canada and the Lieutenant Governors of Nova Scotia and New Brunswick on the matter of gauge 3:

"... I consider it to be of the very highest importance to

secure from the out-set the adoption of an (sic) uniform Gauge, not only in New Brunswick, but throughout the whole of British North America. ... I am of opinion that the decision must rest in a considerable degree, not merely upon what is in itself the best Gauge, but upon what Gauge has already been adopted in existing lines with which those about to be constructed will eventually communicate. The extent of Railroad as yet constructed in the British Provinces is too inconsiderable to occasion any difficulty in adopting any Gauge that may be preferred, but the Gauge in use on Railways in the United States which are likely to become connected with the Railways in the British Provinces should not be overlooked."

Far from insisting on a break of gauge for defence purposes, the British Government was urging the North American colonies to encourage inter-connections with US railroads. Given that those lines were predominantly of 4' 81/2" gauge, this interest from London cannot have been welcomed by the SLA. Fortunately for them, the matter seems to have been dropped without further action.

John A. Poor of Portland Maine saw things differently. His vision was of a great 'trunk line' railroad from the Midwest via Montreal reaching the Atlantic at Portland. A line from Portland to Halifax would indirectly link Canada to New Brunswick and Nova Scotia. The system would be self-contained, with no need to interchange with other roads. To ensure that none of the Portland-bound freight was diverted to Boston or other ports, the road should adapt a different gauge from nearby existing lines.

The key first part of Poor's plan was to be the line from Montreal to Portland. Through 1844-45 he gained the support of merchants in both cities as well as the towns along the proposed route. It was in one of the latter, Sherbrooke, that he found his Canadian co-promoter, Alexander Tilloch Galt, manager of the British American Land Company.

The Portland railroad would need authorization from the Governments of Canada and of Maine, which could be most easily obtained by separate Canadian and US incorporated companies. Thus in 1845, the State of Maine granted a charter to the Atlantic and St. Lawrence Railroad (ASL)

The following month, matters became more serious. A bill had been introduced in the Legislature on behalf of the SLA, to amend its charter and increase its powers. On July 27, 1847, the second-last day of the session, the bill passed the Assembly and went to the Legislative Council, the upper house. A flurry of routine bills always hit the Council at the end of a session, so that body had a procedure for immediate first and second reading followed by quick review by three-man committees.

The committee reviewing the SLA bill – Honorable Messrs. Knoulton, Walker, and Ferrier – may have been aware of Earl Grey's letter. They were certainly aware of a petition from dissident SLA stockholders led by Charles C. Proctor, asking the Government to compel the SLA to adopt the 4'8½" gauge; Mr. Ferrier had presented it to the Council on July 7 4. (Mr. Ferrier was also President of the 4'8½" gauge Montreal and Lachine Railroad.) The committee proposed an amendment to add another clause to the bill:

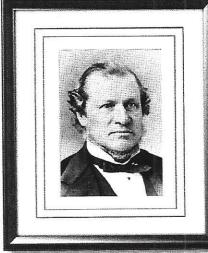
"XVI. Provided always and be it enacted, That the gauge upon which the said rail shall be constructed, and which shall be used in the said Railway shall be four feet eight and a half inches, unless within six calendar months the Governor of this Province in Council, shall by order in Council determine upon any different gauge, and that upon communication to the said Company of any Order in Council establishing any different gauge the gauge so established shall be the one used in the said Road as if the same had been established in and by this Act."

The Council swiftly passed the bill, as amended, and returned it to the Assembly on the 28th. With only hours left in the session, there was no time for more changes. Its proponents were unwilling to withdraw the bill, so the Assembly passed the Council's version which became law ⁵.

The SLA, seemingly blind-sided by this development, reacted quickly. Chief Engineer Morton was ordered to pull together a technical justification for 5' 6" while the company's attorneys drafted their petition explain-

ing the implications of the poison pill agreement and A. T. Galt lobbied the administration. Morton's 35-page report, dated September 20, and the text of the 1846 poison pill contract were bound into a single

Canadian Godfather – Alexander Tilloch Galt, businessman and politician from Sherbrooke, bought into John Poor's vision and built a vast fortune on his railway investing the college of the posterior of the poison of the posterior of the poison of the posterior of the poison of the poison of the posterior of the poison of t



Canadian Godfather – Alexander Tilloch Galt, businessman and politician from Sherbrooke, bought into John Poor's vision and built a vast fortune on his railway investments. Galt was active in promoting Confederation and briefly served as Finance Minister in the first federal government. Later he played a major role in developing the coal industry in Alberta. Library and Archives Canada C 020329 (W. Notman photograph).

volume. That booklet and a rather testy 'memorial' from the directors of the ASL were appended to the SLA's petition to the Governor in Council 6 .

The petition complained of procedural unfairness in the Legislature, stressed that 45 miles were already under contract and drew attention to Morton's report. Mostly though, it spelled out the poison pill arrangement and its implications:

"That the two Companies ... entered into a reciprocal agreement duly signed and sealed by the President and a Special Committee of each Corporation, on the 18th and 29th days of April, 1846, whereby each is bound to the other, to conform in the construction of the Railroad in all matters therein contained under a penalty of the entire Capital Stock of their respective Corporations, a printed copy of which Contract is herewith submitted for Your Excellency's information.

That by the 5th Section Your Excellency's Petitioners are bound to construct their Road with a Gauge of 5 feet 6 inches ...

That an alteration in the Gauge from 5 feet 6 to 4 feet 8½ inches, would therefore not only materially injure Your Petitioners but may eventually frustrate the enterprize (sic), and be the means of subjecting them, under their agreement with the Atlantic and St. Lawrence Railroad Company, to a heavy penalty to the said Company by such alteration, amounting to the whole Capital Stock of this Company."

The company's petition was signed and deposited with the Executive Council (Cabinet) on September 30th. On October 1st, a Council Committee reviewed it, and recommended that the petition be granted. The recommendation was approved by full Council and the Order in Council signed later the same day. The minutes ⁷ of the Committee's study of the petition deal almost exclusively with the poison pill agreement, merely noting that "other facts detailed in the petition" were taken into consideration.

The SLA's legal strategy had worked better than could possibly have been hoped. Thanks to the dissidents' attempt to change it, the road's 5' 6" gauge was now prescribed by law.

The Lure Of The Public Purse

The election of 1848 saw the Tories replaced by the Lafontaine-Baldwin Reformers. A. T. Galt was pleased to see his great friend, Francis Hincks, appointed Inspector General (Finance Minister). It was not long before both the GWR ⁸ and the SLA ⁹ petitioned the Legislature for public assistance. The petitions got no response in 1848. The year's major development was the Assembly's creation of a Standing Select Committee on Railroads and Telegraph Lines. Prior to 1848, temporary legislative committees had been created ad hoc to deal with railway bills.

Galt joined the Assembly as MPP for Sherbrooke in an April 1849 by-election. Inspector General Hincks came to the railways' aid in May with the Guarantee Act ¹⁰. To assist the railway's efforts to raise capital, the Province would guarantee payment of up to 6% interest on their bonds. To be eligible, a railway had to be chartered for a length over 75 miles and the government would only start to pay when the line was half-built. The companies were pleased, but their financing efforts were only modestly more successful. The Province's London bankers were horrified at the open-ended offer and threatened dire consequences.

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Fast-Tracked – The log of petitions to the Governor-in-Council shows that the SLA's petition to use
the broad gauge was approved the day after it was received.

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Library & Archives Canada, Register of Submissions to the Executive Council of the Province of Canada, RG 1, E 7, vol. 74 (Reel C-10691, frame 565).

The British Government had signalled that it might fund an inter-colonial railway from Nova Scotia to Canada via New Brunswick if the Provinces also participated, so the Guarantee Act of 1849 contained a section dealing with that unrelated subject. Until it collapsed in inter-colonial acrimony in 1852, the project for an imperial railway loomed over developments in the Province of Canada.

In 1850, the Legislature passed a flurry of railway legislation, including two bills concerning the GWR and one for the SLA, but none mentioned the subject of gauge.

Railway matters were handled differently in the 1851 session. Hincks believed the Province needed a railway from Montreal to the western border at Windsor and that public investment would be needed to bridge the gap between the SLA at Montreal and the GWR at Hamilton. Such a major undertaking was too important to leave to a Select Committee, so Hincks would put his propositions to the whole House.

Meanwhile, the Standing Select Committee on Railroads and Telegraph Lines, chaired by Sir Allan MacNab, undertook on its own to consult about gauge. Between June 17 and July 22, the committee held ten sessions on the subject, all chaired by MacNab 11. Well-known civil engineers, locomotive and car builders testified, as did both the SLA and GWR. The 31 pages of testimony generally favoured the 4' 8½" gauge. Sir Allan took no part in the Committee's deliberations, given his direct interest, but Inspector General Hincks did. MacNab was probably not surprised when the remaining members voted 9 to 2 in favour of a report proposing that the Government impose the SLA's 5' 6" on the Montreal – Hamilton line and "recommend" it to the GWR. As they had in 1847, the commercial interests of A. T. Galt and the SLA carried the day.



Below: The Moment of Decision – Minutes of the Board of Railway Commissioners, January 13, 1852, recording the decision to impose the 5'6" gauge. Library & Archives Canada, Records of the Board of Railway Commissioners, RG 1, E 6, vol. 2 – Minute Book 1851–1857 (Reel H-1401, frame 53). Railway Premier – Francis Hincks was Canada's Inspector General (Finance Minister) 1849-51 and Premier 1851-54. His laws and executive actions shaped Canadian railways for a generation. Central to the creation of the Grand Trunk, and close to A. T. Galt, Hincks was a political opponent of Allan MacNab. He left Canada after a scandal but returned in 1869 to join Macdonald's cabinet.

Courtesy of Toronto Public Library (ID #20118) via Wikipedia.

On July 31, that report was presented to the Assembly by John A. Macdonald, Member for Kingston ¹². The Assembly did not endorse it. More surprising, its recommendations were not taken up in Hincks' legislative proposals.

Those came before the Assembly on Aug. 8 in the form of a group of resolutions ¹³. After they were debated, the outcome was put into An Act to make provision for the construction of a Main Trunk Line of Rail-way throughout the whole length of this Province ¹⁴, which received Royal Assent on August 30, 1851. It made no prescription as to gauge. Its main provisions were to:

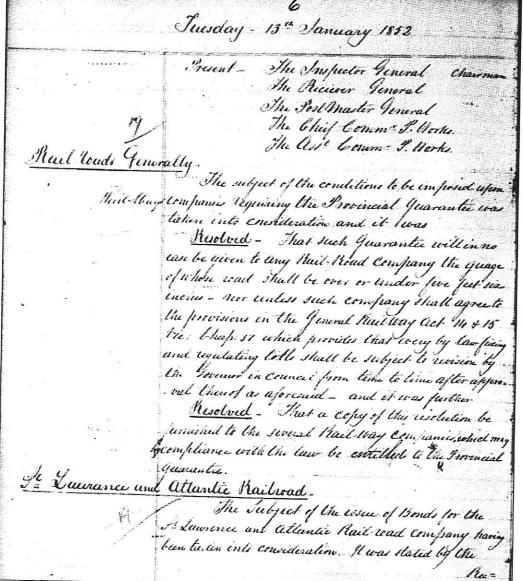
- Limit eligibility for aid under the 1849
 Guarantee Act to parts of the main line
 from Montreal to Windsor, plus the SLA
 and the Ontario, Simcoe and Huron,
 which had been undertaken on strength
 of the guarantee;
- Increase the amount of guarantee from just the interest on bonds to interest plus half the principal, secured by a lien on railway assets;
- Offer separate guarantees for each 75mile section that was half built;
- Create a Board of Railway Commissioners four Ministers plus a civil service engineer to administer aid. No guarantee could be provided until the Board had approved the route, various technical specifications including gauge and the company's financial solidity.

The Board first met on October 21, but it was not until Jan. 13, 1852, with Hincks in the Chair, that they dealt with the gauge question. The minutes ¹⁵ of that meeting said:

"The subject of the conditions to be imposed upon Rail-Way companies requiring the Provincial Guarantee was taken into consideration and it was

Resolved – That such Guarantee will in no case be given to any Rail-Road company the gauge of whose road shall be over or under five feet six inches – nor unless such company shall agree to the provisions of the General Railway Act 14 & 15 Vic. Chap. 51 which provides that every bylaw fixing and regulating tolls shall be subject to review by the Governor in Council from time to time after approval thereof as aforesaid – and it was further

Resolved – That a copy of this resolution be furnished to the several Rail-Way companies which may by compliance with the law be entitled to the Provincial Guarantee"



The Great Western's copy was sent January 26 ¹⁶. Unable to complete the road without the Guarantee, the GWR reluctantly accepted a near-fatal blow to its 'bridge line' ambitions. It managed to survive and in 1866 laid a third rail the length of its main line, finally able to carry US traffic without a break of gauge.

From 1851-1860, many newly-formed railway companies like the 1852 Grand Trunk Railway of Canada 17 (GT) included 5' 6" gauge clauses in their Charters, though they were under no obligation to do so. The GT absorbed both the SLA and its US twin in 1853. Other lines, like the Brockville and Ottawa, just built to the gauge without any Charter requirement. **End Game**

The foolishness of John Poor's vision of a self-contained railway soon became evident as the rest of North America created an inter-connected network. Montreal had a 4' 8½" gauge link to Boston and New York from 1852 and a dense network of standard gauge lines was developed south of the St. Lawrence. Otherwise the GT and GWR broad-gauge systems made up the vast majority of Canadian rail miles.

The GWR's 1866 move to partial dual-gauge signalled the beginning of the end but it was only after Confederation that all 5' 6" gauge obligations were removed. Since the broad gauge had never been imposed by a general law, change could only happen by amendments to individual railway charters. Again, the GWR moved first, with a bill in early 1870 to repeal the gauge clauses from numerous separately-chartered GWR branches. The Railway Committee of the House of Commons added wording to free the GWR's Main Line Guarantee from its gauge condition. There was little opposition and the amended bill became law on May 12 18.

Both Sir John A. Macdonald, now Prime Minister, and his newly recruited Finance Minister, Sir Francis Hincks, took part in the debate. Sir A. T. Galt did not. Hincks denied responsibility but Macdonald frankly admitted that the broad gauge had been a mistake:

"Hon. Sir John A. Macdonald quite agreed with the member for Châteauguay that an error was committed in establishing a broad gauge at first. It was a mistake to call this a Government measure, but they would throw no obstacle in the way of bringing it fairly before the House, in order to obviate the objection that Parliament had not given its consent.

In the present condition of the Grand Trunk it was not to be expected that it would incur the enormous expense of changing its gauge, and it would be a bold Government that would propose a money grant to enable any railway to change its gauge. Therefore he thought it would be impossible to establish now a uniform narrow gauge." 19

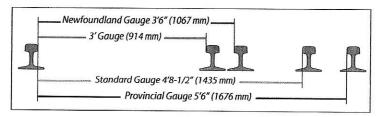
The Prime Minister proved to be too pessimistic.

By 1873, the Grand Trunk had raised the funds for a gauge conversion and the necessary Act ²⁰ was obtained on May 3 of that year. Once the GT was committed to standard gauge, the Government announced ²¹ that it would convert the Intercolonial Railway, then under construction. A few more charters were amended over the next couple of years. The last was New Brunswick's European and North American Railway (E&NA) on April 5, 1875 ²². The E&NA was the fruit of John A. Poor's vision of a Portland – Halifax line. It would take until 1880, when the Canada Central regauged, for the Provincial gauge to disappear from Canadian main lines, leaving just the seasonal Carillon and Grenville until its closure in 1910. **History of Error**

The five bullet points of 'fake news' I debunked to begin this article were taken from a 1963 Canadian Rail article by Omer Lavallée ²³, but the story is ubiquitous. Given its utter falsity, and the fact that the true story has always been available in the public records, some explanation is called for.

The 'original sinners' in this matter seem to be J. W. and Edw. Trout, in their 1871 Railways of Canada. The Trouts clearly did consult primary sources, and correctly noted the creation of the Board of Railway Commissioners, though they overlooked gauges in their description of its role. They produced a good summary of the 1851 hearings on gauge of the Railroads and Telegraph Lines Committee and of the Committee's report. But they apparently had no comprehension of how parliamentary governments work, for at the end of the summary they wrote: "In this way, what has since been known as the Provincial gauge came to be adopted." That statement is completely nonsensical; a parliamentary committee report has no more legal force than a letter to the editor. The brothers' research was excellent, but their analysis sadly flawed.

Things went downhill from there. The first historical article ever published in the CHRA Bulletin ²⁴, in 1937, entitled "The Broad Gauge and the Great Western Railway" by W.S. Spriggs, has a sort of 'Jekyll and Hyde'



quality. The GWR part is carefully researched from original sources, but the gauge material is simply lifted from the work of the Trouts. In fact, it is based on a secondary source, a later book containing excerpts from the Trouts' work, to which Spriggs adds bits of pure invention, such as the supposed 1845 Canadian gauge Royal Commission/committee. He was firmly convinced that British insistence on a break of gauge for defensive purposes was behind the choice, though again he cited no primary sources. He called the gauge choice a "law", clearly without checking the statutes for its existence.

CRHA Bulletin 16, in 1953, was entirely devoted to a Robert R. Brown study of the SLA. In an otherwise seemingly well-researched piece, the short section on the 1851 gauge hearings 'quotes' testimony that never happened. And so on.

Only G. R. Stevens in Canadian National Railways vol. 1, in 1960, got the central fact correct; that it was the Board of Railway Commissioners that decided on the Provincial Gauge, not the Legislature. His date for the decision, July 31, 1852, seems to have been a guess, but at least he got the year right. Sadly, Stevens' work was generally ignored, not only by Lavallée three years later but by subsequent writers as well.

All the original documents have been catalogued and accessible for at least 100 years, first at the Public Archives of Canada and now at Library and Archives Canada. Why no railway historian except Stevens looked at them is a matter for conjecture.

Sources

For this article, I consulted digitized copies of the original documents. The first two online collections are behind pay walls unless you have access through a university or library.

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 - 3. Appendix D.D.D., Annex 1 to the Journals of the Legislative Assembly, 1851.
 - 4. Journals of the Legislative Council, 1847, p.72.
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 - 12. Journals of the Legislative Assembly, 1851, p.210.
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 - 14. 14-15 Vic. Ch. 73 (Ch. 74 and 75 are related Acts).
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