Canadian Rail

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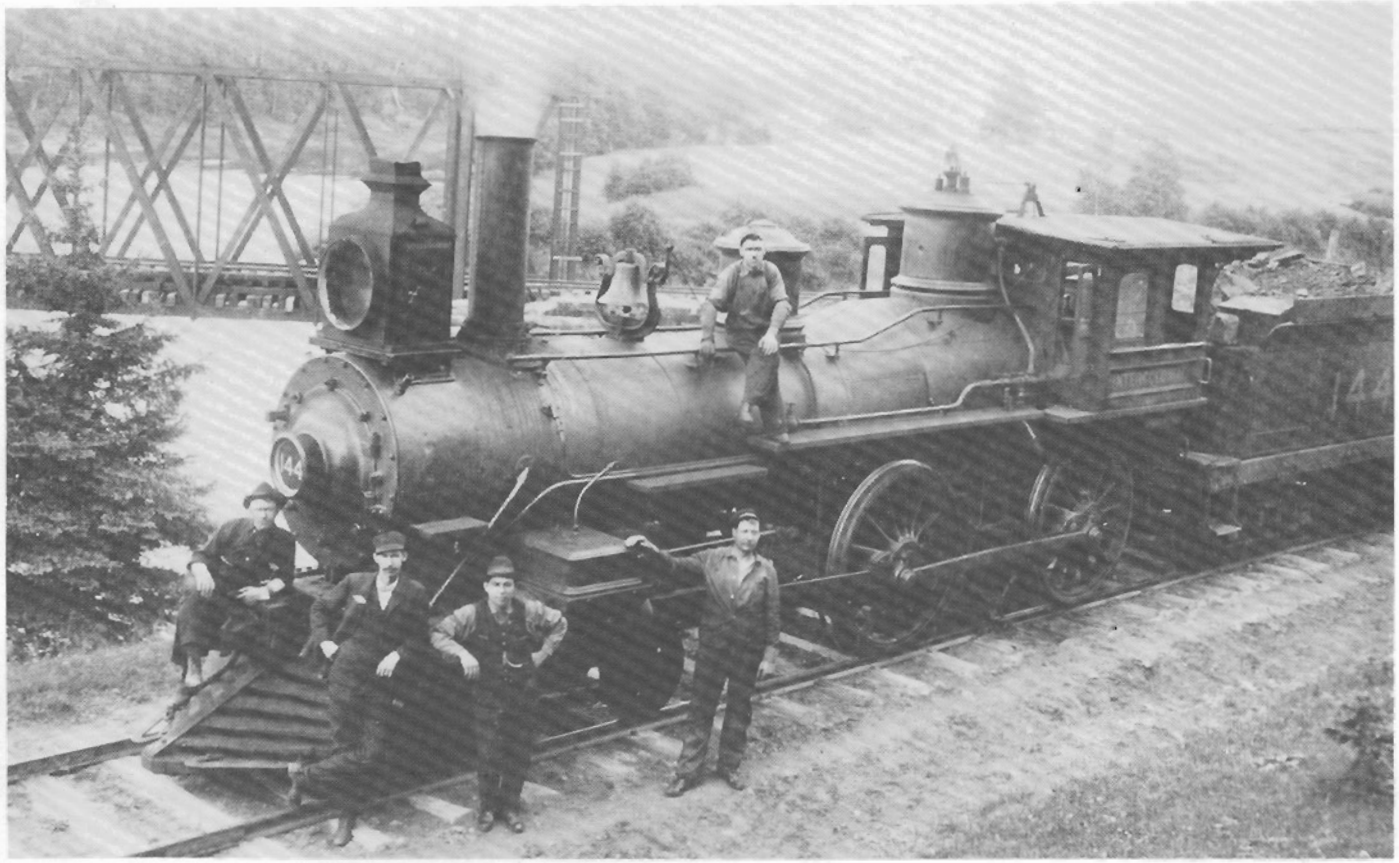

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FRONT COVER: Locomotive 144 of the Intercolonial Railway of Canada poses, with the train crew, some time in the 1890's. This classic 4-4-0 was built in 1883 by the Phoenix Foundry of George Fleming and Sons at Saint John, New Brunswick. No. 144 served the ICR for twenty-seven years, being retired and scrapped in 1910.

New Brunswick Museum / Le Musée du Nouveau-Brunswick. Gift of Brunswick Brock Allen, 1962.

As part of its activities, the CRHA operates the Canadian Railway Museum at Delson / St. Constant, Que. which is about 14 miles (23 Km.) from downtown Montreal. It is open from late May to early October (daily until Labour Day). Members, and their immediate families, are admitted free of charge.

The Phoenix Foundry of Saint John N.B. and George Fleming, Locomotive Builder Part 2 (1868 - 1954)

By Fritz Lehmann

After producing nine locomotives in the decade 1858-1868, the Phoenix Foundry did not build another until late in 1880. The firm continued to advertise its wide assortment of products, and regularly exhibited stationary steam engines, iron turning lathes, water pipe stop gates, iron work for ship's use, and the like. The firm won a public contract and built a steam fog whistle for Point Lepreaux in 1869, and was an unsuccessful competitor among the 33 firms bidding for work on the reconstruction of the Saint John Custom House in 1879, following the great Saint John fire of 1877. The Flemings were not directly affected by the fire which spared both the foundry and the homes of the owners. The Phoenix Foundry built a powerful 150 horse power engine (cylinders 36 1/2" diameter by 7'8" stroke) for the river steamer "May Queen" in 1869, reboilered the Dominion dredge boat at Saint John in 1878, and was invited to tender for the engine for a new steamship by the International Steamship Co. (Boston-Halifax-Saint John services) in 1871.

What happened to the locomotive business in this period? The political changes following New Brunswick's Confederation with other provinces into the new Dominion of Canada brought some economic consequences. The European and North American Railway (E&NA) and the Nova Scotia Railway were merged into the new Intercolonial Railway (ICR), and the major decisions were no longer made in the Maritime provinces but in Ottawa. The ICR bought locomotives in larger batches, beginning with orders for lots of 15, 15, and 10, and the men making the decisions did not know Fleming or his Foundry personally, unlike the original E&NA Comissioners. During the 1870's, the Intercolonial began a practice of selling outmoded locomotives to short lines and industrial users in the Maritimes. Thus the Intercolonial competed for the customers most likely to order locomotives one at a time, the kind of customer best suited to the productive capabilities of the Phoenix Foundry.[68] Indeed, a few of the Phoenix Foundry's customers for new locomotives in the 1880s did buy used locomotives from the ICR as well.

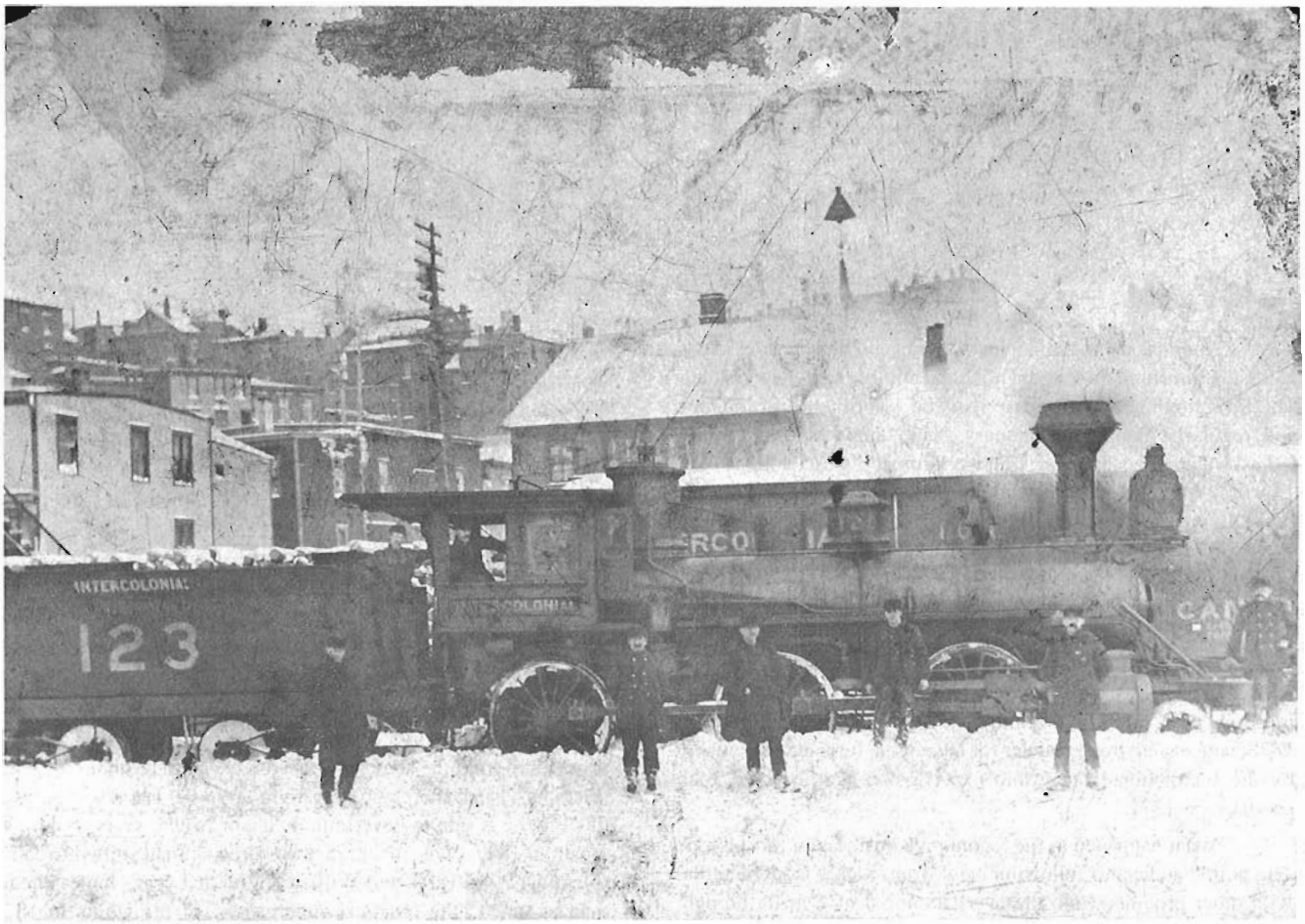
The closer economic ties with the other British North American colonies almost immediately brought competition in other areas to Fleming's door. In the summer of 1868, the Saint John papers carried big advertisements "To Millowners and Lumbermen", extolling what was claimed to be "The Best Shingle Mills in the World", offered by the Montreal firm of W. P. Bartley & Co., the St. Lawrence Engine Works.[69] And the Phoenix Foundry was still making and advertising:

"*Machinery for Saw and Grist Mills; also Castings and Machinery of the various descriptions required in carrying on the important industrial operations of the Lower Provinces . . .*"

This was an incursion into its traditional market.[70] The elimination of tariff barriers between provinces, and the steady growth of cheaper and more reliable transportation, began to produce something approaching a national market with more potential for specialised manufacturers of machinery (and other products). Fleming probably was not yet affected in 1868, but as the transport work continued to grow (for example, the completion of the Intercolonial Railway between Central Canada and the Maritimes in 1876), a number of his local customers undoubtedly began to turn to specialized products like the Bartley shingle mill. But for some years, the Phoenix Foundry continued to be a general producer of a wide range of goods.

Rather surprisingly, the Foundry had another try at locomotive building in the 1880's. This coincides with the gradual shift in leadership from the senior Fleming to his sons. Although George Fleming visited the plant daily right up to the last few months of his life, he is said to have retired "ten or twelve years" before his death in 1887. This meant that the direction had shifted to James Fleming, 39 in 1880, and William, 37 in that year. James already had assumed "the practical supervision" of the works in 1875, when William was said to attend to "the outside and financial matters of the firm." Both men had started work in the firm from very young ages, William from about 11 or 12 years old. The three men lived in rather modest houses on Hazen Street, within close walking distance of the works. After George Fleming's death, James moved away, but to Wellington Row, still a short walk from the works. It seems that their lives centered around the family firm. All three appear to have lived on a modest scale, and to have had few interests outside their work.[71]

In early 1878, the Phoenix Foundry employed 55 men and 5 boys at average wages of $6.50 (men) and $3.50 (boys) per week.[72] But by the end of 1878 the firm only operated three-fourths time, employment was down to 40. The depression of that year left the firm with idle capacity, probably encouraging the Flemings' bid for new Intercolonial locomotive contracts. Their success in getting a contract for nine locomotives--equal to their total previous production--meant they ran full time through 1880, including three months of overtime, kept 90 men employed.[73] The ICR had called for tenders by December 5, 1879, at which date the Flemings won a contract for nine Mogul (2-6-0) freight engines at $9,900 each, a total of $89,100. These engines, with 18" x 24" cylinders and 54" drive wheels, were larger than any previously built by the firm. When the last one was completed in June 1881, production had averaged one locomotive every two months.[74] The locomotives, of course, were built to ICR designs supplied from Ottawa.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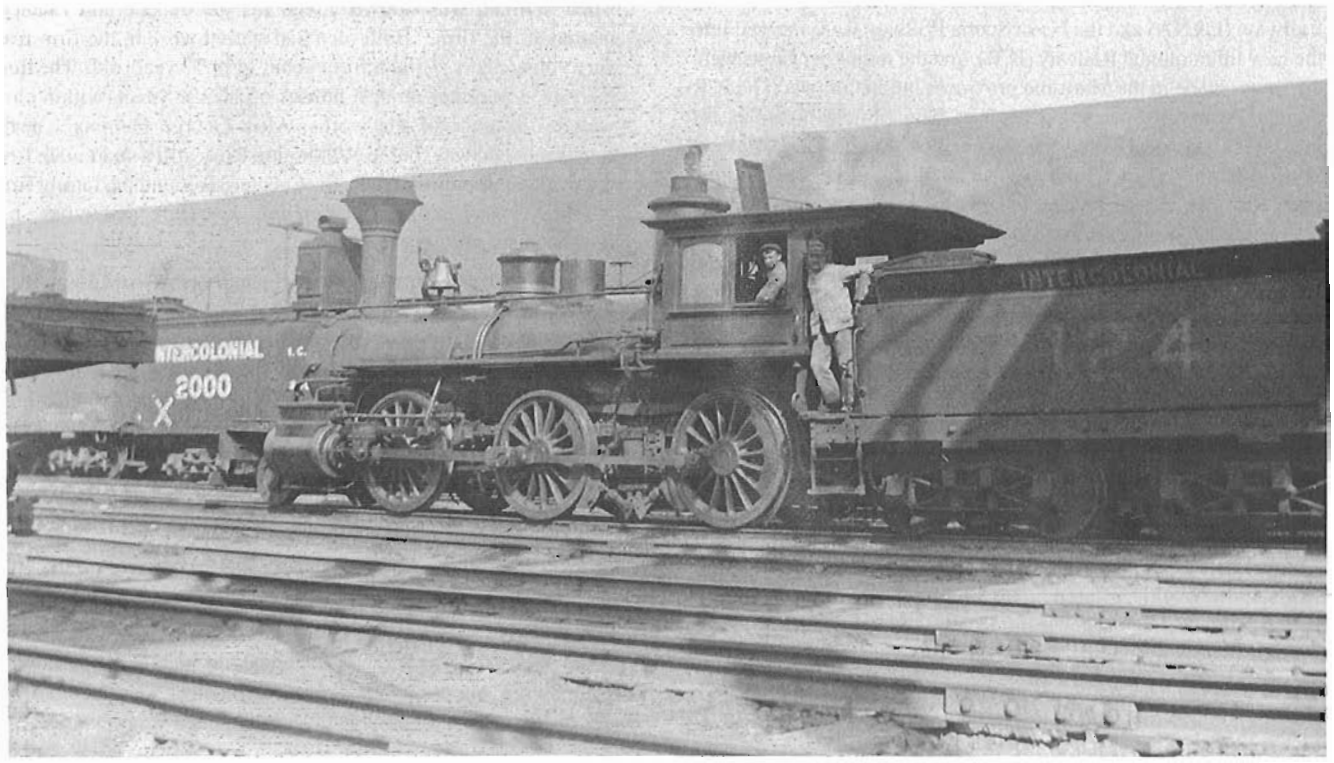
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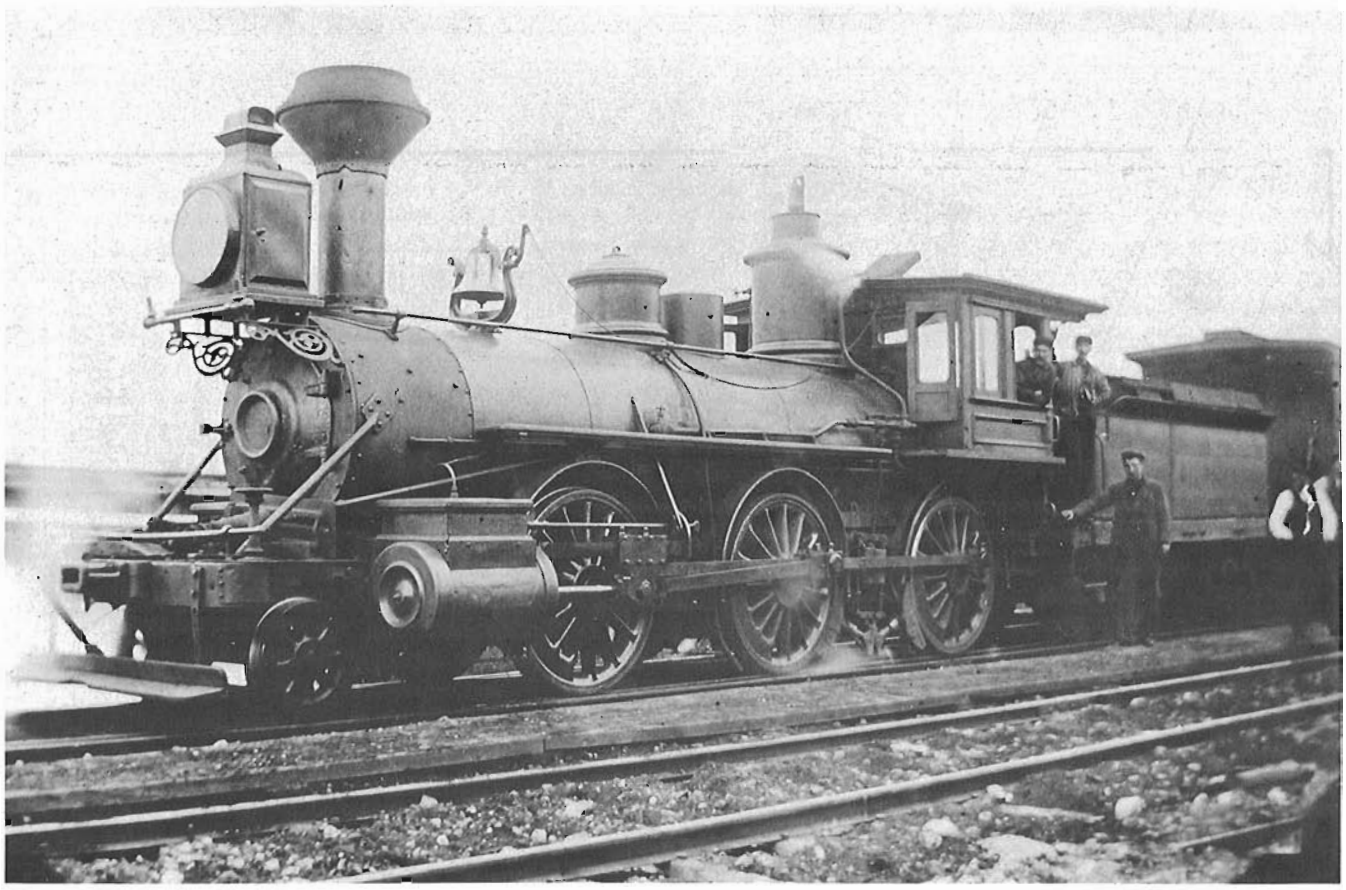


This began a busy and rewarding period for the Flemings. The partnership leased additional adjacent land, built some new buildings, and installed new machinery. The Saint John papers specifically mention one large shipment from Dundas, Ontario (presumably from McKechnie & Bertram, although the originating firm is not named) which included 4 lathes, a slotting machine, and a planer.[75] Lots of work meant full employment and satisfactory profits, and morale at the foundry seems to have been high. Upon completion of the first ICR contract for the nine 2-6-0's, the Fleming employees proposed a celebration. This was reported in the Saint John Daily Evening News of June 21, 1881 under the heading, "Iron Workers Pic-nic," and certainly implies an era of good feelings in the industry:[76]

"The iron workers in the city factories are arranging for a pic-nic to celebrate the completion of nine locomotives for the Intercolonial Railway. The idea originated with the workmen of Messrs. Fleming & Sons, who are making these locomotives, and the employees of James Harris & Co., E. R. Moore, and others in this line of work, have been asked to join the movement. The last locomotive of Messrs. Fleming's contract, and a number of the cars built by James Harris & Co. will be used for the occasion. Everyone will be pleased to see these skilled workmen enjoying a holiday, and riding in a train of cars drawn by a locomotive all made by themselves." [emphasis added.]

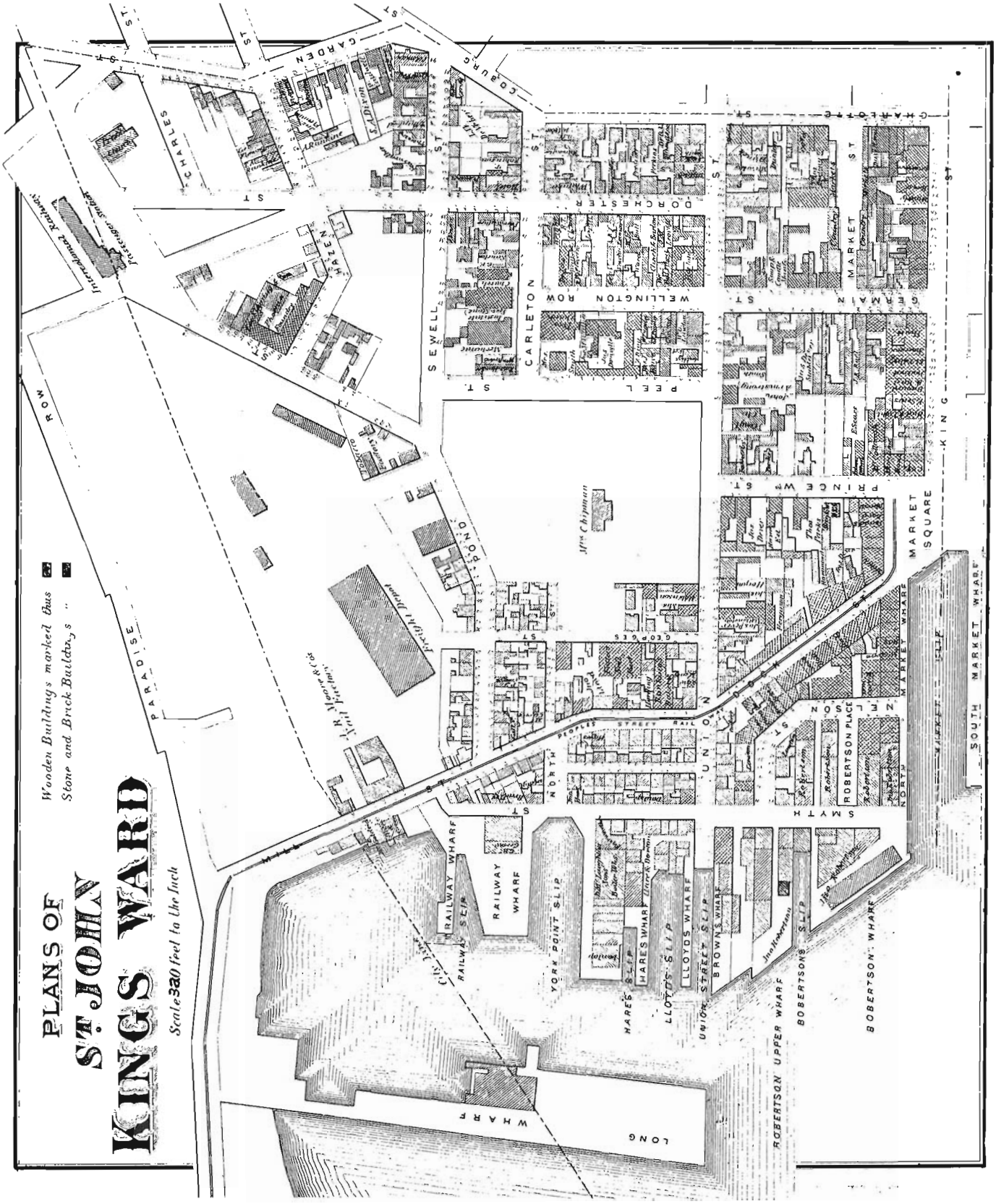
Fleming & Sons were bold in undertaking such a big contract, but they had done some locomotive work for the Intercolonial in the late 1870's that may have given both the Foundry owners and the Intercolonial confidence in their ability to handle a large order. In 1875-76 the firm had rebuilt four older broad gauge engines as part of the Intercolonial's program of converting to standard gauge operation. Some Intercolonial locomotives had been built to a design of the Grand Trunk's Richard Eaton which permitted easy

A TRIO OF MOGULS BUILT BY THE PHOENIX FOUNDRY AS PART OF THE ORDER FOR NINE LOCOMOTIVES FOR THE ICR.

OPPOSITE TOP: ICR 123, built in 1881, photographed in Saint John on a snowy day about 1890.
Photo courtesy of the New Brunswick Museum (gift of Charles A. Brown, 1967).

OPPOSITE BOTTOM: ICR 124 at an unknown location sometime in the 1890's.
National Archives of Canada, Merrilees collection, photo PA-185936.

THIS PAGE, TOP: Number 127 coupled to a freight train, and with all the crew present, ready to roll. This locomotive is the one that completed the order for nine, and was used on the "pic-nic" train in June, 1881. Note the pocket for the link and pin coupler. This dates the photo to the 1880's or early 1890's.
Photo courtesy of the New Brunswick Museum (collection of C. Warren Anderson).


PLANS OF
ST. JOHN
KINGS WARD
Scale 320 feet to the Inch
Wooden Buildings marked thus
Stone and Brick Buildings "
PARADISE ROW
CHARLES ST
GARDEN ST
COBURG ST
SEWELL ST
CARLTON ST
DORCHESTER ST
WELLINGTON ROW
PEEL ST
GERMAIN ST
MARKET ST
PRINCE WM ST
KING ST
MARKET SQUARE
SOUTH MARKET WHARF
ROBERTSON PLACE
SMYTH ST
NELSON ST
UNION ST
PEOPLES STREET
RAILWAY WHARF
RAILWAY SLIP
YORK POINT SLIP
HARES WHARF
HARES SLIP
LLOYDS SLIP
LLOYDS WHARF
UNION STREET SLIP
BROWNS WHARF
ROBERTSONS SLIP
ROBERTSON UPPER WHARF
BOBERTSON WHARF
LONG WHARF

conversion. Rebuilding the other locomotives, however, involved more extensive work. While average costs to adapt the locomotives designed to be convertible was $527.59 per engine, the cost of rebuilding the other locomotives including the four undertaken by Fleming was $2,886.55.[77] In the 1880's, Fleming & Sons did some more locomotive rebuilding for the Intercolonial. This work included an historically interesting job, a contract to alter and repair eight of the locomotives used by Andrew Onderdonk to construct the Canadian Pacific transcontinental line between Port Moody and Craigellachie, British Columbia between 1880 and 1885.[78] Comprising four 2-6-0 type locomotives, originally built for the Virginia & Truckee Railroad in 1869 and 1870, as well as four 4-4-0 type locomotives built by the Baldwin Locomotive Works for Onderdonk in 1884, the engines had seen hard use. After CP declined to purchase the locomotives, the Dominion government decided they would be used on the Intercolonial.

Contracts for rebuilding locomotives may have been profitable to the firm, but opportunities to build new locomotives were undoubtedly more satisfying. Before the 1879 order for nine 2-6-0's were completed, Fleming won another contract from the Intercolonial. On April 26, 1881 the Intercolonial gave Fleming & Sons an order for seven passenger locomotives, 4-4-0's with 17" x 24" cylinders, 69" drive wheels, to burn bituminous coal. The contract price was $10,200 each.[79] A little more than a year later, on June 26, 1882, the Intercolonial gave Fleming & Sons an additional contract for three more 4-4-0's.[80] A third order followed the next year when the Intercolonial was authorized by an order in council dated July 7, 1883 to purchase four "additional" locomotives from George Fleming and Sons.[81] The last two orders were repeats of the passenger locomotive, making fourteen in all of this design; a good thing for the Phoenix Foundry, which could economize by using the same patterns. One of these engines remained in service until 1925, an excellent longevity record for a locomotive of this era.[82]

With locomotives, boilers, and mill machinery filling the order books the firm kept 90 men employed in 1880-81, including three months of "extra time," and even so had to turn away work because the Foundry was running at "full capacity." Indeed, the firm was so busy that Fleming & Sons "were obliged to enlarge their works to provide for their increased business", according to a July 1881 report.[83] A New Brunswick firm, St. Martin's Manufacturing Company, complained that it had to order an engine and boiler from Brantford, Ontario, because all the Saint John foundries were too busy with other work.[84]

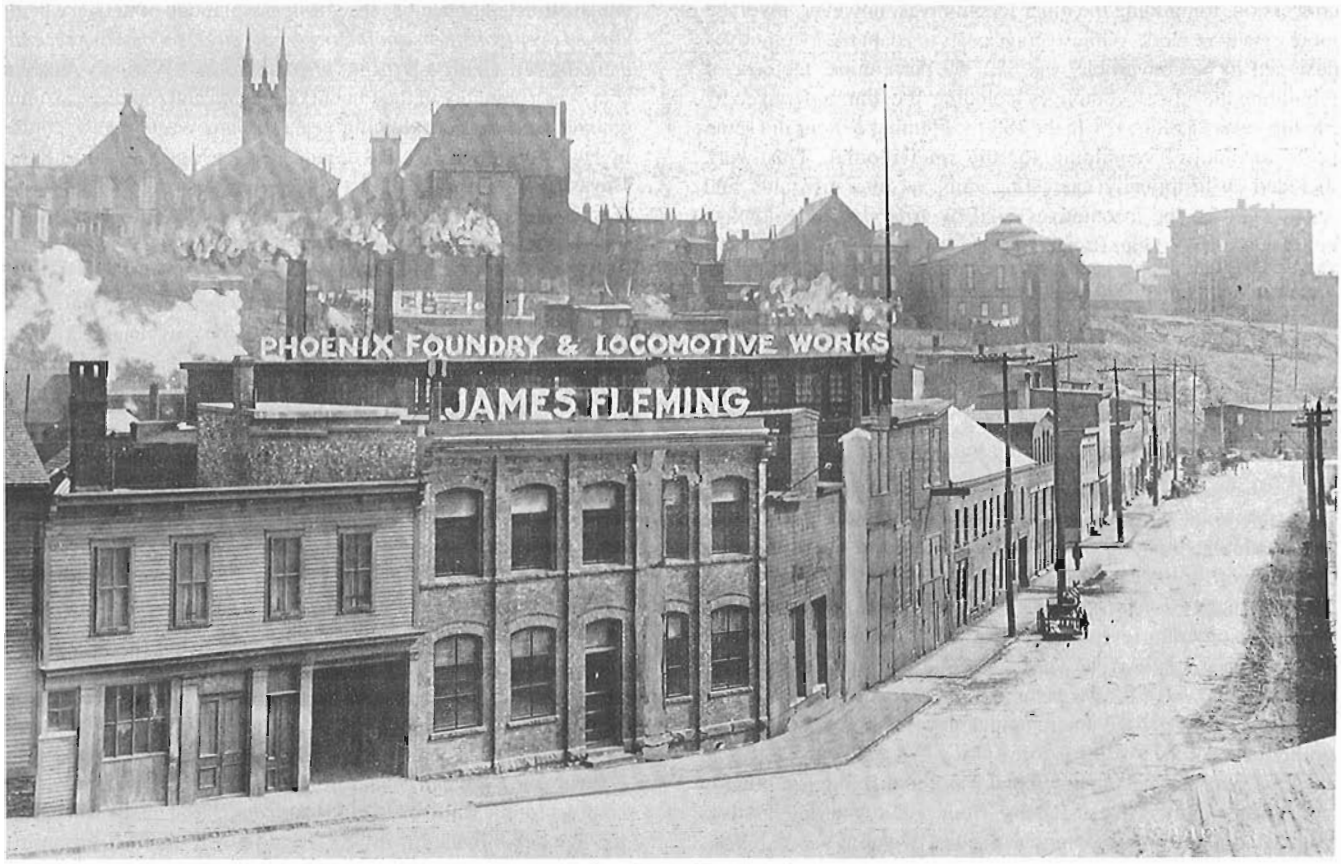
The first of the new passenger locomotives for the Intercolonial was completed in November 1881 -- only seven months after securing a contract that required all new patterns. Fleming & Sons ran the engine "out as far as Rothesay . . . on a trial trip."[85] But the Phoenix Foundry continued with other work. In August work was completed on a new boiler for the tug "Xanthus" which attracted notice because of its novel mode of delivery being "*towed over from the manufactory by the street locomotive recently made by Mr. George Waring, of Indiantown.*" Waring's machine shop was a neighbor of the Phoenix Foundry, and was an occasional collaborator. In the following year William Waring was "putting up" two Fleming horizontal engines for the Joggins Coal Mines in Nova Scotia.[86] Also in 1882, the Flemings built four boilers for the Saint John Cotton Factory, shipped two large boilers to a Halifax grain elevator, and supplied a boiler, "made with Glasgow steel," for the Saint John brass foundry of Messrs. McAvity. In 1883 Fleming & Sons displayed a "monster locomotive" and a 300 horsepower stationary engine for a mine at the Provincial Exhibition, built two large boilers for a new Prince Edward Island coastal steamer, and were reported to be enlarging their foundry and machine shops.[87] These improvements to the works continued, for the firm leased adjacent lots and put new buildings on them in 1885 and 1887. Employment levels, however, varied over the 1880's. There were only 62 (50 men at $6.50 per week, 12 boys at $2.50) in 1884, down to 30 in 1886, and back up to 80 (with an annual payroll reported at $30,000) in 1889.[88] Perhaps the enlargements were not so much devoted to increasing the firm's volume of production, but may have been necessary to enable it to handle technological changes and jobs that were physically larger.

The local press noticed very little of Fleming & Sons' work in the next few years; those they did were chiefly marine contracts. There were new shafts for the "May Queen", new boilers for the "Fawn" and "Western Extension" in 1884-85. The firm had the contract for the Railway Bridge Company's iron trestle work along the Saint John wharves in 1884, and an ICR contract for an iron footbridge and a wider road bridge over the railway line in Saint John in 1886.[89] The following year, Fleming & Sons had a $20,000 job at St. Fabien to build about one-third of a mile of iron snow sheds using 300 tons of old rails; for this work temporary machine shops were put up on the site.[90] In June 1885 the Daily Sun noticed that Fleming & Sons turned out two new locomotives for the Intercolonial "in the last two days" and would likely commence two more soon.[91] In 1886, the firm supplied four more 2-6-0's to the ICR. These were the last new engines it built for that railway.

While these were the last engines built for the Maritime trunk line, Fleming and Sons was able to continue building locomotives as it secured orders from the expanding number of short lines in New Brunswick and Nova Scotia. The first delivery of a Fleming engine to a short line had occurred in 1867 when the "St. James", a 4-4-0, was received by the St. Stephen Railway which ran from St. Stephen to Watt Junction, New Brunswick. After a gap of fifteen years, sales to short lines became a major portion of the company's business during the 1880's. As locomotive records of these companies are incomplete, the exact year of delivery is not known for all the locomotives which Fleming provided to the short lines (see roster on pages 198 and 199).

OPPOSITE PAGE: This map, from Roe and Colby's Atlas of Saint John, dated 1875, shows the location of George Fleming and Son's Phoenix Foundry. It is located at the corner of Pond and Hazen streets, less than 400 feet from the Intercolonial Railway station. George Fleming's house on Hazen Street also appears, about 400 feet to the right of the Foundry. The present-day VIA station is about on the site of the small rectangular building near the upper right corner of the large building labeled "Freight Depot". At that time the city limits of Saint John passed through a corner of the passenger station, for the ajoining town of Portland was not annexed to Saint John until 1889.

Collection of Fred Angus.



A view of the Phoenix Foundry about 1905. In the background can be seen "Stone" Church as well as the former library, both still standing today. The photo was likely taken from the roof of the 1884 freight shed, near where the VIA station is now.

Photo from the Partridge Island Research Project, courtesy of Harold Wright.

In 1882, the Cumberland Railway and Coal Company took delivery of a 2-6-0 for use on its line between Springhill and Parrsboro, Nova Scotia. In 1884, two locomotives were shipped to the Albert Railway, which operated between Salisbury and Albert, New Brunswick. The following year, the Elgin, Petitcodiac and Havelock Railway is believed to have received an engine for use between the New Brunswick settlements in its corporate title.

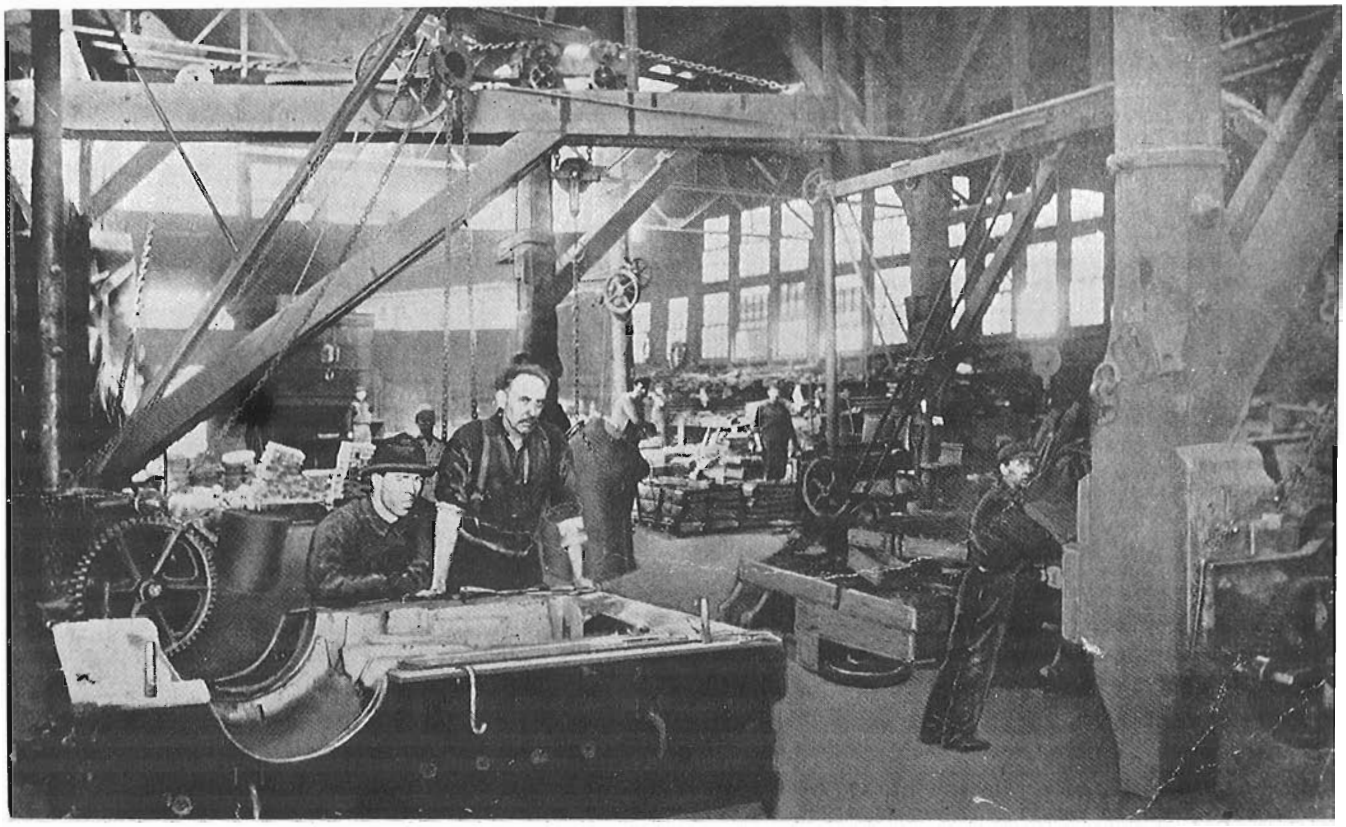
The year 1887 proved to be a banner time for short line locomotive orders. The Moncton and Buctouche Railway, which completed its line between these two towns that year, is reported to have been operating a Fleming locomotive in August 1887.[92] The Joggins Railway, which was completing its line from Maccan to Joggins, Nova Scotia, ordered a locomotive on May 3rd, 1887. It was completed by October 26th, 1887. The following day, the firm completed Central Railway Company of New Brunswick locomotive number 1.[93] The engine was used on the St. Martins and Upham Railway which had been leased by the Central Railway that year. In November 1887, it was reported that "two large moguls" were under construction for the Cumberland Railway and Coal Company. These engines were "nearly completed" in March and May of 1888.[94] In December 1887, another locomotive for the Central Railway was "about completed" and the frame for one of two additional 2-6-0 type locomotives for the Joggins Railway was reported as "already built[95].

The New Brunswick and Prince Edward Railway, which operated from Sackville to Cape Tormentine, New Brunswick, received a 4-4-0 in 1888.[96] This brought to an end the locomotive building era at Fleming & Sons.

It is estimated that Fleming built nine locomotives for Maritime short lines, giving a total of 51 Fleming built locomotives. In addition, the firm was kept busy with contracts to repair and rebuild locomotives. According to one source, the firm continued to do this work until as late as 1914.

Not all Maritime short lines chose Fleming products. The New Brunswick Railway, the largest railway in New Brunswick, chose to purchase locomotives from firms in Kingston, Ontario and Manchester, New Hampshire during 1885 instead of from Fleming.[97]

Notwithstanding the New Brunswick Railway's lack of confidence, the railways purchasing Fleming locomotives were enthusiastic. Mr. R.G. Leckie, Manager of the Cumberland Coal and Railway Company, told the Saint John Daily Sun in 1887 that Fleming & Sons were building locomotives for his line:[98]



A very rare view of the interior of the Phoenix Foundry about 1905. By this time the manufacture of locomotives had long since ceased. Photo from D. Black of Saint John, courtesy of Harold Wright.

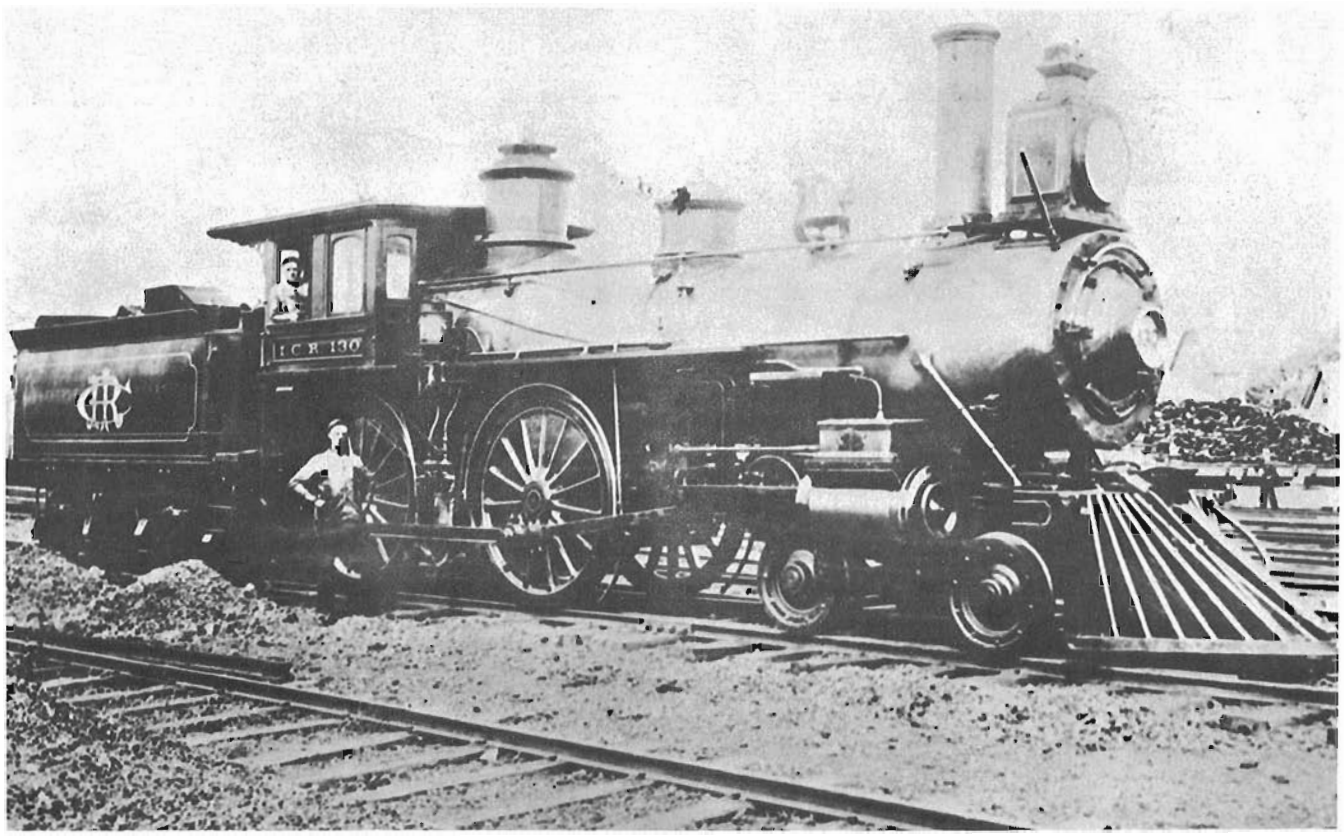
"They are building two large engines of the Mogul pattern, very heavy engines, with all the latest improvements. They will run on the line between Springhill and Pugwash. [Editor's note: The line to Pugwash was never built] *We had an engine from the works of Fleming & Son some years ago, and found it highly satisfactory. We considered it to be equal to any to be had in the States. I understand that the firm have* [sic] *been compelled to refuse orders and that if they chose to do so they could largely extend their operations. . . ."*

Again, we note the hint that the Flemings deliberately kept their scale of business down to a level compatible with a family-owned and operated business.

The year 1887 did see major changes in the Phoenix Foundry, however, for George Fleming died on July 26th, at the age of 87. His wife, Barbara Fleming, died on April 5, 1889 at age 80. The two sons who had been running the firm during his last years applied for probate, which provides us with a number of documents detailing the partnership and family affairs. James, the elder brother, was 46 and William 44. Their father had offered them a partnership back in 1860 (when he and Humbert still owned the Foundry together), to take effect in 1870. This was presumably an inducement to the sons, then both in their late teens, to stay in the family business. Two other sons apparently did not. Charles Fleming pre-deceased his father, and Robert W. Fleming was in 1887 described as a "Master Mariner" of Saint John, although he is not listed in the city directories of that era. A surviving daughter was married and living in Boston, Mass.

The sons who joined the firm, however, had to pay their way. The partnership agreement required them to purchase full one-third shares in the capital stock of the business, valued at $34,000. As well, they had to pay interest at 7% on the unpaid portions of their shares. Having complied with these terms, both sons were full partners at the time of George Fleming's death. That event, however, led to a chancery suit between James and William. This led to a court order to sell the business at public auction so that William could be paid out. James bought the business for $40,250 at the sale in Saint John on June 2, 1888. The partnership was dissolved, and thereafter he was the sole owner.[99] Shortly afterwards, William Fleming made preparations to start a new business for himself. He advertised for tenders to construct a brick machine shop on Charlotte Street Extension in Saint John, on July 24th.[100]

George Fleming had built up a considerable fortune by the time of his death. He had $32,000 in the Bank of Montreal, and held debentures of the Province of New Brunswick and of the City of Saint John and shares in the Saint John Gas Light Co., the Bank of New Brunswick, and the Prince Edward Island Steam Navigation Corporation. While Fleming had built up a solid fortune, he never spent much of it on himself.[101] His personal assets reflected his frugal life. His executors, all the adult family members, valued his



Intercolonial Railway No. 130 was an fine-looking 4-4-0 built by the Phoenix Foundry in 1881, one of a group of three similar locomotives. Note the ICR monogram on the tender.

National Archives of Canada, Merrilees Collection, Photo No. PA-184334.

house on Hazen St. at $1600 (and in the equity court sale by auction, one of them bought it for their mother for $800) and his personal property at $460. A gold watch at $100 topped the list, followed by "kitchen furniture & stove, 24 hour clock, hot air furnace" at $50; the sitting room and parlor each had carpets, and a microscope (valued at $20) and a terrestial globe ($5) rounded out the list.

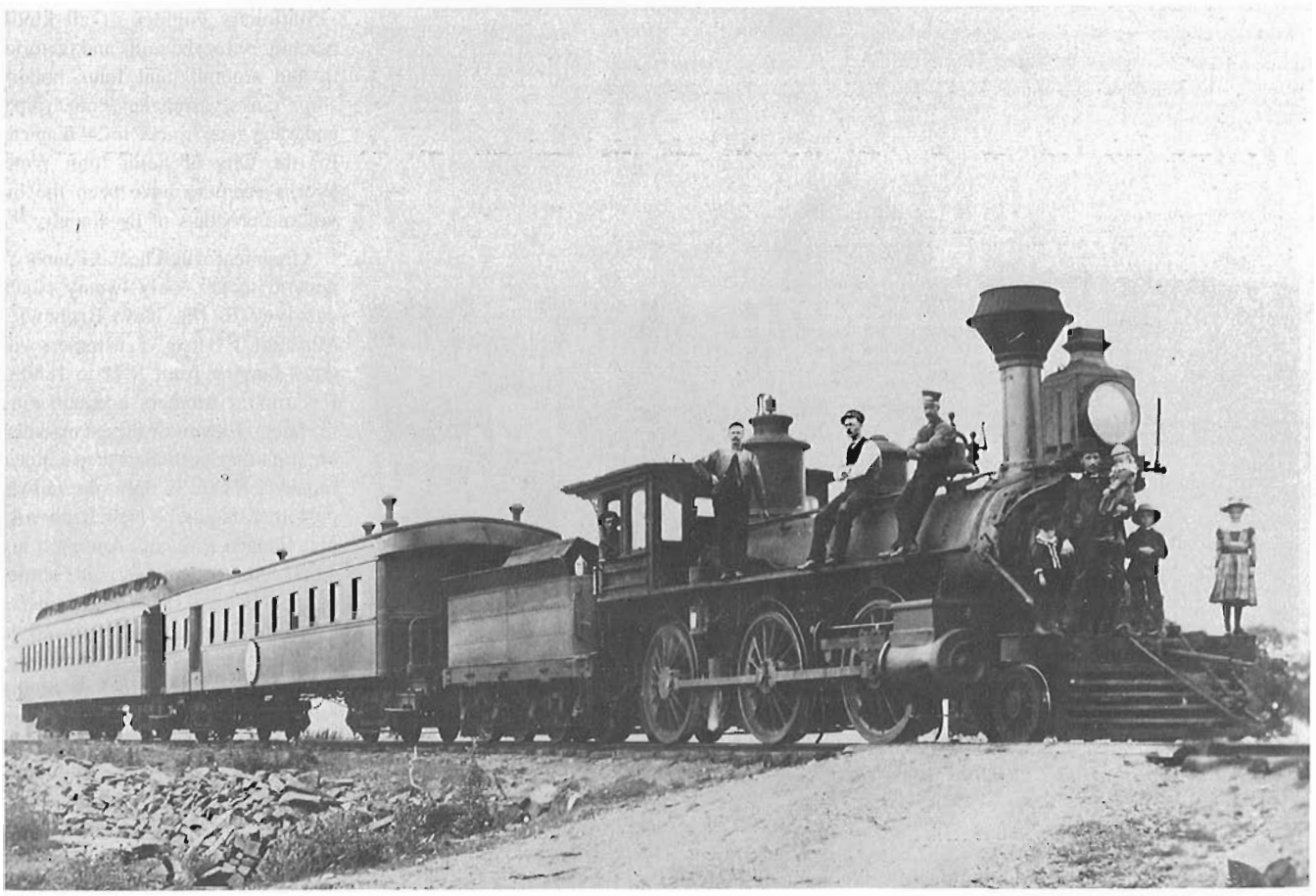
George Fleming "had always been noted for the kindness and consideration with which he regarded his employees," said his obituary writer.[102] One expects pious praise (or discrete silence) on such occasions, but Fleming seems to have enjoyed the support of a stable and loyal work force. In the last half of the nineteenth century, machinists and foundrymen were highly-regarded, skilled tradesmen; machinists' wages in St. John were usually among the highest paid of any trade. So although the ship labourers, the ship carpenters, and other groups were organized and sometimes went out on strike, as late as 1888 the Royal Commission on Labour was told by a Saint John machinist,

"*Machinists have no labor organization in St. John.*"[103] The only reference I have found to a labor dispute involving the Phoenix Foundry during George Fleming's lifetime was an event in 1872. On June 4th of that year, the Morning Freeman announced:

"*The boiler makers are out on "strike," the employers having refused to comply with the demand for an increase of wages.*"

The next issue announced that the major firms had settled with the men.[104]

The case of one firm which did not cooperate is instructive. John W. Fleming, no relation of George, had begun his Lower Cove Boiler Works in October 1868. He refused to give his men a general increase in wages in 1872, offering instead a selective raise for "those whom he considered worth it"; nor would he take back all the men who had gone out on strike. On June 25th, the papers reported his conviction for assault on Frank Williams, a union organizer, of the Boiler Makers Association. On July 1st, he sailed for Europe with his wife. After returning to Saint John at the end of August, Fleming advertised a new co-partnership with Charles Cochran (the former boiler shop foreman in the Halifax locomotive works of William Montgomery). The two new partners published their defiance of "a body of men styling themselves the Steam Boiler Makers' Association", who were apparently advocating a boycott of the Lower Cove Boiler Works. By 1874, both John W. Fleming and his Lower Cove Boiler Works were gone from Saint John.[105] The point of this is that George Fleming, a prudent and



A photo of the arrival of the first train into Dalhousie New Brunswick. The date was 1884, and the locomotive was one of the group of nine 2-6-0's built by Fleming in 1880 and 1881.

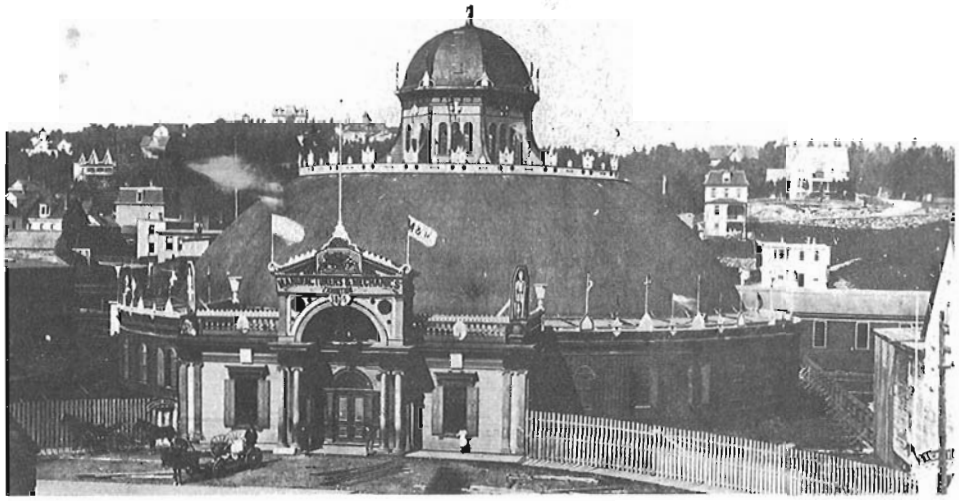
Canadian National Railways, Photo No. 48439-A.

successful businessman, rapidly came to terms with the only labour union reported in his firm in his lifetime, as did most of the other foundrymen. The one man who did not do so appears to have been a poor businessman, and did not long survive on the Saint John manufacturing scene.

A few stray notes point to positive feelings among Fleming's workers.[106] The Phoenix Foundry apprentices made a cannon in 1855 to fire salutes in celebration of the British victory at Sebastapol. The "Phoenix Battery" of apprentices also fired salutes for one of the fathers of Confederation, the Honourable S. L. Tilley, in 1867 and H.R.H. Prince Arthur in 1869. Three apprentices were injured in 1874 while firing such a salute on William Fleming's wedding day, a holiday for the Foundry's workers. "*At the request of the injured men, Mr. Fleming, who left with his bride on the Western train . . . received no word of the affair.*" The men of the Phoenix Foundry carried "a splendid silk banner" in the 1860 parade for the Prince of Wales' visit to Saint John. The European and North American Railway named a locomotive which Fleming delivered to them that year for the royal visitor. We have already noted the holiday "pic-nic" in June 1881, celebrating the completion of the first ICR locomotive contract.

Unlike almost all the other Canadian locomotive builders, George Fleming took part in neither civic politics nor church affairs. In the 1840's and 1850's, he had cooperated with Harris & Allan and other foundrymen to ask for protective duties from the New Brunswick government. In 1872, George Fleming & Sons cooperated with Harris, the Allan brothers and other foundrymen in setting a new price schedule for castings which increased their prices from 4 1/2 to 7 cents per pound.[107] The firm participated in a Saint John manufacturers' meeting against the reciprocity treaty in 1874; an unspecified Fleming spoke in favor of the "N.P." ("National Policy" of protective tariffs) at a city mechanics and manufacturers meeting in 1882; and James Fleming appeared at a city protest meeting against the use of Canadian mail subsidies to benefit American ports.[108] George Fleming, to use a modern idiom, kept a low profile in public life.

Fleming was active in public exhibitions which gave him a chance to show off his work. He sent a small, 5 horsepower oscillating steam engine to London's Great Exhibition of 1862 and won a certificate of honourable mention. At "The Exhibition" held in Saint John in 1867, Fleming and Humbert won prizes for the best steam engine and the best lathe for iron. The firm of George



The Victoria Rink, on City Road in Saint John, decorated for the Manufacturers and Mechanics Exhibition of 1875. Fleming and Sons had an ambitious display at this exhibition. The present-day Colonial Inn occupies part of the site of this rink.

Photo from the Hall Collection of the Partridge Island Research Project. Courtesy of Harold Wright.

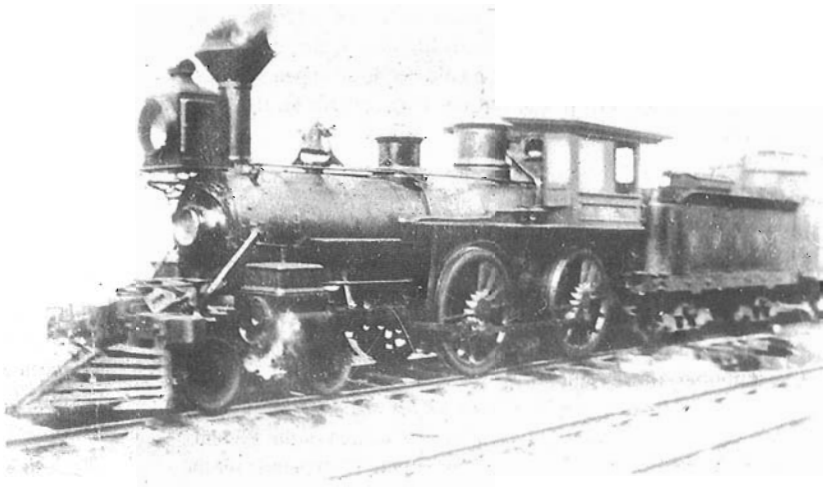
Fleming & Sons had a more ambitious display at Saint John's Manufacturers' and Mechanics' Exhibition of 1875, as they provided the large horizontal 25 horsepower engine that drove all the machinery on display. The 5 horsepower engine from the 1862 English fair was used as a feed water pump for it. The Phoenix Foundry also displayed iron columns for the new City Market, built in 1876 and still in use, water gates or stopcocks, propeller wheels, parts of steam engines, a general assortment of machinery casting, and "specimens of finished work". William Fleming showed improved blacksmith's tools, and James Fleming was on the exhibition's machinery committee.[109] We have already noted the "monster locomotive" and large stationary engine which the Flemings exhibited at the 1883 fair.

Locomotives brought prestige and profit, but the variety of products shown at these exhibitions remind us that the firm's long term success depended on the more humble goods it produced. The skills might show to advantage in the locomotive field - for example, when an admiring Saint John audience was told of the E&NA locomotive "Robert Jardine" in 1868 that:[110]

"It may be somewhat of a novelty to our readers to state that all the spokes of the [driving] *wheels are hollow, thus giving at one and the same time lightness and strength to these whirling mediums of progression."*

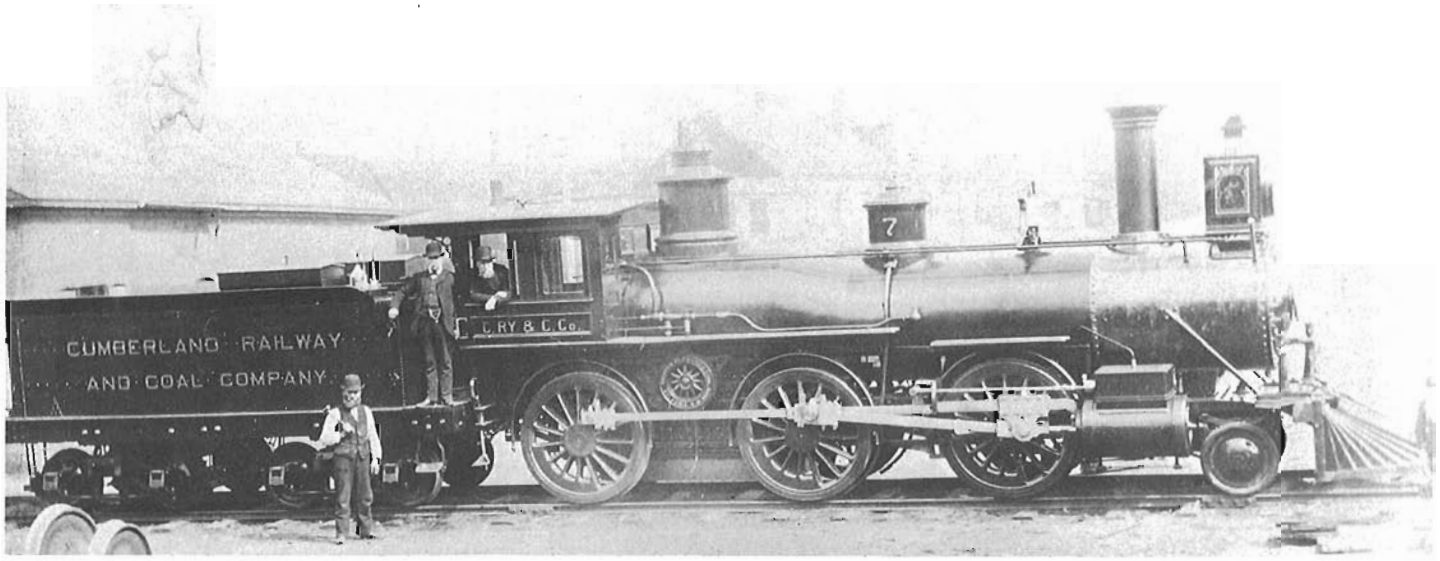
Stationary engines of all kinds, machinery for the mills and factories in and around Saint John, boilers, ships' tanks, gasometers, branch pipes and water gates from 3" to 24" diameter for the City of Saint John Water Works seem to have been the big volume products of the foundry.[111]

A fragment of the Phoenix Foundry's general ledger, only twenty pages, survives in the New Brunswick Museum.[112] It lists 35 customers with dates ranging from 1871 to 1880 (a few minor customers' accounts run a bit later). Eleven of these customers are ships that had boilers or machinery repaired. There is only one railway customer listed, the New Brunswick and Canada Railway. Among a few small items, this railway paid Fleming $216.71 in April 1871 for "cylinders." The City Corporation both taxed the firm and used its services, spending $180.36 for repairs to Fire Engine No. 2 in 1878. Kirk & Daniel bought a $2200 horizontal engine on installments in 1875, Alexander Barnhill bought another in the same year for $1500, while Dearborn & Co. bought a horizontal tubular boiler in 1878 for $560. Simeon Jones, later a mayor of Saint John, paid $540 for a "locomotive tubular boiler" for his brewery in 1878, also paying Fleming to have his old boiler taken out. The Coldbrook Rolling Mills of James Domville & Co. were big customers, taking $8337.74 worth of engines, boilers, girders, etc. with the most



Moncton and Buctouche Railway No. 2, a 4-4-0 built by Fleming's Phoenix Foundry in 1887.

National Archives of Canada, Merrilees Collection, Photo No. PA-185767.



A fine example of the locomotive builder's art is Cumberland Railway and Coal Company No. 7. This was one of the last locomotives built at the Phoenix Foundry, and dates from the period when the orders from the Intercolonial had stopped, so all of Fleming's locomotive construction was for short lines. In the original photo the inscription on the circular builder's plate (between the last two pairs of driving wheels) is visible and reads: "GEORGE FLEMING & SONS ST. JOHN, N.B. 1888".

National Archives of Canada, Merrilees Collection, Photo No. PA-185769.

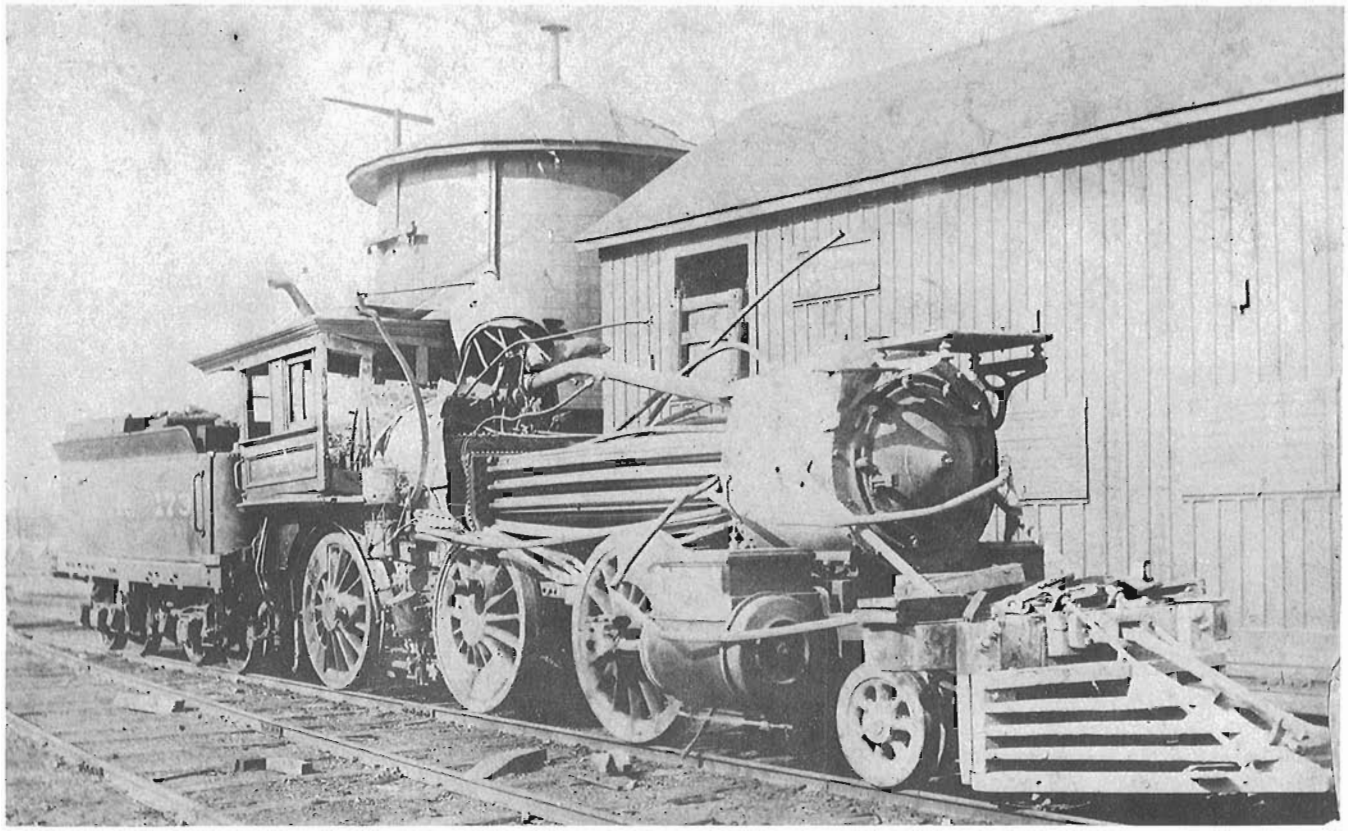
expensive single item a large cast shears with engine attached, $1660. The bed for this was one of the Foundry's larger castings, 17,000 lbs.; a five-ton spur wheel and pinion for this firm was one of Phoenix Foundry's 1875 exhibition displays.[113]

The ledger pages are only a fragment, and can't give us any idea of the whole scope of the Phoenix Foundry's business in the decade of the 1870s. But they demonstrate convincingly why the firm was interested in locomotive building. Any single locomotive which the firm built brought in far more revenue than any of the customers recorded here.

James Fleming's first impulse on assuming control of the business in 1888 was to advertise in his own name: "JAMES FLEMING, Successor to George Fleming & Sons" with notices that the firm would continue to do business "*at the same place, in my own name and on my own account.*"[114] This is understandable enough! A new innovation, was his decision to run the new locomotive for the Central Railway out of the works under its own steam. Although the firm had been making locomotives for three decades, this had apparently never been done before, and the account in the Daily Sun of Oct. 27, 1887 makes it clear why not:

"*It was a novel sight to witness a huge new locomotive go out under full steam . . . through the doors of Fleming's foundry on a track laid for the purpose . . . . To make clear the real difficulties to be overcome, it must be stated that the track running out of the foundry was at right angles with the side track, and that the latter again made too great an angle of junction with the yard track to admit of the use of a frog and switch. Yet, by one head and a dozen pairs of hands, the transfer was accomplished. The head sits upon the shoulders of James Fleming, and the hands were those of his employees. The engine steamed out of the shop upon a cradle (two rails bolted together and laid upon small iron rollers) and the latter with its burden was quite easily turned around so that the engine was....in line with the side track.... The whole thing was easy when one saw it done....The plan was bold, and not less skillfully executed. Had it failed, a 40 ton engine would have been removed at a very considerable cost of time and money....*"

The remarkable aspect of this event is that it reveals that for all those years, the Phoenix Foundry had never bothered to make a direct rail connection to the European and North American Railway or its successor, the Intercolonial. The Foundry had been in business on the site long before the railway came to Saint John, but unlike some awkwardly-located locomotive builders (such as Fleming's Halifax contemporary, William Montgomery), the railway came virtually to the Foundry's door. In the twentieth century, visitors noted direct rail connections existed. Eventually the street the Foundry was located upon, Pond St., was renamed Station St. The original Mill Pond for which the street had been named had been filled in during 1872 when an extension to the railway station was built on the site.[115] "Locomotive Works" had been added to the Foundry's popular title as early as 1862, without the firm feeling any need to get a railway line laid into the plant.[116]

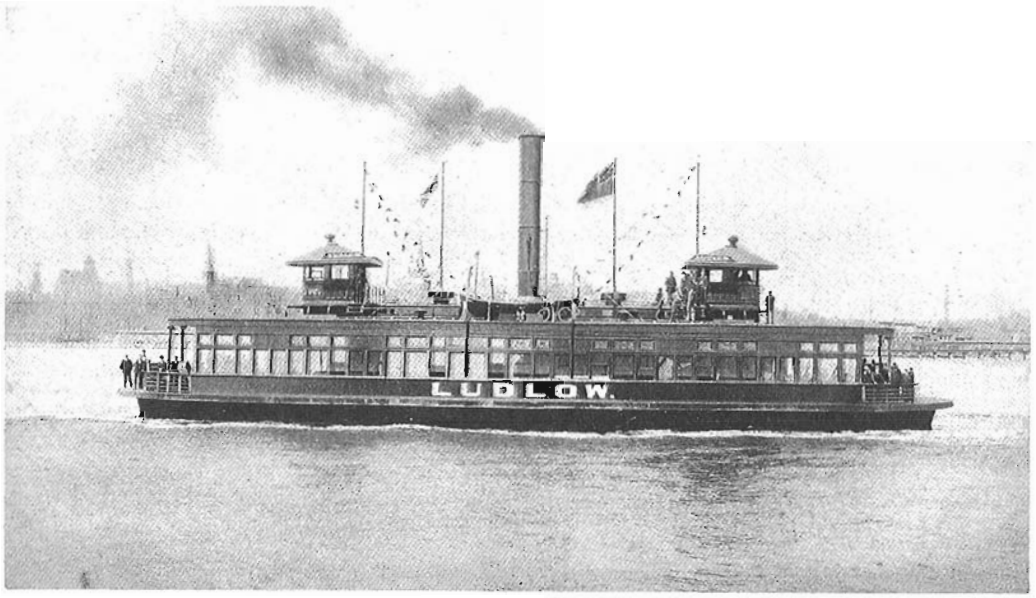


A sad end to a Fleming locomotive! The last locomotive built by Fleming for the Intrecolonial Railway was No. 173, a 2-6-0 built in 1886. On the morning of September 8, 1892 it was leaving Stellarton Nova Scotia for Pictou with a coal train when its boiler exploded. The locomotive was so badly damaged that it was scrapped. See page 179 of Canadian Rail No. 430, September-October 1992, for details of this accident.
National Archives of Canada, Merrilees Collection, Photo No. PA-164735.

It is surprising that the Phoenix Foundry's building of new locomotives came to an end within two years of George Fleming's death. Was James Fleming unwilling, or more likely unable, to get more contracts from the railways? In 1888 he supplied much of the iron work for the new railway bridge at Fredericton, repaired two locomotives for the Intercolonial Railway and one for the Chatham branch. The last was completely rebuilt with a new boiler. In 1889, James appeared on the platform at "a magnificent mass meeting" in the Mechanics' Institute to support the mayor's call urging Canadian steamship subsidies to support Canadian ports winter and summer -- a special Saint John interest. That same year, he joined the Saint John Board of Trade and was elected a director of the Mechanics' Institute. A profile of the firm in the Daily Sun that year said their payroll the previous year had been $30,000 and that 80 men were currently employed, about the same number of men and same amount of wages for the preceeding twenty years. Much of the stock, boiler plate, boiler tubes, etc. was then imported from Scotland, but pig iron and bar iron came from the Londonderry, Nova Scotia works. Later in 1889, Messrs. Fleming and Sons were reported to be converting a steam railway crane into a dredging machine with mussel digger "*similar to those used in Boston harbor . . . superior to the ordinary spoon dredge*" for the Intercolonial Railway. But the firm's biggest project of that year appears to be the rebuilding of the engine of the steamer "Flushing" as a compound to a design by James Fleming, with cylinders 20" and 38" in diameter with a 22" stoke which produced 400 horsepower.[117]

The firm went more heavily into the marine engine area in the following years. James Fleming died in 1899, and was succeeded by his three sons George W., Herbert J., and Walter M. Fleming. The firm was described in 1903 as employing between 130 and 150 men, and performing largely steamboat and mill work.[118] By the 1920s the Phoenix Foundry was in the internal combustion engine business, making Mianus engines in one or two cylinder sizes, producing 3 to 15 horsepower, for Bay of Fundy fishing boats.[119] Lloyd's Register of Shipping listed "James Fleming" of Saint John as a shipbuilder and an engine and boiler builder through the 1922-23 volume. George W. Fleming, apparently the last Fleming to manage the Foundry, died on January 9th, 1932. The Foundry itself went out of business sometime afterwards, and the remaining building, used as a warehouse by Thorne's Hardware, Ltd., was destroyed in a fire in December 1954. The last survivor of the Fleming foundrymen, Walter M. Fleming, celebrated his 78th birthday in Saint John in 1956 with reminiscences of the E&NA locomotives and the glorious past of his family's business. His memories, or perhaps his interviewer's interest, were more focussed on the mid-nineteenth century than the mid-twentieth.[120]

Special thanks to Mary Allen for typing this manuscript.



One of the last major contracts awarded to the Phoenix Foundry was for the steel hull, boilers and engines of the ferry boat "LUDLOW" (named after Gabriel Ludlow, the first Mayor of Saint John) which served as an important transportation link across Saint John harbour from 1906 to 1930, when it was replaced by a new vessel named "LOYALIST". The top photo shows the ceremony of the launching of the "LUDLOW" in 1906, while the bottom photo, from a postcard mailed in 1907, shows it under full steam. In the photo of the launching, we see, standing just under the rudder, Dr. Walter W. White, Mayor of Saint John, and Mrs. White. The ceremony of launching was performed by Mrs. White; very appropriate since she was the daughter of Howard D. Troop, a noted shipowner of Saint John. Dr. and Mrs White were the grandparents of your editor.

Both photos from the collection of Fred Angus.

NOTES - PHOENIX FOUNDRY AND GEORGE FLEMING (PART 2)

68 e.g., Halifax Morning Chronicle, May 26, 1875, advertisement "Intercolonial Railway - OLD ENGINES FOR SALE . . ."

69 e.g., Saint John Morning Telegraph, July 23, 1868, advertisement with two illustrations of machines.

70 e.g., Saint John Morning Telegraph, "The Workshops of Saint John: The Foundries," Jan. 26, 1867, says of Fleming & Humbert: "Here are manufactured . . . stationary steam engines and boilers, machinery for saw and grist mills; also castings and machinery of the various descriptions required in carrying on the important industrial operations of the Lower Provinces."

71 James Hannay (1875), op.cit. [see footnote 1]. George's house at 51 Hazen has been torn down, the others were still standing in 1981--58 Hazen (James) and 66 Hazen (William). When all three men still lived on Hazen street, a local reporter indicated that it was far from a fashionable part of the city: "And Hazen avenue is by no means beautiful. A good many of the buildings are strangers to paint; some of them are decidely odorous . . ." - in "Mr. Tysick, Inventor and Machinist," Saint John Daily Sun, Sept. 23, 1886.

72 Parliament of Canada, Sessional Papers, 1885, no. 37 - Manufacturing Industries, pp. 148-149.

73 Saint John Daily Sun, July 19, 1881.

74 Parliament of Canada, Sessional Papers, 1882, no. 81 - Intercolonial Ry., pp. 10-11; Fleming's price on this contract was $400 per locomotive lower than his only Canadian rival in Kingston, Ont. 27 British and 12 American firms were invited to bid on this business in competition with the 2 Canadian firms.

75 Saint John Daily Sun, July 9, 1881 for the new machinery. Even the Montreal Gazette mentioned that "Their foundry is to be enlarged to facilitate work" in connection with the ICR locomotive contracts, April 26, 1881.

76 Saint John Daily Evening News, June 21, 1881.

77 Parliament of Canada, Sessional Papers, 1877, no. 6 - Public Works, appendix, p. 178.

78 Saint John Daily Sun, Aug. 31, 1887.

79 Parliament of Canada, Sessional Papers, 1882, no. 8 - Railways and Canals, appendix p. 147.

80 Ibid., appendix p. 123.

81 Ibid., 1885, no. 11 - Railways & Canals, appendix p. 154.

82 A. Clegg & R. Corley, Canadian National Steam Power (Montreal, 1969), p. 68.

83 Saint John Daily Sun, July 19, 1881.

84 Saint John Daily Evening News, Nov. 16, 1881.

85 Saint John Daily Sun, Nov. 16, 1881.

86 Saint John Daily Evening News, Aug. 18 & Sept. 18, 1882.

87 Saint John Daily Sun, Nov. 24, 1882; Daily Evening News, Sept. 13 & Dec. 19, 1882; Mar. 5 & 8, Apr. 24, & Oct. 6. 1883.

88 For the real estate leases see New Brunswick Archives, Supreme Court in Equity, Fleming vs. Fleming, decree and report May 11, 1889. For employment and wages see Parliament of Canada, Sessional Papers, 1885, no. 37, pp. 148-149; Saint John Daily Sun, Jan. 8, 1887; Apr. 3, 1889.

89 Saint John Daily Evening News, Mar. 12, 1884; Daily Sun, Feb. 22 & 23, May 26, 1884.

90 Moncton Times, Sept. 14, 1887; St. John Daily Sun, Aug. 23, 1887.

91 Saint John Daily Sun, June 25, 1885.

92 Saint John Daily Sun, Aug. 20, 1887.

93 Saint John Daily Sun, Oct. 26 & 27, 1887; Moncton Times, Oct. 28, 1887.

94 Saint John Daily Sun, Nov. 16 & Dec. 28, 1887; Mar. 24 & May 24, 1888.

95 Saint John Daily Sun, Dec. 28, 1887.

96 R. F. Corley manuscript notes on Canadian National Railways motive power records.

97 Saint John Daily Sun, Sept. 4 & Oct. 2, 1885.

98 Saint John Daily Sun, Nov. 16, 1887.

99 For partnership terms etc. see Supreme Court in Equity file, footnote 88. Bidding for the foundry started at $20,000 and "was very brisk" until James' successful bid, according to one report. Fredericton Capital, June 9, 1888.

100 Saint John Daily Sun, April 5 & 10, July 24, 1889.

101 Supreme Court in Equity file, cited footnote 88.

102 Saint John Daily Sun, July 27, 1887.

103 Saint John Daily Sun, Mar. 21, 1888. Note that Sheet Iron & Tin Plate Workers had a successful strike for higher wages in 1866 (Morning Telegraph, Sept. 4, 1866), the same year that the ship carpenters' strike closed the Saint John shipyards; railway construction workers had struck work unsuccessfully in 1858 (Morning News, May 5, 1858). The absence of a machinists' union can not be explained by total ignorance of labor organization in 19th century Saint John.

104 Saint John Morning Freeman, June 4 & 6, 1872; see also Daily News, June 4 & 6, 1872.

105 Saint John Morning News, Oct. 12, 1868; Morning Freeman, June 6, June 25, July 2, Aug. 27, 1872; Telegraph-Herald, Sept. 23, 1872; Daily News, Sept. 25, 1872; and McAlpine's St. John City Directory, 1869/70, 1870/71, 1872/73, and 1874/75.

106 Saint John Morning News, Aug. 6, 1860 & Apr. 3, 1867; Morning Freeman, Sept. 9, 1869; Daily News, Aug. 28, 1874.

107 Saint John Daily News, Sept. 25, 1872.

108 Saint John Daily News, Sept. 3, 1874; Daily Evening News, June 15, 1882; Daily Sun, Nov. 12, 1886.

109 Saint John Morning Telegraph, Jan. 26, 1867; Morning News, Oct. 14 & 16, 1867; Daily News, Sept. 29, Oct. 6 & 8, 1875.

110 Saint John Morning News, "The New Iron Horse," June 29, 1868.

111 James Hannay (1875), op. cit.; N.B.Museum, Ward's Historical Scrapbook, op.cit. [both cited footnote 1]; Saint John Daily Sun, April 3, 1889.

112 New Brunswick Museum: Phoenix Foundry Ledger (shelf 61).

113 Saint John Daily News, Sept. 29, 1875.

114 Saint John Daily Sun, June 15, 1888 and following issues.

115 Saint John Daily News, June 14, 1872.

116 see footnote 27.

117 Saint John Daily Sun, Feb. 15, March 24, May 17 & 24, July 12, Oct. 24, all 1888; March 3 & 30, April 3 & 9, May 17, Aug. 10, all 1889; and N.B. Museum, Ward's Historical Scrapbook, op.cit.

118 The Book of Saint John (Saint John: Telegraph Publishing Co., n.d., c.1903), p. 95.

119 New Brunswick Museum CB file: William Easton, "My Recollections of Quoddy Bay," The Quoddy Times, Eastport, Maine, USA, May 14, 1976.

120 New Brunswick Museum CB file: "Foundry Building on Station Street," Saint John Telegraph-Journal, Dec. 20, 1954; "The Man on the Street," Saint John Evening Times-Globe, Feb. 21, 1956.

RIGHT: How have the mighty fallen, or, from locomotives to popsicles. This photo, taken on June 1, 1992, shows what now occupies the site of the Phoenix Foundry - a popsicle factory. Sic Transit Gloria Mundi!

Photo by Fred Angus.

LOCOMOTIVES BUILT BY THE PHOENIX FOUNDRY

SEQ. NUM	TYPE	CYLS.	DRIV.	DATE BUILT	ORIGINAL IDENTITY	SUBSEQUENT HISTORY
1	4-4-0	14 X 22	66	AUG 1858	E&NA 8 "**Loostauk**"	ICR 31. Sold to J.H. Beatty of Toronto Ont. in 1882.
2	4-4-0	15 X 22	60	JUN 1859	E&NA 9 "**Ossekeag**"	ICR 32. Sold to CPR in 1878 (?).
3	4-4-0	15 X 22	60	AUG 1859	E&NA 10 "**Apohaqui**"	ICR 33.
4	4-4-0	15 X 22	66	JUL 1860	E&NA 12 "**Prince Of Wales**"	ICR 34. Sold to J.H. Beatty. Resold to Fullerton Bros. Lumber Mill, Little Forks N.B. Scrapped in 1887.
5	4-4-0	15 X 22	66	NOV 1860	E&NA 13 "**Norton**"	ICR 35. Sold to CPR in 1878 (?).
6	4-4-0	15 X 22	66	JUL 1861	E&NA 14 "**Prince Alfred**"	ICR 36. Sold to Cummings of New Glasgow N.S. in 1898.
7	4-4-0	15 X 22?	63?	JAN 1867	St.S.B.Ry. "**St. James**"	Sold to N.B. Ry. (No. 15) in 1890. Became CPR 492 in 1891. Scrapped in 1895.
8	4-4-0	16 X 24	60	JUN 1868	E&NA 15 "**Robert Jardine**"	ICR 37. Sold to J.H. Beatty in 1880.
9	4-4-0	16 X 24	60	AUG 1868?	E&NA 16 "**The Bear**"	ICR 38. Sold to J.H. Beatty in 1880.
10	2-6-0	18 X 24	54	OCT 1880?	ICR 119	Rebuilt as 0-6-0. Sold to A.E. Peters in 1899.
11	2-6-0	18 X 24	54	1880	ICR 120	CGR 1017. Rebuilt as 0-6-0. Scrapped in 1917.
12	2-6-0	18 X 24	54	1880	ICR 121	Sold to Moncton & Buctouche (first No. 1) in 1887. Wrecked Feb. 20, 1914.
13	2-6-0	18 X 24	54	JAN 1881	ICR 122	CGR 1018. Rebuilt as 0-6-0.
14	2-6-0	18 X 24	54	1881	ICR 123	CGR 1019. Rebuilt as 0-6-0.
15	2-6-0	18 X 24	54	MAR 1881	ICR 124	CGR 1020. Scrapped in 1917.
16	2-6-0	18 X 24	54	MAY 1881?	ICR 125	Scrapped in 1890.
17	2-6-0	18 X 24	54	JUL 1881	ICR 126	CGR 1021. Scrapped in 1917.
18	2-6-0	18 X 24	54	JUN 1881	ICR 127	Completes contract for 9 locomotives. Sold to Chignecto Branch Ry (No. 3) in 1914.
19	4-4-0	17 X 24	69	NOV 1881?	ICR 128	First of contract for 3. Rebuilt in 1897. Scrapped in 1910.
20	4-4-0	17 X 24	69	DEC 1881	ICR 129	CGR 1112. Rebuilt in 1894.
21	4-4-0	17 X 24	69	DEC 1881	ICR 130	CGR 1113. Rebuilt in 1895.
22	4-4-0	17 X 24	69	DEC 1881	ICR 131	First of contract for 4. Rebuilt in 1895. Scrapped in 1912.
23	4-4-0	17 X 24	69	DEC 1881	ICR 132	CGR 1114. Rebuilt in 1895.
24	2-6-0	18 X 24	54	1882?	Cumberland Ry. & Coal Co. 3	Later No. 6. Sold to Reid McManus, contractor, (No. 8) in 1908. Sold to Abrams Foundry (No. 1000) in 1913. Sold to Moncton & Buctouche (second No. 1) in 1914. Scrapped by CNR in 1918.
25	4-4-0	17 X 24	69	JAN 1883	ICR 133	Wrecked in collision in 1885.
26	4-4-0	17 X 24	69	JAN 1883	ICR 134	Last of contract for 4. CGR 1115. Rebuilt in 1894. Scrapped in 1917.

27	4-4-0	17 X 24	60	JAN 1883	ICR 135	CGR 1072. Rebuilt in 1901. Later CNR 118. Scrapped in May 1925. Last surviving Fleming locomotive.
28	4-4-0	17 X 24	60	FEB 1883	ICR 136	CGR 1073. Rebuilt in 1901.
29	4-4-0	17 X 24	60	FEB 1883	ICR 137	CGR 1074. Rebuilt in 1895. Scrapped in 1917.
30	4-4-0	17 X 24	60	1883	ICR 142	No data.
31	4-4-0	17 X 24	60	1883	ICR 143	Rebuilt in 1896.
32	4-4-0	17 X 24	60	1883	ICR 144	Scrapped about 1910.
33	4-4-0	17 X 24	60	1883	ICR 145	Scrapped about 1910.
34	4-4-0	17 X 24	60?	1884?	Albert Ry. Co. (S&H) 2	No data.
35	4-4-0	17 X 24	60	1884	Albert Ry. Co. (S&H) 3	Repaired at ICR shops in Moncton for $959 in 1909. Scrapped in 1920.
36	4-4-0	17 X 24	60	1885?	Canada Eastern Ry. 17	ICR 330. CGR 1121.
37	4-4-0	17 X 24	60	JUN 1885	ICR 30	CGR 1071.
38	4-4-0	17 X 24	60	1885?	Elgin Petitcodiac & Havelock Ry. 2	No data.
39	2-6-0	18 X 24	54	1886?	ICR 170	Wrecked in boiler explosion in 1887.
40	2-6-0	18 X 24	54	1886?	ICR 171	Sold to Record Foundry, Moncton in 1892.
41	2-6-0	18 X 24	54	1886?	ICR 172	Sold to G.B. Willett for Nova Scotia Steel Co. (No. 5) in 1899.
42	2-6-0	18 X 24	54	1886?	ICR 173	Wrecked in boiler explosion in September 1892.
43	4-4-0	17 X 24?	60?	OCT 1887	Joggins Ry. Co. 1	Scrapped in 1922.
44	4-4-0	17 X 24?	60?	OCT 1887	Central Ry. (N.B.) 1	No data.
45	4-4-0	17 X 24	60	1887	Moncton & Buctouche Ry. 2	Scrapped in 1918.
46	2-6-0	18 X 24	54	APR 1888	Cumberland Ry. & Coal Co. 7	Scrapped in 1913.
47	2-6-0	18 X 24	54	JUN 1888	Cumberland Ry. & Coal Co. 8	Scrapped in 1918.
48	4-4-0	17 X 24	60	1888	NB&PE Ry 3	NB&PEI 3. ICR 1176 in 1914. CGR 1176 in 1916. Scrapped in 1917.
49	2-6-0	18 X 24	54	1888	Joggins Ry. Co. 4 (?)	Rebuilt as 0-6-0.
50	2-6-0	18 X 24	54	1888	Joggins Ry. Co.	No data.
51	4-4-0?	?	?	1888?	Central Ry. (N.B.)	No data.

NOTES

Sequence numbers are for convenience, and are not official works numbers. Explanation of abbreviations:

E&NA = European and North American Railway.

ICR = Intercolonial Railway.

CGR = Canadian Government Railways.

CNR = Canadian National Railways.

St.S.B.Ry. = St Stephen Branch Railway.

N.B.Ry. = New Brunswick Railway.

CPR = Canadian Pacific Railway.

S&H = Salisbury and Harvey Railway.

NB&PE Ry. = New Brunswick and Prince Edward Railway.

NB&PEI = New Brunswick and Prince Edward Island Railway, a name change of the NB&PE Railway.

NOTES ON SOME FLEMING MARINE ENGINES

NAME OF VESSEL	DATE	NOTES
(NOVA SCOTIA) ?	1837	Early Bay of Fundy steamer, owned jointly by the Annapolis Steamboat Co. and E. Barlow and Sons. The Barlow connection might have got the engine and boiler work for the Phoenix Foundry.
LADY COLEBROOK	1841	30 H.P., low pressure, owned by "Mayor, Aldermen and others".
VICTORIA	1842	Identical specifications to "Lady Colebrook", sister ferry vessel. The presumption is that the Phoenix Foundry built the engine of this one too.
ST. JOHN	1847	216 H.P., cylinders 44 inches by 10 foot stroke.
EMPEROR	1856?	No data.
PRINCE OF WALES	1860	Sidewheeler.
PRINCESS OF WALES	?	No data.
EMPRESS	1865	Sidewheeler.
OLIVE	1865	Sidewheeler.
DAVID WESTON	1866	250 H.P., hull by Hatheway and Small.
ROTHESAY	1867	Cylinders 42 inches by 11 foot stroke, boiler pressure 35 psi, hull built by M.S. Olive for Enoch Lunt.
MAY QUEEN	1869	150 H.P., cylinders 36 inches by 7 foot 8 inch stroke.
XANTHUS	1881	New boiler. Tug.
FAWN	1884	New boiler.
WESTERN EXTENSION	1886	New boiler. Ferry.
ADMIRAL	1888	New boiler. Tug.
HERO	1889	Two 18 inch cylinders. High pressure engine. Tug.
WINNIE	1889	Boiler.
I.C.R. DREDGE	1889	Rebuilt from railway crane.
LILLIE G.	?	15 ton boiler at 100 psi.
FLUSHING	1889?	Rebuilt simple to compound engine, 400 H.P., old cylinders 20 inches, and new 3 ton 38 inch cylinders by 22 inch stroke.
VICTORIA	c.1897	Engines and machinery.
SENLAC	c.1903	Machinery and 2 large boilers.
LUDLOW	1906	Steel Hull, boilers and engines. Saint John city ferry.

The Railways and Canada's Greatest Disaster

The Halifax Explosion. December 6, 1917

75th Anniversary

By Douglas N.W. Smith

The First World War created an upheaval in the political and social orders which continues to be felt to the present. For most Canadians, the physical devastation of the war was a far-off event occurring in the dismal trenches in Flanders. Seventy five years ago, however, the carnage of war was experienced by the residents of the City of Halifax when a major portion of their city was blown off the map.

As Canada's eastern most major port, Halifax played a major role in the war effort. As the St Lawrence River ports of Montreal and Quebec were closed to navigation for more than five months each year, all the food, armaments and troops had to move through the remaining two open ports - Saint John and Halifax. By virtue of its position far out in the North Atlantic, Halifax had long been a base for the navy. As well, the Bedford Basin provided a large staging area for convoys. These two factors made Halifax Canada's pre-eminent wartime port.

This was reflected by the increased loads of freight carried by the Intercolonial Railway (ICR), the oldest constituent of the Canadian Government Railways. A comparision of the twelve months ending March 31, 1918 to a similar period ending June 30, 1914, shows freight ton miles generated by the ICR almost up 54 per cent and passenger miles up 44 per cent. As shown in the following table, the other major Canadian railways, the Grand Trunk and Canadian Pacific experienced much smaller increases in freight traffic. Passenger traffic on these two railways actually declined as restrictions were placed on civilian travel to conserve coal supplies.

This surge in traffic placed a tremendous burden on the ICR which had only a single track line from Montreal to Halifax. Prior to the outbreak of the war, the Dominion Minister of Railways and Canals had announced a program to improve the shipping facilities in Halifax. In 1854, the Nova Scotia Railway, the predecessor of the ICR, located its Halifax terminus at Richmond lying at the northern end of the isthmus upon which Halifax is situated. Over the years, growth in traffic required the expansion of the rail yards and wharfage. The Richmond facility, however, was hemmed in by the naval yards lying to the south of it. After several decades of improvised, imperfect solutions, the government announced in October 1912 that it would build extensive new port facilities, rail yards, and a station in the southern part of the waterfront near Point Pleasant Park. The outbreak of the war caused delays in construction as men, materials and money were diverted to the war effort.

December 6, 1917 dawned as a clear cold winter day. After breakfast, fathers went off to work, children to school and mothers started their day's household tasks. In the Richmond rail yard, switchers sorted cars of vital war supplies. At North Street Station baggage and express was being unloaded from the baggage car on ICR Train 314, the morning local from Truro.

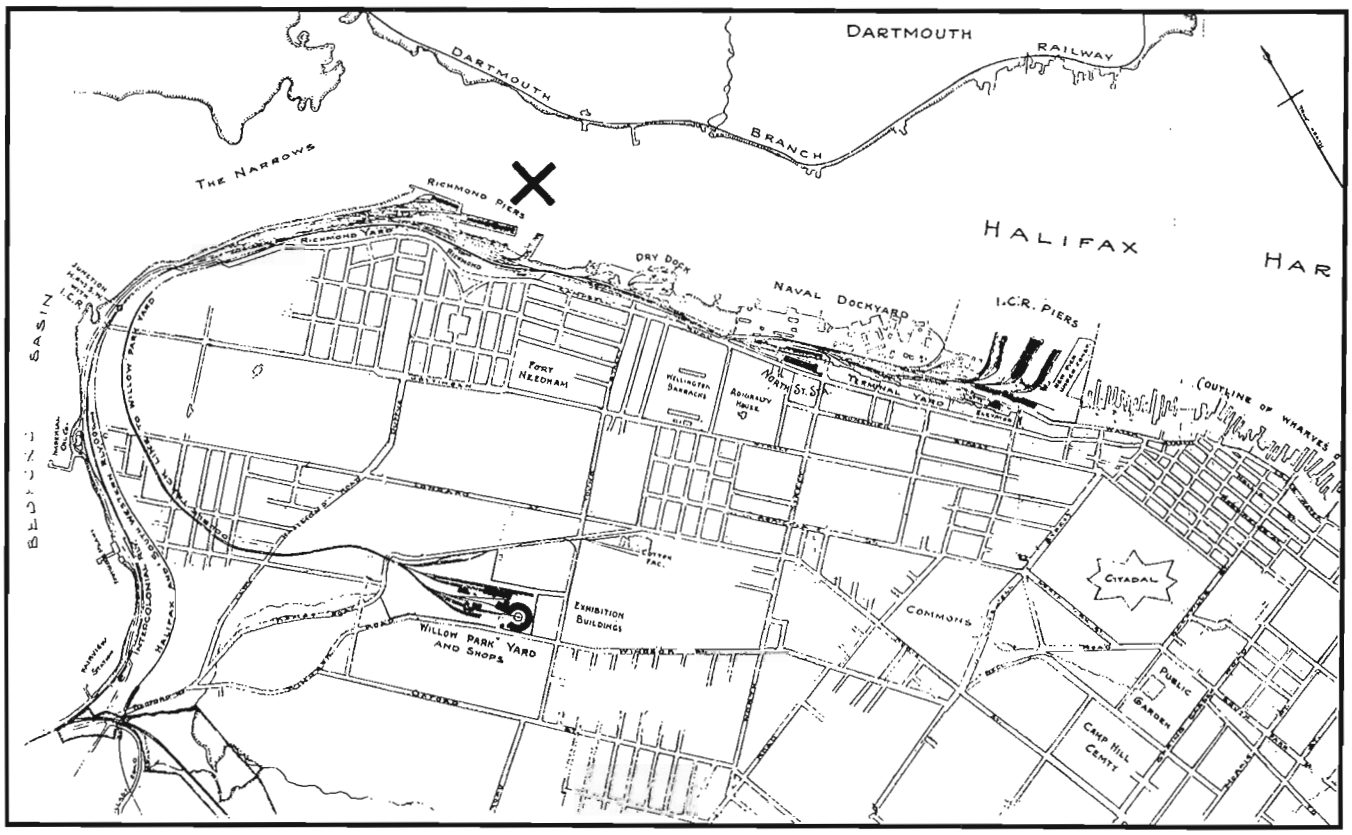
All were unaware of a drama unfolding in the harbour which would destroy the pattern of daily life, and in many cases life itself. At 0845, the outward bound freighter "Imo", carrying relief supplies for Belgian war refugees, collided with the freighter

COMPARISON OF TRAFFIC ON CANADIAN RAILWAYS 1914 - 1918

	Freight Ton Miles (in millions)			Passenger Miles (in millions)		
Railway	1914	1918	Change	1914	1918	Change
Intrecolonial *	1,345	2,070	54%	200.2	287.9	44%
CPR **	10,601	14,918	41%	1,570.8	1,438.4	-8%
Grand Trunk **	3,838	4,214	10%	647.0	585.6	-9%

Note: * The data for both years exclude traffic handled over the National Transcontinental, the International Railway of New Brunswick, the Saint John and Quebec and the Prince Edward Island Railways. The figures for 1914 are for the fiscal year ending June 30th, while those for 1918 cover the fiscal year ending March 30th.

Note ** The data for 1914 and 1918 are for the fiscal years ending June 30th.



Map of Halifax showing the railways as they were in 1917. The site of the explosion is marked by a large "X".

"Mont Blanc" which was heading for the Bedford Basin. The cargo loaded on the "Mont Blanc" made it a veritable floating explosive factory. On board were over 2,000 tons of high explosives, a volatile mixture of picric acid, TNT, and benzine.

The collision occurred in The Narrows at the north end of the City of Halifax. The "Mont Blanc" caught fire and drifted towards Richmond. Seeing the red flag flying on her mast, ICR train dispatcher Vincent Coleman sent out the first news of the impending diaster. He called the station at Truro and announced, "Munition ship on fire, making for Pier C. Good bye."

Shortly thereafter, at 0906, the "Mont Blanc" blew up in the largest man-made explosion up until the nuclear era. The force of the explosion levelled almost two square miles of the city killing over 1,600 people. Thousands more were injured as windows exploded into thousands of shards of flying glass and buildings crumpled. Fires from overturned coal fired stoves threatened much of the remainder of the city.

The small hill in the centre of the city, familiarly known as the Citadel, deflected the force of the blast upwards and thereby spared the southern part of the city from the devastation which swept the northern section.

Since all the ICR facilities in Halifax were located in the part of the city devastated by the explosion, the railway was temporarily paralyzed. A report prepared for the Dominion Minister of Railways and Canals stated that 55 ICR employees had been killed in the explosion including six men working on the switch engines, 12 men in the running trades, 5 trackmen, and 26 from general office staff, station personnel and police officers.

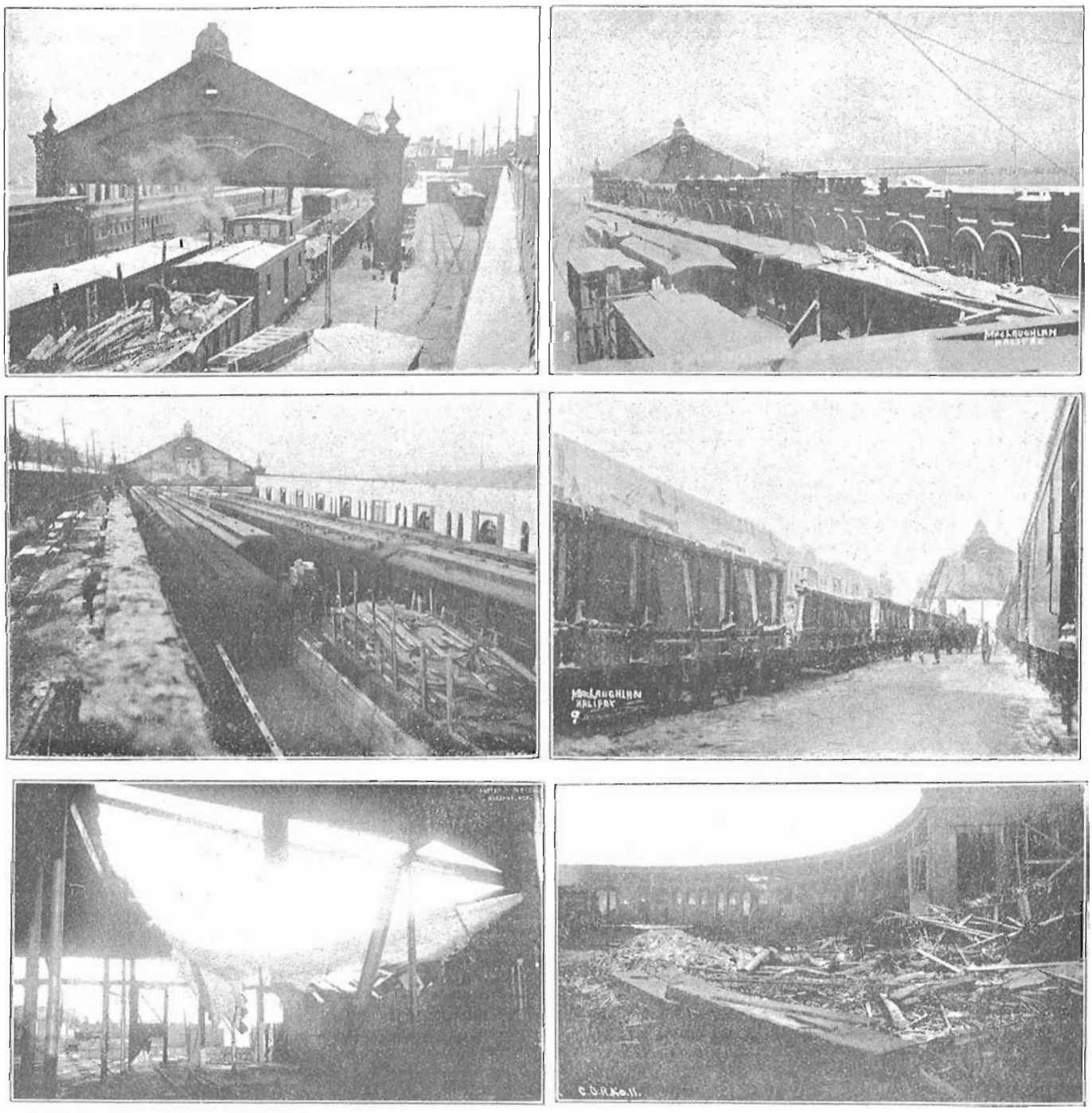
The description of the physical destruction wrought upon the ICR facilities is numbing:

At Richmond: Piers No. 6 and 8 were completely destroyed, even their piles were blown away. The east end of Pier No. 9 was blown away and the freight shed upon it was destroyed, and the crib walls of Pier No. 7 were badly damaged.

The Richmond station, carpenter shop, carmens', customs, stevedores' and other small building including the cattleshed and stock pens were completely destroyed. The roof of the water tank was blown off and holes were pierced through the tank walls by flying iron. Two railway houses were completely destroyed.

At Willow Park: The roof of the roundhouse was damaged and the greater part of it collapsed. The power plant was put out of commission. The doors and windows in the car shop, stores building, planing mill, oil house and roundhouse were blown out. The roof of the water tank was blown in, allowing debris to enter the pipes, thereby stopping the flow of water. A railway house was completed destroyed.

At North Street: The North Street passenger station sustained very heavy damage. The front and back thirds of the train shed roof were blown up by the blast of the explosion, and then they collapsed and fell down inside the brick walls. Thirteen of the roof



These six photos are reproduced from the Canadian Railway and Marine World for February, 1918. The upper two views show the exterior of the North Street station a few weeks after the explosion, after traffic had been resumed. The middle two photos show the interior of the train shed, while the bottom two show the damage to the ICR's Willow Park roundhouse.

This panoramic photo, and those on the next two pages, give a relatively good idea of the immense devastation caused by the explosion. In order to comprehend the magnitude of the destruction, one must remember that the area depicted in the photo at the top of pages 206 and 207 was a built-up residential area before the explosion. Note the trees blown over by the force of the blast.

All three photos from National Archives of Canada. These two pages Photo C-19945, next two pages C-19950 (top) and C-6969 (bottom).

trusses in the centre of the shed, with the roof boarding, framing and sash on them remained standing, but were later pulled down for safety. The head house of the station, which was a solid brick structure, sustained heavy damage. On the first floor, all the doors, windows and fixtures were blown off. On the second floor, all doors and windows were blown off, and the plaster partitions were bulged and broken. The damage to the third floor was similar to that on the second. A portion of the roof was heavily damaged and subsequently collapsed in the heavy storm of December 9th.

The roof of the power house and heating plant was blown in and the plant itself seriously damaged. The loss of heat lead to all the pipes in the vicinity, not destroyed by the explosion, to freeze and burst.

The roof of the Dominion Atlantic Railway freight shed was blown in and the remaining portion was seriously damaged.

The windows, doors, walls and roof of the three car-cleaning buildings and the mail and express building were badly shattered.

At Fairview: The four railway houses had windows, doors and roofs badly damaged. A small brick building housing an electrical regulator was badly damaged and its roof torn off.

At Rockingham and Bedford: The stations had windows blown out, doors damaged and chimneys shaken.

At Tufts Cover: The shelter was completely destroyed.

At Dartmouth: The roof and one end were blown from the enginehouse and the building was badly shattered. The freight shed had windows and doors blown out and its walls badly damaged. The station had windows and doors damaged, the roof lifted out of place, its centre partition pulled from the outside walls and the chimney blown down.

At Deepwater Terminals [this was mid way down the harbourfront, south of Richmond]: A large hole was blown through the grain elevator, its roof was lifted off the structure and fell back in a different position, and portions of the walls were torn away.

Damage to the railway piers in this area was not as extensive as at Richmond. The freight shed on Pier No. 4 collapsed, that on Pier No. 3 had its windows and doors blown in and the roof trusses on the north side broken, while that on the new concrete Pier No. 2 had its doors and windows blown in and the partition on the second floor collapsed.

The inward and outward freight shed, a brick structure, was not greatly damaged, except for a short section of roof next to the office portion which opened up for a length of 60 feet. The glass in all the windows was blown in.

Roadbed and Track: The Richmond Yard was heavily damaged and covered in debris. Rails in many places were bent like hoops. A great wave, which followed the explosion, covered the railway tracks with debris, mud and boulders to a considerable depth. The railway estimated that 105 tons of track material was either lost or damaged in the explosion.

The double track main line between Willow Park Junction and North Street Station, a 7,000 foot distance, escaped damage but was blocked by debris. The automatic signals between these points were badly wrecked. The telephone dispatching line between North Street Station and Rockingham was put out of commission.

On the Dartmouth side, between Stairs and Black Rock siding, the sea wall was washed away in several places and 200 feet of track at Black Rock was undermined to a depth of about two feet.

When the trainshed over the tracks at the North Street Station collapsed, it landed on the Truro local which had arrived at 0845. Fortunately, the DAR local from Kentville was late that morning. Had it arrived as scheduled at 0900, its passengers and crew would have swelled the list of fatalities and injured.

As fate would have it, the chief officers of the two railways serving Halifax were in their business cars at the station when the explosion occurred. The General Superintendent of the ICR, Mr J. T. Hallisey was severely cut about the head. General Manager Graham of the Dominion Atlantic Railway (DAR) was having breakfast with this wife and daughter at the time of the explosion. The Graham family escaped injury. Mr Graham walked and ran the 4.1 miles to Rockingham, which was the nearest functioning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station. He sent a telegram to the DAR headquarters in Kentville ordering a relief train to be sent to Halifax bringing all available doctors, nurses and Red Cross supplies from Kentville, Wolfville and Windsor.

This DAR train was the first relief train to reach the beleagured city. It left Kentville at 1145 and arrived in Halifax at 1545. The ICR was the major conduit by which aid reached the city. On December 6th, six relief trains operated over the ICR bringing medical and additional fire-fighters and fire fighting equipment to the city to assist in putting out the fires which threatened to spread to those parts of the city not flattened by the explosion. Special trains arrived from New Glasgow, from Amherst and from Moncton.

This photo, and those on the next three pages, were taken by Donald F. Angus who was a survivor of the explosion. Mr. Angus (the father of your editor) was stationed with the Canadian army in Halifax at the time, and was one of the many troops who assisted in the rescue of victims of the disaster. The above view, taken a few days later, shows a pile of wreckage, as well as three freight cars, the one in the foreground being a wooden flat car. In the background can be seen the Narrows and, beyond that, the Dartmouth shore. Photo by D.F. Angus.

Boston was one of the first major cities to respond to the appeal for aid. At 2200 on the evening of the 6th, a relief train bearing 13 doctors, 10 nurses, Red Cross officials and medical supplies left the capital of Massachusetts. After leaving McAdam, New Brunswick the vacant places on the train were filled by New Brunswick medical practitioners desiring to volunteer their services. Leaving Saint John, the train ran into the blizzard. A second engine was added to the train at Moncton, but huge snow drifts near Folleigh Mountain stalled the train. It was not until 0300 on the morning of the 8th that the train arrived at Rockingham. Shortly after 0600, snow plows cleared the line to the Ocean Terminals. The first relief train from outside of the Maritime region arrived in the city at 0700. A partial list of the special trains which operated over the ICR bringing aid to the city in the first five days after the explosion is shown in Appendix 1.

While the railways played a crucial role in forwarding much needed supplies and emergency personnel to the city, they also helped to carry the injured to nearby communities for medical attention and convalescence.

The first such train almost was a fatality of the explosion. Train No. 10, operating on an overnight schedule between Saint John, New Brunswick and Halifax, happened to be a few minutes late on the morning of December 6th. Had it arrived at North Street Station on time at 0855, its passengers would have been in the station when the blast occurred.

The explosion rocked the train as it approached Rockingham station. The cars were buffeted by the concussion which blew out all the glass in the windows. Fortunately there were no injuries to those on the train. The engineer, though badly injured by being thrown against the boiler, managed to bring his train safely to a stop. The train proceeded slowly up the track as far as the junction to Willow Park engine terminal. There its progress was blocked by debris covering the track.

Being one of the few intact structures in the area, the train was rapidly invaded by cold and injured survivors of the explosion, many of whom were seriously injured. The train became an impromptu hospital. With the passenger cars rapidly filling, Conductor J. C. Gillespie had the baggage and postal car emptied of their contents to increase the space for these refugees. Lacking skilled medical practioners, the train crew and passengers rendered such emergency medical aid as they could. Many of the men, who realized that fires threatened the lives of people who were trapped in the collapsed buildings near the tracks, spent several hours saving those they could reach.

With his train loaded with 210 injured people, Conductor Gillespie made arrangements to have it run back to Truro. There the injured were accommodated in three temporary hospitals which were hastily set up in the Fire Hall, the Academy and Court House to receive them. In the following days, the railways were called upon to operate several hospital trains taking the many of the injured to outlying towns due to the shortage of space in Halifax.

Upon learning of the explosion, the General Manager of the ICR, Charles A. Hayes had his car attached to the first of the four special trains run to Halifax. These carried medical supplies, doctors, nurses, and work gangs and equipment to restore the railway and its facilities. As more than three miles of trackage were blocked by damaged locomotives, cars and shattered buildings, the incoming relief trains ran into the partially completed Ocean Terminals complex at the south end of the city. Damage to these facilities had been very minor consisting primarily of damage to windows and doors in sheds 23 and 24 and in the terminals offices.

An automobile that came to grief, being turned completely over. Note the scene of complete destruction in the background.
Photo by D.F. Angus.

An organization called the Canadian Government Railways, Halifax Restoration, was formed to carry out the work of reconstruction. This organization was charged with the repair and rebuilding of all damaged tracks, buildings and other property belonging to the railway in halifax, Richmond, Fairview, Dartmouth. At the request of the Department of Naval Service, it also undertook the reconstruction of the naval dockyard.

Even while aid was rushing to the city, the railway employees at Halifax were struggling to re-establish rail links to accommodate the relief trains. Fortunately, the railway installations at the Ocean Terminals were sufficiently complete to permit their use. Indeed, the day following the explosion the first regular trains departed Halifax for Montreal from the Ocean Terminals. Without the availability of these facilities, it would have been much more difficult to bring emergency supplies and staff speedily to the city.

The clearing of the double track between Richmond and North Street Station was the first major task undertaken. Auxiliary cranes cleared one track by noon on December 8th and opened the second track the following day. The standing portion of the train shed roof was taken down on the evening of December 8th due to fears concerning its strength. Railway telegraphic communication to North Street Station was restored by the night of December 8th. That evening at 1800 the DAR Kentville local became the first train to leave North Street Station since the explosion.

Following the restoration of the telephone dispatching line between North Street Station and Rockingham on December 9th, the first trains were run into North Street Station. On December 10th, the full schedule of trains began to operate once more from this facility.

It was decided that the old wharves and sheds at Richmond would not be reconstructed, but that new sheds and wharves would be provided at the new docks under construction at the Halifax Ocean Terminals. New sheds Nos. 25 and 28 were built on Pier A. Shed No. 25 was 594 feet long by 90 feet wide, while Shed No. 28 was 550 feet long by 90 feet wide.

In a letter to the Minister of Railways and Canals dated January 7, 1918, C. A. Hays outlined the effects of the explosion had on the ICR employees. A total of 55 current employees had been killed as well as ten retired ICR employees. The homes of 600 employees had been damaged. While 418 of the homes could be repaired quickly, 192 had been either heavily damaged or destroyed. In addition to the physical damage to homes, many employees had either been injured or had been traumatised by the death or injury of family members.

In an effort to help ease the housing crisis, the ICR parked a number of boarding and other cars at the Willow Park facilities. These were placed at the disposal of those employees who had lost their homes. W. C. Roberts reported to the Deputy Minister of the Department of Railways and Canals on January 5, 1918 that only very few families had consented to occupy them. He stated most of the employees, who it is assumed stayed with relatives, resided in temporary shelters or camped out in the remains of their homes, preferred to wait until temporary housing was ready on the Exhibition Grounds. The report outlined the state of the five families who moved into the cars at Willow Park. It illustrates the impact which the explosion had on those who lived in the north end of Halifax:

William Bison, employed as a Car Clerk, was married and had six children. His wife and two children were injured.

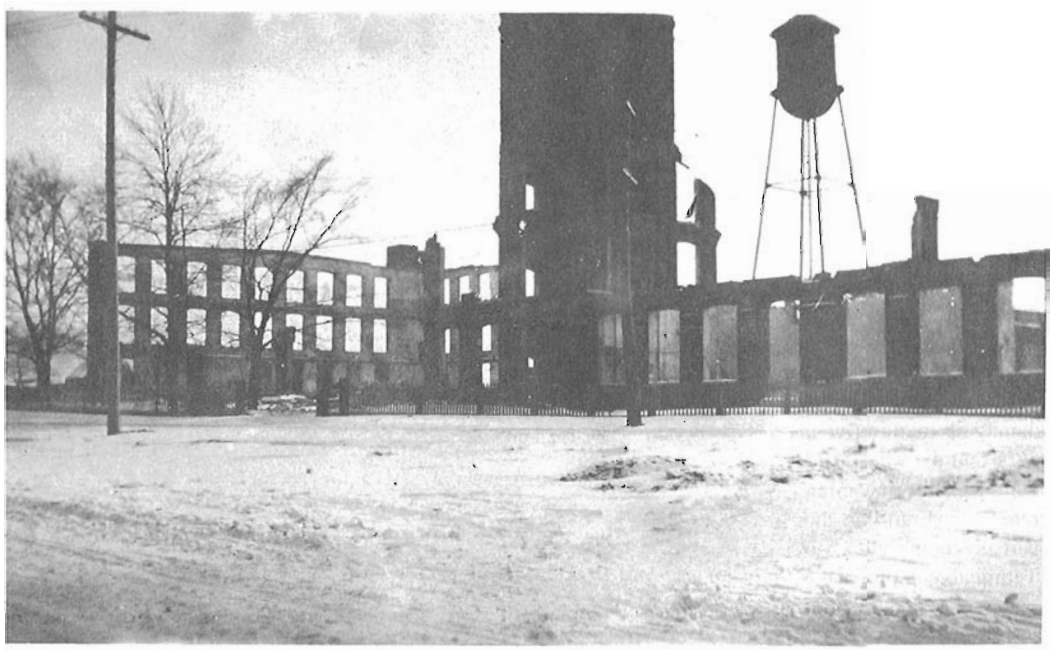
F. McPhee, employed as a Carpenter, was married and had two children. All were injured.

N. Currie, a Machinist, was married and had two children. No injuries.

Frank Myer, a car Cleaner, single. Living with mother and father in an auxiliary car. All injured.

G. Isner, an employee working in the fuel department, single and not injured.

These families remained in what was called the "Box Car Hotel" until early March when new temporary housing was ready.



The ruins of the Dominion Textile Company's cotton mill. The entire interior of the building collapsed, and many workers lost their lives.
Photo by D.F. Angus.

A report from the Master Car Builder to General Manager Hayes, dated December 17, 1917, states that almost 500 pieces of equipment were either damaged or destroyed in the explosion. Freight cars accounted for 374 of the rolling stock. This included 139 ICR cars, 96 Canadian Pacific cars, 43 Grand Trunk cars, 10 New York Central Cars, and 82 from other railways. Four cars could not be accounted for as they had been blown into the harbour and no records could be found. Thirty seven of the freight cars were completely destroyed leaving only their trucks to be salvaged. A further thirty eight freight cars had their tops destroyed, but they were fit to be converted to flat or pulpwood cars. The remaining 299 freight cars could be repaired. The total bill to settle with the foreign line car owners and to repair the ICR freight cars was estimated to exceed $102,000. While this sum may seem small, it should be remembered that in 1917 a new box car cost approximately $800.

The explosion side-tracked over sixteen per cent of the ICR's total passenger car fleet. These cars consisted of 18 sleepers, 2 sleeper-observation cars, 6 diners, 14 tourist cars, 18 colonist cars, 7 military hospital cars, 4 commissary cars for military movements, 1 parlour car, 3 coaches, 2 combination cars, 13 baggage cars, 3 postal cars, 1 official car, and 1 air brake instruction car. Based on the ICR roster at March 31, 1918, it appears that 34 per cent of the sleeping cars, 25 per cent of the colonist cars, 19 per cent of the dining cars and 70 per cent of the hospital cars were damaged in the explosion.

The restoration of the 113 ICR cars was being rushed as they were essential to enable the ICR to continue the heavy movements of troops to the coast and of wounded combatants to military hospitals in Central and Western Canada. It was expected that it would take six weeks to return all the passenger cars to service.

At the time of the Master Car Builder's report the Moncton Shops were working on 51 passenger cars and expected to receive six more from Halifax. Twenty three passenger cars were undergoing repair at Halifax. A further 17 had been sent to the Canadian Car & Foundry Company plant at Amherst, Nova Scotia for repairs. Nine of the damaged cars belonged to foreign roads. The ICR returned one first class coach and three baggage cars to the Grand Trunk, three baggage cars to Canadian Pacific and 2 baggage cars to the Boston & Maine for repairs. The total estimated cost of the repairs to the ICR passenger cars was expected to total $75,000.

Surprisingly, no locomotives were destroyed by the explosion. The available reports show that only five locomotives were damaged in the explosion and all were returned to service.

Less than a month after the explosion, tremendous progress had been made to repair the damaged railway facilities. In a telegram dated January 3, 1918, W. A. Duff, Assistant Chief Engineer of the ICR, reported to the Minister of Railways and Canals as follows:

Sheds on Pier A: Excavation for foundation nearly finished, grillage being put in place, and expect to start framing of sheds within a day or two. Track work about fifty per cent completed. Bottom story will be closed in tomorrow night and repairs to piping will take at least two weeks.

Pier Two: Bottom storey will be closed in tomorrow night and repairs to piping will yet take at least two weeks. The pier is in good shape to handle business.

Pier Three: About ten per cent repaired.

Pier Four: Practically cleared up and will now start repairs.

Elevator: In working condition and all housed in Balance; of repairs being continued but will not interfere with operations.

North Street Station: Repairs to building about eighty per cent complete and canopy over concourse will be finished this week.

Boiler House: Repairs to roof finished.

Richmond: Clearing of tracks and wreckage is proceeding satisfactorily. About forty per cent of tracks are cleared.

Willow Park: Eighteen stalls of engine house now in service and repairs are being done to power house, car shop, planing mill, stores tank, and oil house. Temporary repairs to these buildings are fifty per cent complete and permanent repairs are underway. Bunk house finished so that 150 men can sleep and 200 can be fed.

One of the many blocks of temporary structures hastily erected to shelter those made homeless by the explosion. Some of these buildings survived for years.
Photo by D.F. Angus.

Dartmouth: Station and freight shed complete and repairs fifty per cent complete to houses of employees living in Dartmouth.

By the middle of January, significant progress had been made in the restoration efforts. A status report printed in the February 1918 issue of Canadian Railway and Marine World is reproduced in Appendix II.

The reconstruction of the railway and naval dockyard required large amounts of manpower. The number of men employed was 457 in December 1917, 1,418 in January 1918, 1,097 in February and 605 in March. At the end of March, it was reported that the restoration of the railway was 100 per cent completed while the naval yard about 95 per cent restored.

In closing this account of this sad day, the final words are from the February 1918 issue of the Canadian Governent Railways Employess Magazine. In reading this text, it should be remembered that few people knew the cause of the explosion which shook the city, and those not in the North End would not have immediately known of the devastation. The writer, perhaps to distance himself from the tragic events of the day, uses the impersonal tense in his article. His sentiments, expressed in the final paragraph, are as true for us today as they were seventy-five years ago.

"*The writer was at the office at the time* [of the explosion] *and, thinking that the only damage would be broken windows, was in no hurry to get home. He thought, his family being late sleepers, would be in bed at that time and no glass would hurt them. Imagine his horror, when reaching his home, he found his three-storey house flat on the ground, his sister and brother-in-law, wife and nephew, dragged from the ruins, his mother dead in the kitchen, and his two little sisters, from school, streaming with blood. But he was one of the lucky ones; for many went home to find nothing but ashes. No trace of home or relatives . . .*"

"*The disaster has now been shoved into the background as far as the daily news is concerned but for those, who like myself, witnessed the terrible sights on the streets, in the hospitals and morgues, and in the cemeteries, where the dead were heaped up for want of help to bury them, it will always remain a thing of horror; and yet something to wonder when we think of the courage and strength of those who lost all.*"

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APPENDIX I

HALIFAX DISASTER SPECIAL TRAIN SERVICE ON THE C G R

Between December 6th and 11th, the CGR operated 20 special trains to rush medical assistance and food and building supplies to the devastated city. Many of these trains originated from the Northeastern United States, a region populated by many ex-patriot Canadians who remembered their roots during this time of crisis.

The list of special trains, their donors and contents during the six days after the explosion was a follows:

December 6: From College Bridge, New Brunswick a ten car special train bringing the Amherst fire brigade, 1 car of food supplies and 8 railway boarding cars to provide accommodation for workmen to rebuild demolished railway facilities.

December 6: From Moncton, New Brunswick an eight car train comprised of 1 baggage car, 1 hospital commissary car, 2 hospital tourist cars, 1 first class coach, 2 standard sleepers and General Manager Charles Hayes business car carrying railway officials, doctors, nurses and hospital supplies.

December 6: From Moncton a nine car train including a wrecking crane and outfit, 3 hospital and 1 colonist car. This train brought the Moncton fire brigade to Halifax.

December 6: From Moncton a thirteen car train comprised of 3 box cars of food supplies from Moncton, 1 car of food supplies from Sackville, 7 first class coaches, 1 sleeper and 1 official car bringing doctors and nurses.

December 6: From Moncton a 24 car train including a steam shovel, a small crane, 1 car of track spikes, 1 car stores, lanterns, etc., and other cars of food supplies. With this train were three gangs of workmen consisting of 3 foremen and 15 men.

December 6: From Sydney and New Glasgow a five car train bringing the General Superintendent, doctors and nurses.

December 7: From Pictou a four car train carrying Prime Minister Borden and a party of doctors and nurses from Charlottetown. In connection with the Prime Minister's special, a special trip of the S.S. Aranmore was made from Charlottetown to Pictou.

December 7: From Boston a five car train of Massachusetts State Relief comprised of 2 baggage cars, 1 diner, 2 sleepers bringing 13 doctors, 10 nurses and hospital supplies.

December 8: From Boston a 13 car train of Massachusetts and Maine Relief comprised of 6 baggage cars, 1 first class coach and 6 sleepers. From Maine came 13 doctors, 4 nurses, 2 orderlies, 6 Maine Government Staff, 7,100 blankets and 750 cots. This train also carried hospital supplies, cots and blankets to accommodate 500.

December 8: From New York a five car train of City of New York Relief. This train carried 1 doctor representing the medial department of the U.S. Government, 1 nurse representing the civilian relief arm of the U.S. Red Cross, 1 representative of the Quartermaster Store Department of the U.S. Government and 6 newspaper reporters. The train brought 10,000 blankets, 10,000 sweaters, 7,000 pairs of socks, 100 sets of civilian clothing for men, women and children, 40 cases of surgical bandages, 100 gallons of liquid disinfectant, 10 bales of absorbent cotton, and 1 carload of food.

December 9: From Montreal a 14 car train of Montreal and Saint John relief bringing food supplies and coffins.

December 9: From Providence an 8 car train carrying Rhode Island Relief comprised of 1 baggage car with condensed milk and a doctor's outfit, 1 baggage car with bread, window sashes, window glass and clothing, 1 diner, 5 sleepers. This train brought 50 doctors, 50 nurses, 1 chauffeur, 1 druggist, 3 secretaries, and 2 social workers.

December 9: From Bangor, Maine a 6 car train comprised of 2 baggage cars, 2 first class coaches and 2 sleepers carrying 35 doctors and nurses, clothing, blankets and other supplies.

December 10: From Montreal a 9 car train bringing Montreal relief comprising 4 cars window glass, 2 cars beaver board, 2 cars roofing material and 1 car of lumber.

December 10: From Montreal an 11 car train of food supplies.

December 10: From Montreal a 24 car train of food supplies.

December 10: From Montreal a 5 car train including 3 cars of clothing and provisions, 2 private cars with doctors, nurses and officials of the T. Eaton Company of Toronto. Sir John Eaton was on this train.

December 10: From Toronto an 11 car train bringing Toronto Relief. Train comprised of 1 car building supplies, 3 baggage cars, 6 colonist cars, and 1 sleeper. This train carried carpenters, plumbers and machinists with tools as well as 8 military officers and 337 men.

December 10: From Ottawa a 20 car train bringing cars, trucks and other supplies.

December 11: From Ottawa a 25 car train bringing food, medical and building supplies.

APPENDIX II

THE RESTORATION OF THE CANADIAN GOVERNMENT RAILWAYS PROPERTY AT HALIFAX

The restoration work at Halifax is being carried on under the general direction of C. B. Brown, Assistant General Manager and Chief Engineer, CGR at Moncton, W. A. Duff, Assistant Chief Engineer and Engineer of Bridges, being in direct charge at Halifax, with office at 137 Barrington Street, C. H. Edgett, being Purchasing Agent and F. M. MacLennan, Auditor. Mr Duff was at Halifax when the explosion occurred and acted most promptly. Telegraph connection being destroyed, he motored to the nearest station from which he could telegraph, and made a most graphic and correct report of the extent of the damage to General Manager Hayes at Moncton, detailing relief, etc., required and enabling prompt action to be taken to rush special trains with doctors, nurses, supplies, etc . . . [The following summarizes] the reconstruction work done up to January 18th:

At North Street station temporary repairs have been carried on both inside and outside of building. The stairs leading to the station have been repaired and are in service. The linen room and express offices have been made water tight. An awning for the concourse has been erected, and will be covered with rubberoid as soon as work in front of the building is completed. The North Street power house roof has been completed, and a boiler put in place and bricked in.

New Pier 2: The repairs are about 85% complete. All doors upstairs are in place and glazed. All doors on the south side downstairs are in place and being glazed. Sixteen pairs of doors are in place on the north side. Practically all the branch return pipes have been installed, and work is still proceeding. All mains, returns, connections and traps will be installed as soon as received. Doors for the north side are being straightened and repaired. The pier and shed have been in service since December 26th.

Pier 3: Seventeen trusses on the north side have been repaired and repairs were made to side of shed, where necessary. About 200 feet of track for doors on the north side have been removed, straightened, and replaced. The work is about 75% complete.

Pier 4: The wreckage from roof and sides of shed has been cleared away. The floor of the annex has been taken up, so that piles can be driven. Stringers and a plank on the north side of pier are being finished so that track can be used. The shed is being rebuilt and is about 25% complete.

Pier 9, Richmond: The debris has been cleared away and also the debris on tracks leading to the pier and the pier is now in shape to be used as an open pier.

The deepwater local freight shed has been repaired.

Grain Elevators: Temporary repairs are finished. The elevator has been boarded in on the north side and covered with rubberoid finished, and repairs are now being made to the roof on the east side of the building. It has been in use since December 24th and the permanent repairs are about 60% completed. The boiler house building is completed and the boiler put in place and bricked in. The carpenter shop building is boarded in and roof covered with rubberoid, and work is proceeding on the interior of the building.

At Richmond the debris has been cleared away from about 85% of the tracks in the yard and they are being put into service as fast as repairs can be made to them. The water tank at Richmond has been temporarily repaired and has been in service since December 9th. All Hudson Bay timber has been loaded and shipped to the south terminals. [This timber was awaiting shipment to northern Manitoba.] Pier 9 and three tracks in connection with it have been cleared, and can be used at any time for handling deals, or any other cargo which does not require shed space. The water tank has been temporarily repaired and is giving good service. The sugar refinery site is being cleared.

At Willow Park temporary repairs have been made to 18 stalls in the locomotive house and temporary repairs are being made to 6 additional stalls. The dangerous portions of the roof of sections 5 and 6 have been removed. Section 4 is being repaired. The "I" beams and columns of this sections are straightened, and joists and sheathing are being put in place. Windows are being obtained by salvaging from machine shops and from sections 5 and 6 of the locomotive house. The work is about 75% completed. At the bunk house, the carpenter work is completed, and the plumbing work is about 75% completed. Sashes are being placed in the office building. Temporary repairs to the stores building are complete and the permanent repairs are now finished. Two bad leaks were discovered in the mains and were repaired and a better supply obtained at the stand pipe.

At the ocean terminals two freight sheds, 600 by 90 feet each, are being constructed to take the place of sheds which were destroyed by the explosion. They are known as sheds 25 and 28. Grading for tracks near the sheds is finished. Grading for the roadway between the sheds is finished. Pile driving for shed 28 is completed. Twenty-five per cent of the floor decking has been placed on the north half of shed 28; 90% of floor grillage has been completed on the south half of shed 28, with the exception of platform grillage which has not been started yet; 75% of floor girders have been placed on the south half of shed 28; all the columns for shed 28 have been cut to length, and 50% of the brace blocks have been nailed in place and 25% bored for lag screws. Six bents for the north side of shed 28 have been laid out. Good progress is being made and the framing of the superstructure will be well under way this week.

The repairs to the transmission line are over 60% complete.

The telephone dispatching line between North Street station and Rockingham has been put back into service.

The CGRofficials are also attending to the repairing of the Naval Service Department property . . .

Source: Canadian Railway and Marine World, February 1918

5909's New Year's Eve
A Roundhouse Fantasy

By Nicholas Morant

T'was New Year"s Eve in Revelstoke roundhouse. Contrasted with an occasional grunt from a waterpump was the hissing of steam which billowed up amongst the mountain locomotives in the cool air. As they settled down to their evening's rest, wraithed in ghostly mists, they looked for all the world like monsters from a strange land. The gnomelike figures of two hostlers, armed with oil soaked waste for flares, who were peering here and there into the innards of the somnolent mammoths made the whole scene increasingly mysterious.

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For a roundhouse everything was quite peaceful. The two hostlers had disappeared and it was only then that 5909, an inveterate grouch for no good reason at all, started steaming away to himself just as if some careless apprentice had bruised him with a five-foot pipe wrench.

"Trouble with this railroad," 5909 was saying, "is that a fella's supposed to do three men's work - it ain't fair . . . ."

"Aw - whatcha beefin' about anyway - that's what you were built for, wasn't it?" This, if you please, from 560. Just exactly when and from whence 560 had blown in nobody seemed to know - or care, for that matter. It was presumed by certain haughtily inclined 5900's and the two rather subjugated snowplows, who had no minds of their own and were pretty easily led anyway, that he had come off the Okanagan line. What he was doing in Revelstoke on New Year's Eve of all times, nobody knew or, if one may use the expression - gave a spit in the sandbox.

560 may have been a stranger there that night but he was an oldtimer and that meant a great deal in the mountains. He went right after 5909 like a bulldog, "Look you big sixteen wheeled, booster equipped hog, you . . ." he was spluttering by now, some steam had condensed somewhere in his anatomy, but he continued bravely on, "why back in the old days when we had to handle the mainline passenger trains we didn't come back into the 'house bellyachin', about our work and especially on New Year's Eve mister! We just, just - what is it you youngsters call it now . . . ?"

"Went to town," interposed an unidentified voice from the far end of the shed.

"Alright fella, alright," hissed 5909 uncomfortably, realizing by now he had probably bitten off more than he could chew with that peppery little 560 in the fold, "mebbe I'm a little tired or sumpin' - you oldtimers preachin' at me all the time but just the same, as I wuz sayin' . . ."

"Hey you - yeh, you with the booster, pipe down, see?" It was a rough voice from the north side of the shed and everyone recognized old 5801 - a tough old pusher if there ever was one. "I'm on snowplow duty - see? I want peace and quiet, New Years or not, so pipe down . . . or else somebody I know may get a poke in the pilot, see?"

Suddenly 5909's headlight burned up brightly, perhaps it was a trick of the steam or then again maybe it was the bright idea. "Say fellows I'm going out tonight - I'm gonna burn up somebody's rails . . . yippee, boyoboy me for the bright lights, its New Years!"

Gloomy Gus, in the guise of 5801, still feeling that his was a black outlook with nothing but snowplow duty hanging over his wrinkled dome, cut in sharply in an attempt to dampen the suddenly acquired brightness of 5909. "Maybe," he said, "they'll need somebody to help with the plow - what then, eh?"

5909 maintained his perkiness and suddenly assumed a "smart alec" attitude which fairly stormed the doughty 5801's armour of animosity, "Why you old wreck," he retorted, "your tubes are swellin' - you may need help at that - okay, ducky maybe we could get 560 to help you up to Flat Crick with his mighty driving wheels - haw haw!"

Poor little 560 who was just about out of the picture for lack of steam just sizzled ominously.

But 5909 went right on painting the highlights of his coming evening revelling with colours so bright that even Nellie the Snowplow squirmed uncomfortably. "Boyoboy," he was saying jubilantly, "am I going to have fun - first of all I'll go . . ."

"Quiet someone's coming", was the hissed warning from a locomotive near the far door.

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The two hostlers returned on the run. Said one - "Better get 5909 fired up again - he'll hafta take the plow east with 5801 soon's we can get pressure."

"Hey, what was that?" said the other hostler.

"What was what?"

"S'funny, but I though I heard someone laughing, a guffaw like."

Source: CP Staff Bulletin, January 1938.

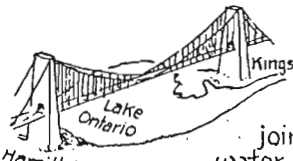
The Railway and the War

By Thurstan Topham

A great army of maintenance of way workers forms the backbone of railway operation. Their task is to keep track and bridges in proper condition - one of the vital essentials of the Railways' big war job

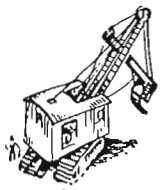
The Hand car is the track-worker's gasless & rubberless jeep. The C.N.R has 2,243 of them to cover the System's 3,053 track sections.

The Sperry Car is the trackman's detective. Its intricate mechanism spots hidden flaws which sometimes develop in high grade track steel. C.N.R main lines which carry the swift and heavy war traffic are tested regularly by this marvel of modern railroading.



The 6400 bridges of the National Railways System, if joined together, would span the water gap between Hamilton Ont. and Kingston Ont. - 167 Miles.

Many Canadian Railway Shops are now manufacturing war munitions. Thousands of Railway mechanics are engaged in this task.



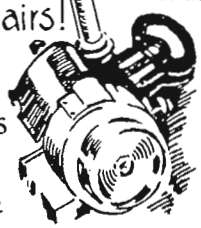
- FIRST SOD - - TURNED - DEC. 26TH 1940

- FIRST GUN - COMPLETED, JAN 3RD - 1942

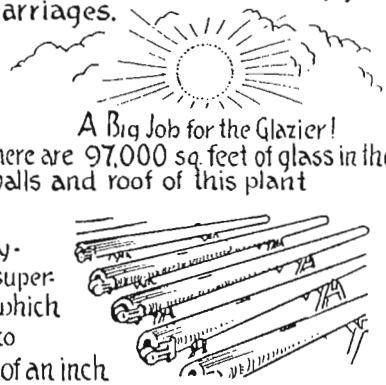
A Speed Record – Production was started 53 weeks after the first sod was turned for the plant of National Railways Munitions at Montreal, operated by the Canadian National Railways, which is turning out naval guns and field artillery gun-carriages.

Splitting Hairs!

Some parts of Navy Gun Breechblocks are machined to 2-10,000ths of an inch - one quarter of the thickness of a human hair.



Parts are checked with an electrically-controlled super-micrometer which measures to 1-100,000th of an inch



A Big Job for the Glazier! There are 97,000 sq. feet of glass in the walls and roof of this plant

War Materials are also being made at C.N.R Shops at Moncton, N.B., Stratford, Ont., Transcona and Fort Rouge (Winnipeg), Man., and Prince Rupert, B.C.

Rail Canada Decisions

By Douglas N.W. Smith

On June 20, 1992, the National Transportation Agency refused an application by Canadian National to abandon its Midland Subdivision from Uhthoff to Midland, a distance of 23 miles and related spur lines. Based upon representations from the two largest shippers, Ogilvie Mills and Unimin Canada, the Agency determined that the line could become economic. The Ogilvie Mills grind grain received by ship into flour which is moved by rail to Candiac, Montreal, Quebec and Halifax. Under the terms of the decision, CN will operate the line for another eighteen months before the decision will be reassessed.

Thus Midland remains as the last Georgian Bay port to further western grain products to eastern points. During the nineteenth century, the communities of Owen Sound, Collingwood, Meaford,, Depot Harbor and Midland vied for this trade. So valuable was this trade that CP carved a new port and community at Port McNicoll during the 1910's as it was dissatisfied with the harbour at Owen Sound.

The origins of the rail line serving Midland dates to the beginning of the railway era in Ontario. The Port Hope, Lindsay and Beaverton Railway (PHL&B) was incorporated by the Province of Canada on December 18, 1854. The company completed 42 miles of line between Port Hope and Lindsay in 1857. The following year it completed a 12 mile branch from Millbrook to Peterborough.

After this initial burst of railway building, progress ground to a halt. More than a decade would pass before the PHL&B bestirred itself. By this time, the company had decided its western terminus would be on the shores of Georgian Bay. There the PHL&B expected to tap the growing Canadian lumber trade and to capture a portion of the grain trade moving between Chicago and the Northeastern United States. In recognition of its new terminal point, the PHL&B changed its name to the Midland Railway in 1869. This name was the same as the site of its terminus on Georgian Bay.

The Midland entered into a contract with famed Canadian railway engineer and contractor, Walter Shanley to build the Lindsay-Midland extension. The 22.5 mile section between Lindsay and Beaverton was opened to regular traffic in January 1871. By the end of the following year, trains had reached Orillia, 19.9 miles west of Beaverton. As the contract with Walter Shanley called for the line to have been completed through to Midland by the end of 1872, the Board of Directors relieved Shanley of his contract in February 1873. All work on the Orillia-Midland section came to a halt as a result of the financial depression which started in 1873.

By 1874, the financial situation had improved sufficiently to permit the line to be extended to Waubaushene, 19.8 miles from Orillia. George A. Stewart, the Midland's Chief Engineer, had importuned the board to complete this extension. In his report to the President dated December 31, 1874 he wrote, "*During the winter and spring of the present year, the different contractors at work on the line between Orillia and Waubaushene continued their labours, but the expectations expressed in my last year's report of getting the road through to Waubaushene during the Summer* [of 1874] *have not been realized, owing entirely to the financial position of the Company, which was not in a condition to meet the balance of the outlay and purchase the rails for the purpose of finishing the line. The work had therefore to be discontinued.*"

"*The disappointment this has occasioned to the lumber interests along the Georgian Bay to reach this outlet for their productions which is so desirable, was very great, and I beg to urge that in view of the large outlay of capital already made every effort should be brought forward to reach, if not the terminus of the line at Midland, at least the waters of Georgian Bay at Waubaushene.*"

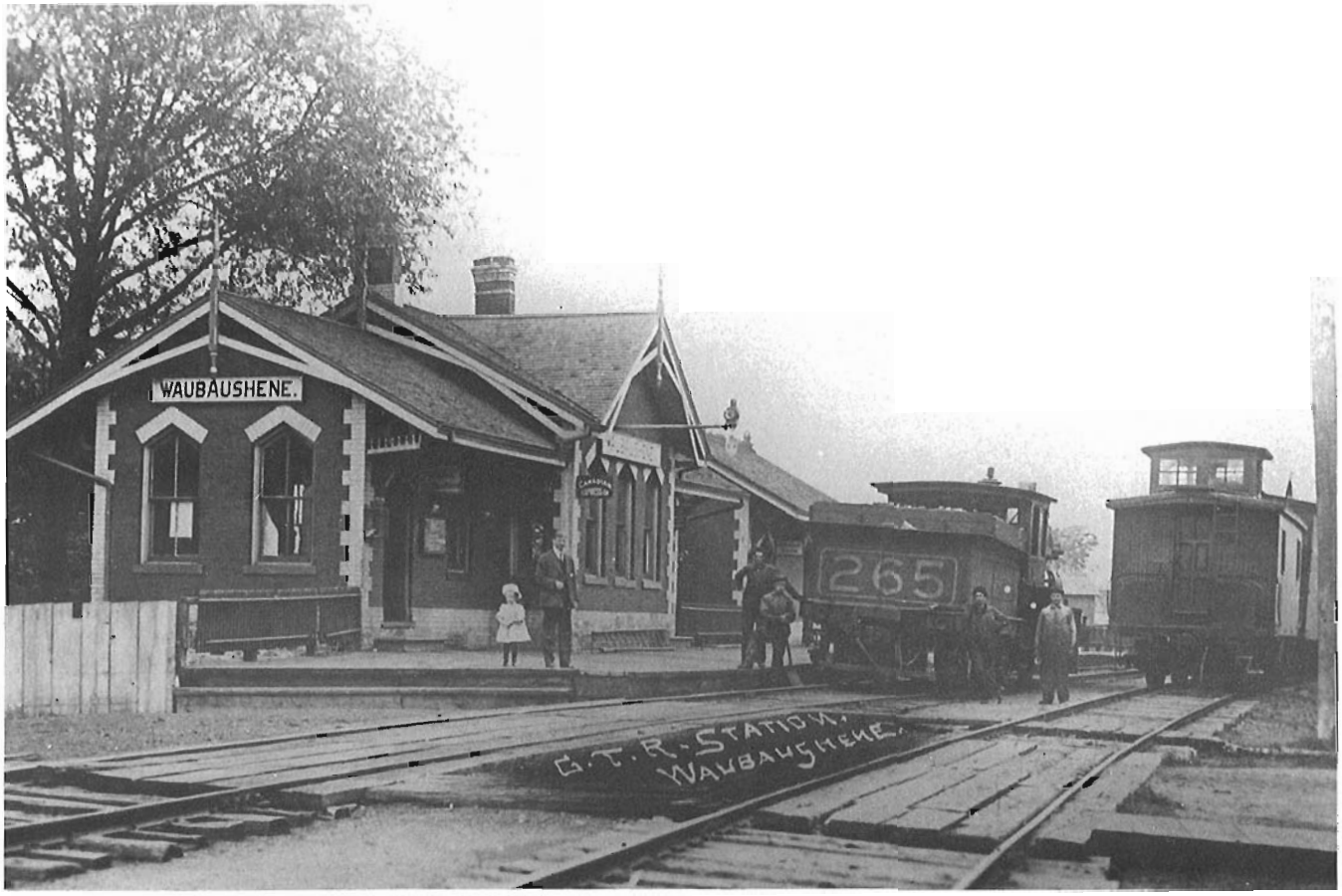
"*The necessary outlay, independent of the requirement of rails to finish the road between Orillia and Waubaushene, is not very large, and my statement furnished to F. Morton, Esq., the Engineer who came to examine the line will form a basis of the expense to be incurred.*"

In a report dated May 1874, Morton had reported favourably to the English bondholders, Messrs Uhthoff & Company, upon the Midland extension. He calculated that a total investment of $850,000 was needed to make the Midland a major grain route. The rehabilitation of the run-down Port Hope-Orillia and Millbrook-Peterborough lines with new rails, additional ballast, and improved bridges to handle the heavy traffic expected after the line reached Georgian Bay points was estimated to cost $150,000. The extension of the line from Orillia to Waubaushene was estimated to cost $170,000 and from Waubaushene to Midland $210,000. The costs of providing necessary facilities at Midland, namely wharves, freight sheds and a grain elevator, was estimated to be $120,000. The cost of additional locomotives and cars to handle the increased traffic once the line reached Midland was estimated to be $200,000.

Morton forecasted that the receipts from the lumber shippers along Georgian Bay, who would use the railway once it reached the harbour at Waubaushene, would increase revenues by 75 per cent or $291,000 per annum. The traffic at Midland was expected to add $100,000 per year to the company's revenues.

The backers of the Midland were sufficiently impressed with the prospects of the Waubaushene extension that funds were found to complete the line to that point. The tracks reached that point on August 9, 1875. Due to the Midland's poor financial position, the line was not put in a suitable condition for passenger traffic until December of that year.

The extension to Waubaushene did not revive the Midland's deteriorating revenues. In 1872, the last year before the depression began in 1873, the Midland generated $304,333 in revenues of which 77 per cent came from freight shippers. The year 1875 saw revenues fall seven per cent from those of 1872. As its revenues declining by a further four per cent in 1876, the company suspended work on the final section of the line from Waubaushene to Midland.



The local way freight crew and the station agent at Waubaushene, along with his daughter, stopped their activity long enough for a photographer to record this scene sometime about 1906. The 265 was a 4-4-0 built by the Manchester Locomotive Works in 1873. When delivered to the GT it was initially assigned number 199. It was renumbered 180 in 1882, 467 in 1898, 265 in 1904 and 2037 in 1910. The locomotive never appeared on a CN roster as it was withdrawn from service in 1918. This view provides a clear view of the end of a typical GT caboose of the period.

During the period the photograph was taken, the GT scheduled two round trips daily except Sunday between Midland and Blackwater Junction. At Blackwater Junction connections were made with the train to Toronto and Port Hope. No run of the mill branch line, one pair of the Midland trains carried a parlour car which provided through service between Toronto and Midland.

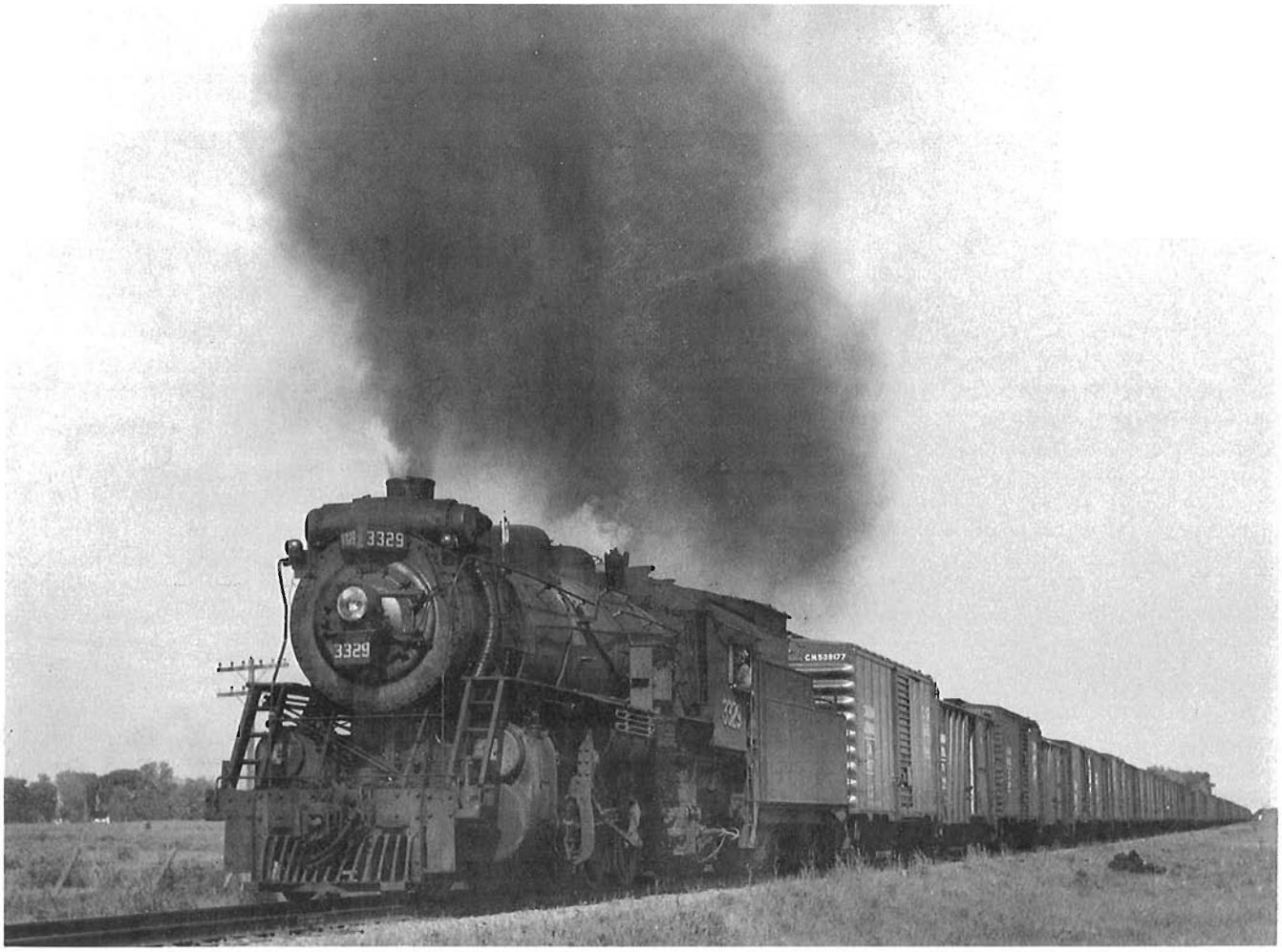
Patterson-George Collection.

In 1877, work resumed on a modest scale. Rails were laid 3.5 miles from Waubaushene to Victoria Harbour. The capital investment in this extension was $44,084. Midland President A. Hugel commented, "*The financial position of the Company permits of but a gradual completion of this work, but this difficulty it is hoped will be shortly overcome, and thus enable the Management to finish the remaining seven miles to Midland, when the system of the Midland Railway will be completed, and when it can be confidently predicted that from its geographical position and the command of the finest harbor on Georgian Bay, the road will assume a prosperous financial position, and justify the confidence bestowed on it by its owners.*"

In order to better serve the Georgian Bay Lumber Company mill at Severn, situated approximately four miles by water from Waubaushene, in 1877 the Midland rebuilt the trackage on its lumber wharf to permit freight cars loaded on scows to be transferred to its trains. The following year, the Midland spent $183.60 installing rails on two scows constructed by the Georgian Bay Lumber Company.

Work on the line to Midland was discontinued in August 1878, at which time rails had been laid to the River Wye. As the financial condition of the Midland had continued to deteriorate, with revenues falling to by $15,000 from 1877. At the same time, costs increased by $20,000, largely to correct the effects of deferred maintenance.

In 1878, the English bondholders replaced President Hugel with George A. Cox. In 1879 the work was resumed and the final three miles of track were laid into Midland. The line officially opened to Midland on July 14, 1880, ten years after work had begun on the 74 mile long prior to the official opening, on June 15th, the Lindsay-Midland extension.



Running westbound from Lindsay on June 15, 1956, CN Mikado 3329 hauls a long string of empty box cars destined to Midland for another load of grain. The 3329 was built by the Montreal Locomotive Works for the Canadian Government Railways in 1917, and it was retired by CN in 1960.

Patterson-George Collection.

Several weeks before the official opening, on June 15th, the Midland operated a special train to show its new terminal to influential businessmen. The special train from Port Hope met another special which had run up the Toronto & Nipissing Railway (T&N) from Toronto at Woodville Junction. As the T&N was built to narrow gauge of three feet six inches, it was necessary for the Toronto delegation to change to the standard gauge Midland train. Amongst those making the transfer were W. Gooderham, Jr., President of the T&N; J. G. Worts, Director of Bank of Toronto; W. B. Hamilton, General Manager of the Bank of Toronto; G. Y. Yarker of the Bank of Montreal; W. Wilby of the Imperial Bank; and a host of lessor luminaries.

Upon arrival at Midland, the Toronto delegation expressed their admiration for the fine natural harbour and extensive facilities which the Midland had under construction, including a 250,000 bushel grain elevator and 1,000 feet of wharfage with about half the wharfage having a natural depth of 18 to 23 feet for steamships. During their trip around the harbour on a steam yacht, Messrs. Gooderham and Worts expressed their surprise that other railways had not taken advantage of the harbour. They are reported as saying the trade resources of Midland were almost incalculable. Mr Gooderham added that there would be more through western grain from the United States points seeking to use the Midland route than the railway would be able to handle.

As if to reinforce the vision of streams of golden grain flowing through Midland's funnel, it was announced on the return train trip that the T&N would standard gauge its line to from a through route between Midland and Toronto as well as spend $250,000 to improve its line and increase its rolling stock.

The Midland had come under new management with the appointment of George Cox as its President in August 1878. Recognizing that competition had lowered rates but not increased

revenues, he moved to harmonize the relations between the railways in Central Ontario. In 1879, a pool agreement was entered into with the Whitby, Port Perry & Lindsay (WPP&L), an aptly named railway which ran between the towns in its corporate title, to divide the earnings of the two companies. A marked success in increasing revenues, arrangements were made with three other lines in 1880 in order to stabilize rates. The agreement with the Northern & Northwestern, which had lines from Hamilton and Toronto to Collingwood, another port on Georgian Bay, established uniform rates. Arrangements made with the Victoria Railway, which ran from Lindsay to Haliburton, established joint rates and the divisions of the revenues between the two companies. With the agreement with the T&N, Cox had achieved rate harmony throughout of the territory served by the Midland.

Following the opening of the grain elevator in Midland, the harbour was bustling with grain ships from the U. S. ports along Lakes Michigan and Superior. This bonanza, however, was not an unmixed blessing. The Midland was so short of cars it soon had to refuse shipments. This problem aside, the Midland saw its net earnings soar to an all-time high in 1880.

The following year, the Midland expanded its sphere of influence by leasing the Grand Junction Railway which extended from Peterborough to Belleville. In order to shorten the distance between Midland and Belleville, a cut-off was built between Omemee and Peterborough in 1883. This was done under the charter of the Toronto & Ottawa Railway in 1883.

The Montreal Gazette had forecasted these steps in July 1880 when assessing the possible developments of the Midland Railway:

"[As soon as the elevator is completed at Midland], *there is a prospect of an arrangement being made with a line of propellers* [steamships] *to run between Midland and the ports of the western lakes. . . The road from Lindsay to Peterboro, now by Millbrook, could be shortened to half its less than half the distance by connecting these two points with a short branch* [from Omemee] *to Peterborough. An arrangement may possibly be made with the Grand Junction railway so as to make a line for the grain traffic from Midland on the Georgian Bay to the Bay of Quinte at Belleville, where elevators being erected, the grain will be transferred into barges and brought direct into Montreal. There is no doubt that would be the most economical method of transport. It would give to the grain the option of going on when it reached Belleville by the Grand Trunk to this city or by barges, as the condition of tonnage and freights at Montreal at the moment might render expedient.*"

"*The Grand Junction is likely to be completed into Peterborough possibly during the present year and there is little doubt that it would be in the interest of both companies to make an arrangement by which they would practically become one.*"

In addition to its lease of the Grand Junction, the Midland capped its 1881 activities by arranging to lease the T&N, the WPP&L, the Victoria, and the Toronto & Ottawa Railways. The consolidation of these companies into the Midland was approved in 1882. Two years later, the Midland was leased by the Grand Trunk (GT).

The Midland had been controlled by its English bondholders since 1878. The committee of bondholders had been headed by GT President Sir Henry Tyler. GT feared that the Midland system could be taken over by the Ontario & Quebec Railway (O&Q), which was building an new line between Montreal and Toronto. As the O&Q was being built by the backers of the Canadian Pacific, the takeover of the Midland by it would have provided CP with a ready built network serving the largest centres in central Ontario.

The flow of grain through the port of Midland grew to mammoth proportions during the first three decades of this century. The Grand Trunk developed Midland and the adjacent area at Tiffin into its major grain port on the lower lakes. Grain volumes reached 40 million bushels a year and elevators with a storage capacity of 6.5 million bushels ringed the harbour. The GT and its successor CN ran solid grain trains from Midland to Montreal where the grain was placed in steamships for export or milled for domestic purposes. However, the opening of the new Welland Canal in the early 1930's, allowed shipping companies to handle grain through to Montreal at rates cheaper than those possible by rail. This diverted most of the grain trade from the ports on Georgian Bay.

The decision by the federal government to cease to subsidize reduced rates on grain milled in Central Canadian ports such as Midland and then re-shipped to East Coast ports for export killed what grain traffic had remained at most of the Georgian Bay ports. Port McNicoll, the last port facility to be developed on Georgian Bay and once CP's largest grain port on the lower lakes, now has been completely abandoned.

Will such a fate await the remains of the Midland Subdivision? The final chapter in the history of the railway to Midland has yet to be written.

Sources:

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Stevens, G. R. Canadian National Railways, Sixty Years of Trial and Error, Clarke, Irwin & Company, Toronto 1960

The Times and County of Simcoe Expositor, Issue of July 22, 1880

[This issue contained a reprint of the Montreal Gazette article concerning the future of the Midland Railway.]

BACK COVER: Gone, but not forgotten. Ontario Northland's train No. 121, "The Northlander", powered by F7A No. 1517, makes a stop at the ONR's new rail / bus facility (station) at North Bay on its way north to Cochrane Ontario. The date was Easter Sunday, March 31, 1991. In January 1992, the European equipment of this train was replaced by newly-rebuilt cars acquired from GO Transit.

Photo by Pierre Ozorak.

Canadian Rail

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