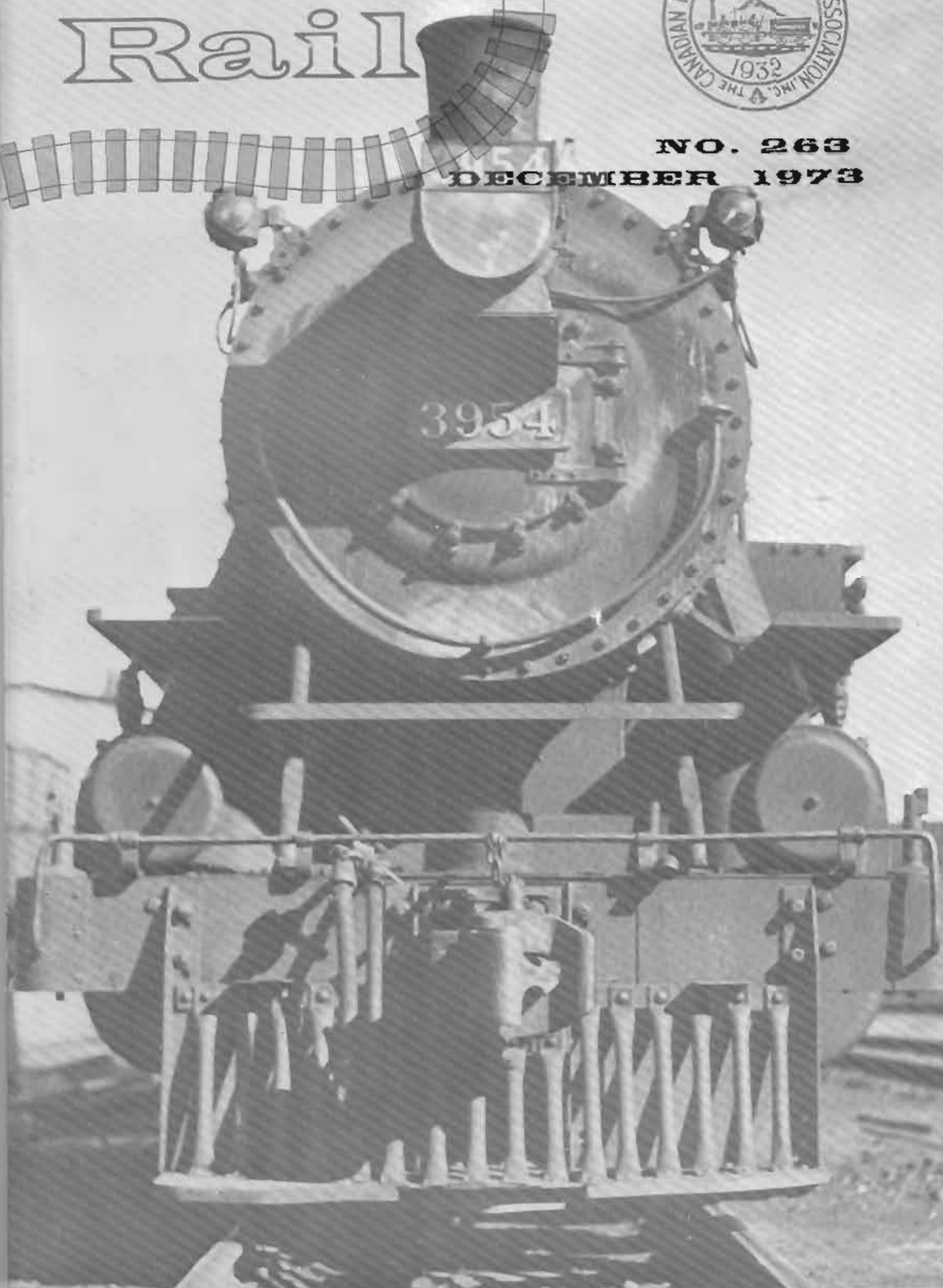
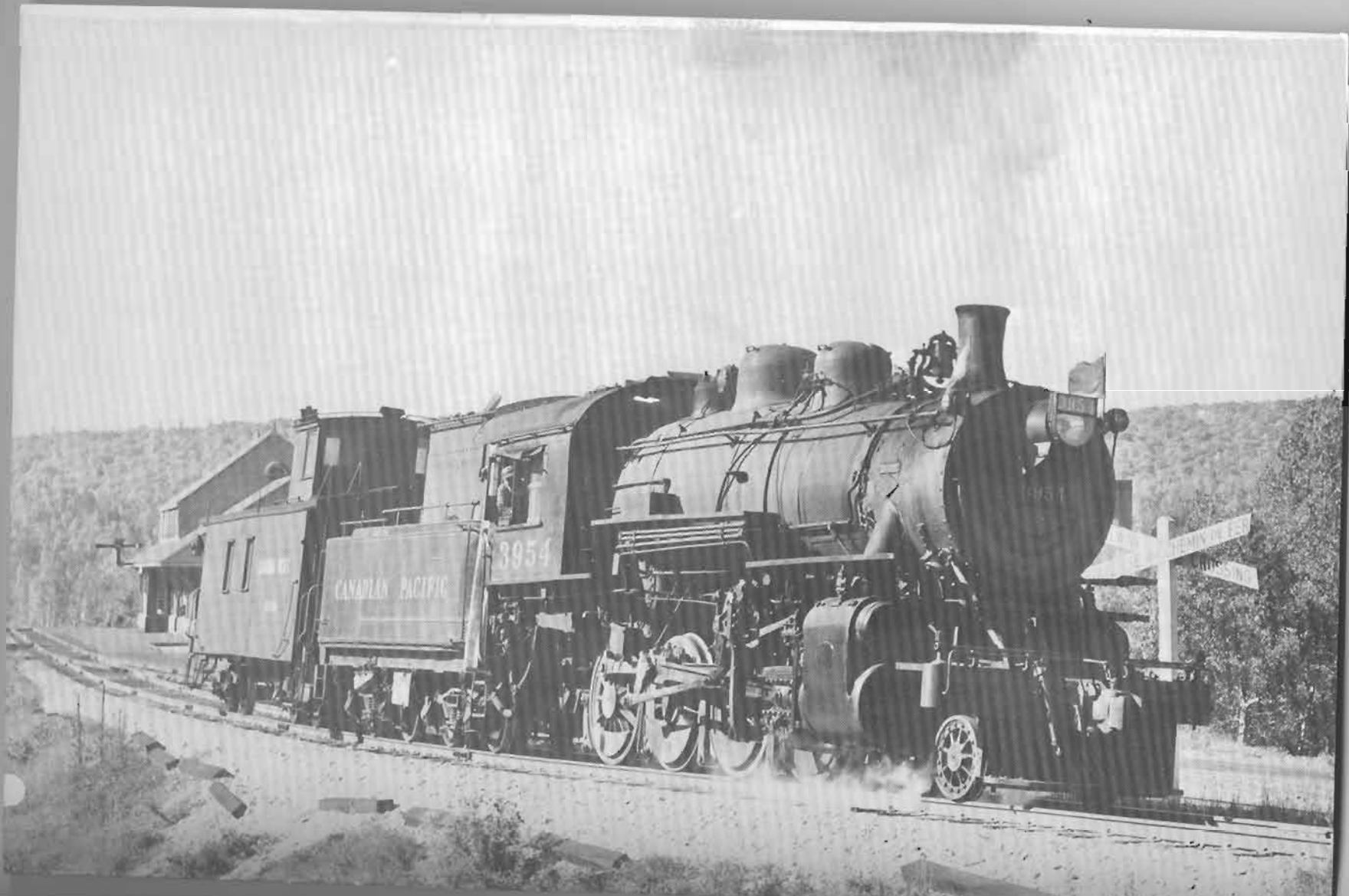


Canadian Rail



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ALGOMA EASTERN

The Line
to
Little Current

W.A. "Dale" Wilson

At its greatest extent, the Algoma Eastern Railway penetrated northeasterly eighty-seven miles into the northern Ontario portion of the Canadian Shield. Its eastern terminus was Sudbury, Ontario - centre of the world's largest nickel-mining region - located on the main line of the Canadian Pacific Railway 440 miles west of Montréal, at the point where the Sault Ste. Marie Branch leaves the main line. The town of Little Current on Manitoulin Island - just off the north shore of Lake Superior - was the AER's western terminus.

As actually constructed, the AER's purpose was threefold: to serve a part of the nickel-mining and refining industry near Sudbury; to provide a rail connection to Manitoulin Island; to open the intervening area to developments of various kinds. Service to the nickel industry was to involve a great variety of traffic: ore from the mines to the smelters, finished and semi-finished products to interchange points from smelters or roast-beds and miscellaneous raw materials and supplies - chiefly coal - to the mines and smelters. It is not surprising to find that the charter of the AER expressed much more ambitious aims. Most Canadian railway charters of the late nineteenth and early twentieth centuries were noted for being anything but modest and that of the Algoma Eastern Railway was no exception.

The AER story had its beginnings just before the turn of the century in Sault Ste. Marie, Ontario, on the Canadian side of the St. Mary's River, the outflow of Lake Superior into Lake Huron. The American-born financier and dreamer, Francis Hector Clergue, about whom much has been and will be written, had in 1894 begun to create an industrial empire under the general title and control of the Lake Superior Corporation.

The Corporation's achievements over the years were magnificent. They included a steel-mill complex and a pulp and paper mill in the

↖ THE MAJESTIC COUNTENANCE GRACING THIS MONTH'S COVER IS THAT OF CANADIAN Pacific Railway's engine Number 3954, class N4b, originally Number 54 of the Algoma Eastern Railway. She was photographed by Dick George at North Bay, Ontario, about 1947.

← ON SEPTEMBER 28, 1957, EX-ALGOMA EASTERN NUMBER 54, NOW CPR NUMBER 3954, stepped along briskly with her van at Temiskaming, Ontario. Dick George of Oakville, Ontario, took the picture.

Sault - pronounced then and now as "Soo"; hydroelectric generating and distributing companies in both the Ontario and Michigan "Soo"s; ferry service between the sister cities and electric transit systems in both; iron mines to the north, near Wawa, Ontario; coal mines in West Virginia, U.S.A.; limestone quarries in the State of Michigan and, last but by no means least, 400 miles of railway. And these accomplishments did not satisfy Francis Hector Clergue's aspirations.

It all started in 1894, when Clergue was on his way to Fort William, Ontario, to investigate the possibility of hydroelectric power development for a group of New York and Philadelphia investors. He interrupted his journey at Sault Ste. Marie, Ontario, on hearing that the town's attempt to harness the power potential of the St. Mary's River had ended in failure. Clergue arranged to take over the project and place it in operation. He did just that. Then, failing to interest any company in the use of the power generated, he promoted the construction of a pulp and paper mill under his own management. What he could not do in Fort William, he could do at Sault Ste. Marie. The Lake Superior Corporation was on its way.

To obtain the sulphurous acid essential to paper-making, Clergue proposed to use the sulphur which was a by-product from the nickel-mining and smelting operations in the Sudbury area. The Canadian Copper Company, one of the predecessors of the International Nickel Company of Canada of today, refused to deal with him. Clergue was not a man to be thwarted. Thus it was that in 1899 the Lake Superior Corporation became involved in the affairs of Sudbury, by buying two nickel properties west of the town. The mines-to-be were named "Gertrude" and "Elsie", after Clergue's sisters.

The nickel obtained from these mines was initially just a by-product, since the sulphur was of importance to Clergue. But it quickly assumed greater importance and before it knew it, the Lake Superior Corporation was in the nickel business. Experiments conducted in Sault Ste. Marie suggested that it was economically feasible to use Gertrude and Elsie nickel as an alloy in steel-making. A Lake Superior Corporation subsidiary, later known as the Algoma Steel Corporation, negotiated a contract to supply nickel-steel to Krupp, the German weapons-maker.

Rail transportation had to be provided for the Gertrude and Elsie Mines. Clergue took over the existing charter of the Manitoulin and North Shore Railway Company of 1888. This line had been planned originally to connect Manitoulin Island in Lake Huron with the mainland. Extensions of the charter up to 1894 authorized a connection with the Canadian Pacific Railway's line between Sudbury and Sault Ste. Marie. Although subsidies had been granted, it is probable that none were actually paid, since no construction took place on the ancestral M&NS.

Clergue's new Dominion of Canada charter for the M&NS in 1900 legalized the construction of a railway from Sudbury to Little Current, from Little Current southeasterly across Manitoulin Island, across Georgian Bay (by ferry) to Tobermory on the eastern shore of Lake Huron and thence to Meaford, Wiarton and Owen Sound, with a potential connection with railways to Toronto. The possibility of a new railway from Toronto to Sudbury and Sault Ste. Marie was very encouraging. But since this proposed route involved a train-ferry operation across Georgian Bay, there was some speculation as to how operations would fare during the winter months. However, it was in planning, not in operation, that Clergue's talents lay.

A now-defunct newspaper, the Sudbury JOURNAL, reported in May 1900 that construction on the Manitoulin & North Shore had just begun in Sudbury without any kind of ceremony. The contractors were Fauquier Brothers. The JOURNAL predicted that the M&NS would do for the Sudbury area "...what the Crow's Nest Line is doing for Rossland..." There were also predictions for "...a fine new Union Station..." for Sudbury.

A small railway yard was laid out in Sudbury, having two or three tracks, a coal tower, a water tank and a small engine house. These facilities were located in the northwest corner of the town, just west of the point where the M&NS branched away from the Canadian Pacific's main line to western Canada. M&NS engines were turned about half-a-mile southeastward, on the wye formed by the junction of the CPR's main line and the Sault Ste. Marie branch.

1901 was an exciting year for the M&NS. In the spring, the 60-pound rail reached Gertrude, 14 miles west of Sudbury, well beyond the spur-connection to the Elsie Mine at mile 5. The arrival of track at mile 12 had allowed the Canadian Copper Company's new Creighton Mine to begin shipping ore to the Copper Cliff smelters via Clara Belle Junction at mile 4.8. Seventy years later, Creighton ore still follows this route.

The line avoided cutting through the ever-present rock ridges as far as was possible and resorted to the twisted course dictated by "side-hill" construction. The track was carried over muskeg and swamps either on timber trestles or large gravel fills, resting on massive platforms of timber corduroy. Where shallow cuts through clay ridges were necessary, an absolute minimum of ballast was used. This had one inevitable result. Train movement through such cuts, during or after wet weather, caused a pumping action in the road-bed and resulted in the disappearance of rails and ties under a thick layer of mud.

Also in 1901, the Spanish River Pulp and Paper Company was beginning construction of a paper mill and power plant at was to be the town of Espanola, about 50 miles west of Sudbury. A spur was built a distance of about 1.5 miles, to connect the site with the CPR's Sault Branch at Stanley Junction, today known as McKerrow. This spur was a part of the M&NS "system", probably as a result of the powers granted by the original and revised M&NS charter. The obvious lack of a physical connection with the rest of the railway resulted in the lease of the Stanley Junction spur to the Canadian Pacific. It is probable that the M&NS planned to push construction ahead rapidly and thus arrive in the Espanola area within the year. Due to circumstances beyond the Company's control, this did not happen until the year 1912.

Information on the history of the Manitoulin and North Shore, in this period of its history, is scanty, but it may be said that the enterprise was successful. The Lake Superior Corporation's smelter at the Gertrude Mine was opened in 1902. The next year, a new mine, the North Star, opened near mile 10 and was served by a mile-long spur. This mine was owned by the Mond Nickel Company and ore concentrates were shipped east to Sudbury on the M&NS and then west 21 miles over the Canadian Pacific's Sault Branch to Victoria Mines, at that time the site of the Mond Nickel Company's smelter.

In the same year, 1903, disaster overtook the Lake Superior Corporation. Largely because of Clergue's overextension of the company, a financial crisis ensued which obliged reduction of the operations of the subsidiaries, either partially or totally. In the Sudbury area,

the immediate result was the closing of the Corporation's two mines and smelter. They were never to re-open. The construction plans of the M&NS were brought to a halt, with only the original 14 miles of track completed. A further 10 miles to the Crean Hill Mine and the right-of-way between Espanola and Little Current had been surveyed, but nothing more was to be done before the period 1908-1910.

At the Sault Ste. Marie headquarters, Francis H. Clergue was eased out of control of the company which had been his personal creation and dream. He remained on the Board of Directors for some time, but apparently was expressly prevented from having any voice in the formulation of company policy.

The possibility that a railway line would be built from the M&NS to the Corporation's other railway subsidiary, the Algoma Central and Hudson Bay Railway, is mentioned frequently in historical research material. Certainly the head offices of both railways were in Sault Ste. Marie, Ontario, and the two railways shared staff at the upper management level. Company employees, with the obvious exception of train crews, were frequently transferred back and forth between the Sault and Sudbury. Yet the proposal to construct a physical link never appeared in any legal charter. Such a link would have meant a partial duplication of the existing Canadian Pacific service to the Sault and this would have been unproductive from both an economic and political point of view.

However, the Official Guide 1905 contains a map of the Algoma Central system, showing all routes mentioned in both the AC&HB and M&NS charters as being in operation or under construction, as well as the proposed connecting line between Sudbury and Sault Ste. Marie. Since Clergue and his dreams were no longer dominant in the Corporation in 1905, it may be assumed that the new, practical management saw some merit in the idea. There is no proof that the scheme had been Clergue's originally, but it somehow seems to fit in with his flair for empire-building.

Despite the problems of the parent corporation and the resulting loss in traffic to and from the Gertrude and Elsie Mines, the M&NS managed to survive. The Official Guide 1905 lists two passenger trains each way, daily, over the 14 miles of main line. Creighton Mine remained the chief source of traffic, with 15,000 tons of ore-concentrate shipped per month in the decade 1901-1910. Poor's Manual 1905 shows that the railway owned two locomotives. Mr. Ray Corley, Canadian railway locomotive historian, has kindly supplied facts on the M&NS/AER numbering system and its relation to that of the Algoma Central & Hudson Bay, as shown in the roster notes at the end of this article. Speculation based on these facts leads to the conclusion that locomotives owned by the M&NS previous to 1907 were numbered between 12 and 18, inclusive. Further data is at present unavailable.

The locomotive roster presented supplies information relevant to a much later date and indicates that motive power used on the completed railway was acquired after 1911, with the one exception noted.

In 1907, or shortly thereafter, the Lake Superior Corporation and its subsidiaries resumed plans for expansion. The M&NS acquired a new locomotive, Number 27, in that year and proceeded to make the route of its line more closely resemble that described in its original charter.

Mr. T.J. Kennedy, General Superintendent and Traffic Manager of the AC&HB/M&NS, organized the Superior Construction Company to

build the M&NS extension. The construction company appears to have been a temporary part of the Lake Superior Corporation family. Mr. Kennedy was in the right place at the right time, since, in 1915, he was President and General Manager of the Algoma Eastern Railway Company, successor to the Manitoulin and North Shore Railway Company, and a receiver of the then-bankrupt Algoma Central & Hudson Bay Railway Company.

The M&NS rails, now 80-pound, had reached mile 24 by 1910, the Crean Hill Mine and its townsite of four hundred population. Mine traffic had previously been hauled from the Crean Hill property over a spur of the Canadian Copper Company's railway to the Sault Branch of the Canadian Pacific Railway. On its arrival, the M&NS took over this traffic and the spur south to the CPR was finally abandoned in 1915. This favourable treatment of the M&NS by the Canadian Copper Company and its successor, the International Nickel Company, was to continue throughout the railway's life.

The town of Mond at mile 26 was the next settlement to be reached. Here lived the workers for the mine of the same name, situated a mile or so to the north. Until 1913, ore-concentrates were taken by aerial tramway to the Mond Company's smelter at Victoria Mines, a few miles south on the CPR's Sault Branch. In 1913, the town of Coniston, to the east of Sudbury, was chosen as the site for the new Mond Nickel Company smelter and the M&NS, by then the Algoma Eastern Railway, began hauling ore-concentrates from the mine destined for this smelter.

The railway's new name caused considerable confusion in Sudbury railway circles in 1910 and 1911. Officially, the Manitoulin & North Shore Railway Company became the Algoma Eastern Railway Company on May 11, 1911; yet, for some time previous, the Sudbury STAR, a newspaper of the town, and mining industry publications had been referring to the Company as the "Algoma Central". The close corporate relations between the Algoma Eastern and the Algoma Central, plus the presence of some regularly-assigned rolling stock and maintenance-of-way equipment labelled "Algoma Central", apparently provided a reasonable basis for the confusion. There was no explanation for the name-change and it can only be assumed that the Lake Superior Corporation wanted all of its subsidiaries named "Algoma (something)".

Construction of the M&NS/AER continued westward to Turbine, mile 34, where there was an interchange with the Canadian Pacific Railway and a Canadian Copper Company spur, which turned north to the power developments on the Spanish River. AER locomotives were to run over this spur with Canadian Copper Company pilot crews. From Turbine to Espanola, the AER right-of-way roughly paralleled the CPR, following it closely and crossing under it at about mile 38, near Nairn. The AER track from Turbine to Nairn followed the south bank of the Spanish River and was often no more than five or six feet above the river's summer level. Although power developments upstream would have helped to control water levels somewhat, spring flood-waters must have been a chronic problem.

At this time, the Sudbury STAR reported that, in addition to the new construction, the original 14 miles of track to Gertrude had been improved. This involved track renewal with 80-pound rail, new ballast, widening of the fills and draining of the muskegs. These improvements were not all completely successful. The wider fills were too heavy for their corduroy bases, for on one occasion, a "sink" developed near Creighton, in which the track and eight ore-cars were submerged. Two of the cars were later recovered, when new



↑ MILE 1.0 OF THE FORMER ALGOMA EASTERN RAILWAY AT SUDBURY, ONTARIO, the present-day Nickel Subdivision of CP RAIL. Looking east, this is the precise location where the pre-1930 CNR transfer track joined the AER. In the background was the extreme west end of the AER's yard in Sudbury. Photo W.A.Wilson, August, 1971.

fill pushed them back up out of the swamp. Sixty years later, the muskegs are still stubbornly hazardous and a continuing problem.

The AER main line, without final ballasting, reached Turner, mile 86.2, in April 1913. Turner was the site of the Little Current yard and dock facilities on Lake Huron's Georgian Bay. Company officials toured the line on board the "Lake Superior", one of the Algoma Central and Hudson Bay Railway's business cars, which had come east from the Sault via the CPR. In October of the same year, the bridge to Manitoulin Island and the town of Little Current itself was finished and the Algoma Eastern Railway could boast of 87.1 miles of main line. The Dominion of Canada's Railway Board apparently found all things to be in order and the new line was declared open officially.

The Sudbury STAR wrote enthusiastically about potential passenger traffic and lower freight rates for certain goods, notably coal, northbound through Little Current harbour. The STAR pointed out that the Canadian Pacific was charging less for coal in North Bay, Ontario - which the Grand Trunk Railway Company of Canada also served - than in Sudbury, even though the coal for North Bay was shipped via Sudbury! Traffic prospects south of Espanola included forest products, commercial fish and livestock and were excellent. J. P. Mader, then-General Agent of the Algoma Eastern Railway, remembers that one of his early tasks was to solicit the cattle traffic from Manitoulin Island, which formerly had been routed by boat to Owen Sound at the base of the Bruce Peninsula.

The STAR was not completely happy with the operation of the new line. When the "first" passenger trains from both Espanola and Little Current to Sudbury ran, the newspaper was angry because no advance notice of their arrival was provided. Perhaps Algoma Eastern management, over ten years late in fulfilling even a part of the responsibility undertaken in its charter, was too embarrassed to call attention to itself on the occasion of the first operation of its passenger service.

The previously-mentioned 1913 relocation of the Mond Nickel Company's smelter to Coniston, east of Sudbury, seemed to provide an extra incentive for a direct connection between the Algoma Eastern and the Canadian Northern (Ontario) Railway in Sudbury. There must have been some interesting and animated bargaining between the Canadian Pacific, the Canadian Northern (Ontario) and the Mond Nickel Company for the lucrative traffic that the AER could offer, since ore-concentrates from the two on-line Mond mines could easily have been routed via the CPR from Sudbury to Coniston. Canadian Northern (Ontario) must have offered a most attractive arrangement to the Mond Nickel Company.

The Canadian Northern (Ontario) Railway had served Sudbury since 1909 by a spur running west to the downtown section from its main

↓ JUST BEYOND THE AER'S SUDBURY YARD WAS THE WATER-TANK, THE FOUNDATIONS of which are still visible. In 1971, Canadian National Railways trestle carries the transfer line over CP RAIL in the background. The photo was taken by W.A.Wilson in August, 1971.



line at Sudbury Junction, 3.8 miles to the east. In that year, this MacKenzie and Mann road had proposed an extension to the Manitoulin and North Shore through the town, which involved numerous grade crossings. Already suffering from a plague of these, courtesy of the CPR, the town fathers quite sensibly declined the proposal.

The scheme which was to succeed in 1913 involved a combined wooden-trestle and steel-span bridge, crossing two streets and the main lines of both the CPR and the AER in the northwest corner of the town. The bridge was not very high, for on one occasion an AER employee fell from it, for reasons now unknown, landing in a sitting position on the AER main line, with only his dignity injured. While the new interchange line was built and owned by the Canadian Northern (Ontario), it was shared equally with the Algoma Eastern, the latter using it for their switching in daylight hours.

Previous to 1913, Algoma Eastern passenger trains departed from the Elm Street crossing, about where the AER joined the CPR main line in Sudbury. From 1913 to 1924, the AER used the Canadian Northern (Ontario)/Canadian National station facilities. Cooperation reached a high point during the summer of 1920, when Canadian Northern (Ontario) sleeping cars ran through from Toronto, via Sudbury, to Little Current on Manitoulin Island. The decision of the Algoma Eastern not to build a station in Sudbury was, in retrospect, common

↓ CANADIAN NATIONAL RAILWAYS' A-FRAME TRESTLE IS MUCH THE SAME TODAY as it was in the days of the Algoma Central Railway. It is easy to see why a fall from a cut of cars on the trestle would probably be fatal. The west abutment was built in 1930. Photo W.A.Wilson 8/71.





↑ RISING TO JOIN THE CP RAIL MAIN LINE FROM THE WEST, THE FORMER LINE of the Algoma Eastern Railway is heading southeast towards the centre of Sudbury. Today, this portion of the AER is part of CP RAIL's branch to Sault Ste. Marie, Ontario. Photo W.A.Wilson: August 1971.

sense, since a town the size of Sudbury never did need three passenger stations!

Expansion naturally brought changes to the Algoma Eastern. Passenger trains were rescheduled for Canadian Northern connections in Sudbury, but of much more significance was the changing of the name "Clara Belle Junction" to Copper Cliff, Although the CPR's Sault Branch served the town of Copper Cliff, as well as its smelters, the Canadian Copper Company chose to ship its total and steadily increasing nickel production via the Algoma Eastern. Perhaps the name-change of the operating point was to recognize this practice. Not playing favourites, the Algoma Eastern divided the onward traffic equally between the CPR and the CNorO at Sudbury.

Elsie Junction had all but disappeared from the timetables of the AER by World War I and was replaced - approximately - by Nickelton, site of the British America Nickel Company's operations. BANC arrived on the Sudbury mining scene just before World War I, with an impressive list of mining properties and ambitious plans to erect a smelter near the Murray Mine, a bit northwest of the AER main line at Copper Cliff.

The Murray location was the site of the original Sudbury Basin mineral discovery, made when the Canadian Pacific Railway's main line was pushed through this region in the 1880s. The mineral discovered was thought to be copper - and certainly there was copper in the ore - but the original developers were bitterly disappointed to find considerable amounts of an impurity which, at that time, was almost impossible to remove. This was nickel, today the most impor-



↑ THE FORMER STATION AT CLARA BELLE JUNCTION ON THE ALGOMA EASTERN Railway subsequently became Clarabelle Station on CP RAIL, after a number of changes, back and forth from two words to one. Dale Wilson took this picture in August, 1971.

tant mineral mined in this region. It was some time before the metallurgists were able to develop a commercially-acceptable process to separate the nickel from the copper economically and to put it to use in its own right.

Perhaps coincidentally, there were several of the directors of the British America Nickel Company who were or would be members of the management of the Lake Superior Corporation. However, control of the BANC was maintained by the British Government, who were anxious to ensure a supply of nickel for the impending European conflict. The 1917 Royal Commission Report on the Nickel Industry stated that the British Government was also BANC's principal customer.

Nickelton turned out to be the proverbial "flash in the pan". Rail traffic was spasmodic, due to design problems in the smelter and other developmental difficulties. When BANC was working, the AER ran "passenger extras" for the employees, to and from Sudbury. BANC's fortunes were directly reflected in this passenger volume, which varied from a high of 100 to a low of 5, per working day, each way, during the month of August 1913. Production of nickel did not begin until World War I was nearly over and, after 1918, the market declined rapidly. BANC, unlike Mond and Canadian Copper, had no established peacetime market to fall back on. By 1921, all was ominously quiet at Nickelton and in 1924, BANC assets were liquidated for but a small fraction of their actual worth.

Soon thereafter, the AER spur to Nickelton was abandoned and the name disappeared from the timetables. In 1940, once again due to a wartime condition, the Murray Mine was re-opened and a new rail

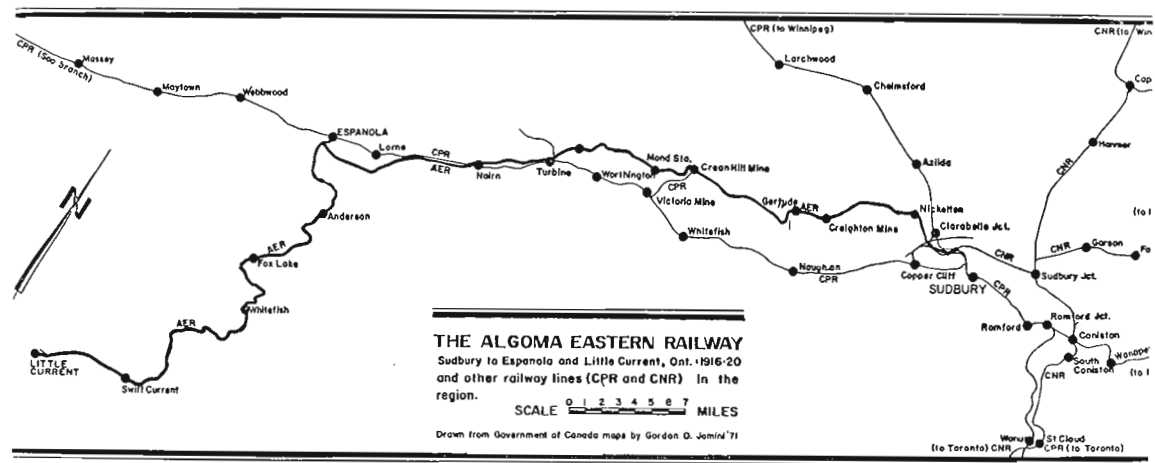
line was built in from Nickelton. As luck would have it, the 1940 rails belonged to the Canadian Pacific Railway.

The 1914-1918 war years brought considerable added rail traffic to the Sudbury district. Canadian Copper Company relocated its outdoor roast-yards from Copper Cliff to O'Donnell, mile 18, on the Algoma Eastern. This resulted in a considerable amount of new traffic for the AER, since 60% or better of Canadian Copper's raw ore was pretreated outdoors. The yard had four parallel tracks 7,500 feet long, with roast piles between them containing 125,000 tons of nickel sulphide ore. Using considerable quantities of locally cut wood for fuel, the roast piles were set afire and allowed to smoulder for four to five months. This slow burning removed a substantial amount of the sulphur from the ore in the form of sulphur dioxide gas, thus making it easier to process the roasted ore in the smelter furnaces.

The vaporized sulphur dioxide gas polluted the air for miles and eventually killed off whatever trees had escaped being used for fuel. This cheap but destructive process for removal of the sulphur was used until 1929, when the Government of Ontario finally legislated its discontinuance. Ore shipments from O'Donnell must have continued until 1938, since an International Nickel publication describes this as the year when the ore-handling facilities were removed.

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AT MILE 4.7 OF THE WEBBWOOD SUBDIVISION OF CP RAIL IS COPPER CLIFF, Ontario, with its typical CPR design. It took 13 minutes for Algoma Central Railway's Train 1 to cover the distance from Sudbury in 1928, while in 1972, CP RAIL's "Dayliner" Train 427 was allowed 7 minutes.
Photo by Dale Wilson, August, 1971.





Corporate changes ensued. The Canadian Copper Company and a number of other local companies combined to form the International Nickel Company - INCO - during World War I. Only the Mond Nickel Company remained as an independent producer and it, too, was to merge with INCO in 1929.

The nickel and copper mining and refining business boomed in response to wartime demands and new mining properties were located and prepared for operation. To supply sufficient hydroelectric power for the growing complex, INCO built additional generating installations north of Turbine. To handle the increasing traffic, the AER apparently obtained locomotives when and where it could. Between 1914 and 1919, the total rolling stock of the AER also increased from 256 to 389 cars for all types of service.

As might have been anticipated, in such economic conditions rumors were constantly circulating about the possible sale of the AER. The Sudbury STAR identified the interested parties as the CPR, the CNorO and even the Grand Trunk, although the latter's nearest rail was in North Bay, 80 miles to the east. Canadian Northern (Ontario) was considered as the company most likely to become the new owner, but nothing developed and talk soon ceased. As a sidelight to all of this, the Algoma Eastern was presented as a very prosperous venture.

The early 1920s were not so happy a time. BANC staggered along towards bankruptcy and the Crean Hill and North Star Mines were shut down. Conditions were sufficiently depressed in 1921 to force INCO to suspend most of its operations for a full year and Mond Nickel worked on a greatly reduced basis. Curiously, 1921 saw the delivery of two new locomotives to the AER. These were 2-8-0s Numbers 55 and 56 from the Montreal Locomotive Works, the last locomotives that the railway was to buy.

A further comment may be made on the Algoma Central Railway's motive power prior to 1920. Sources indicate that Algoma Central and Hudson Bay Railway locomotives Numbers 28, 29 and 30, 2-8-0s built by Montreal Locomotive Works, Montreal, in 1911, were leased by the AER for an indefinite period during World War I. Specifically, Algoma Eastern records show that Number 30 was involved in a collision in Sudbury Yard in February 1914. An unknown number of Canadian Pa-

cific Railway locomotives were also leased about this time, with CPR Number 3408 (2-8-0; MLW 1904) definitely on AER property as of December 23, 1918. Mr. G.S.Dennis says that "a number of Baldwins" were acquired temporarily during World War I, but little information is available as to their origin, length of stay, or disposition. According to AER records, locomotives numbered 55 and 58 were in service during September 1917. Since a new AER locomotive was numbered 55 in 1921, it is logical to assume that "the Baldwins" were numbered at least from 55 to 58 and were with the AER for no more than the period 1916 to 1921. The numbering system suggests that the locomotives were probably repainted by the AER and may actually have been bought by the railway, rather than only leased. A letter from AER engineman Wickenden to Mr. Dennis' father, at that time with the Canadian armed forces overseas, indicated that the Baldwins were expected to be troublesome. In fact, one of them later killed Engineman Wickenden when one of her main rods broke and forced the Johnson bar back, crushing his chest.

The Sudbury STAR reported in October 1922 that Algoma Eastern Railway timberlands, situated along the Algoma Central, had been sold to Philadelphia U.S.A. interests for over a million dollars. Since the AER reported operating losses of \$ 214,000 in 1922 and \$ 44,000 in 1923, it would seem that the proceeds of this sale were of little real assistance to the railway. A complete history of the Lake Superior Corporation might reveal reasons for this sale and the disposition of the proceeds. It is interesting to note that a number of the members of the Board of Directors of the Lake Superior Corporation were residents of Philadelphia, PA, U.S.A., at that time.

Mining and related traffic declined further in 1923, with the closing of the Mond Mine near mile 26. Other classes of AER traffic were in better shape. Lumber in considerable quantities was being shipped from Little Current and Fox Lake (mile 60). The Spanish River Company's paper mill at Espanola was receiving 500 cars of pulpwood and shipping 8,000 tons of paper per month. Local passenger traffic, tourists, livestock, poultry and even cars of fresh fish all contributed to keeping the line going. Little Current Harbour was a busy place, the major commodity handled being inbound coal for the nickel companies' furnaces.

Early in 1924, the Algoma Eastern Railway's public timetable, printed daily in the Sudbury STAR, began listing AER/CPR connecting trains. Yet, freight interchange with the recently-formed Canadian National Railway Company continued, as did the use of the CNR's station facilities. Finally, a change came with the advent of the summer timetable. AER passenger and express business was relocated to the Canadian Pacific Railway station in Sudbury, where it was to remain until the end of AER operations. Freight business with the CNR continued as usual. In the opinion of J.P.Mader, who was by this time the AER City Passenger Agent in Sudbury, the lower cost of CP's facilities, plus the more direct route to the CPR station, were the main reasons for the relocation.

The summer of 1924 saw the first and only head-on collision in the history of Algoma Eastern operation. Passenger Train 1, with engine Number 51, bound for Little Current, met freight extra Number 54 at mile 77. Mr. G.S.Dennis, a schoolboy at the time, was riding the passenger train that day and the following is part of his story:

"The conductor of the passenger train, Bill Dick, had suddenly remembered his meet order for Birch Island.

Why he did not pull the emergency air in the baggage car, no one will ever know. He had left the baggage car and was climbing onto the top of the tender just as the two engines met. He was thrown alongside the passenger locomotive, where the air-pump, breaking loose in the crash, dropped on him, killing him instantly.

The foreman of that section of track, Arnold Noble, was riding in the cab of the passenger engine, checking for rough spots in the roadbed. He hesitated for a split second too long before jumping and was crushed to death between the cab and the tender. The terrific impact forced his foot, unmarred, with shoe and sock still in place, through the two-inch planks of the engine deck.

Behind the freight engine, six flat cars had doubled up into the length of half-a-car. Water gushed into the coach from the ruptured tender of the passenger engine. The crash forced the baggage car up onto the tender platform and tore a gaping hole in the tank."

Besides the two deaths, a baggageman narrowly escaped drowning, being pinned face-down by the trucks and other baggage. Locomotives were rented from the Canadian Pacific while Numbers 51 and 54 underwent extensive repairs.

Mr. Dennis also tells of more pleasant times on the Algoma Eastern Railway:

"In the absence of roads, the train was the only means of access to stores, etc. Many times, a farmer would come out to the track waving a letter or holding a parcel. They were always picked up by the train crew and mailed. Often, some member of the train crew would stop for some necessary item for the farmer or homesteader. The passenger train would stop anywhere to pick up or let off a person... the girl or boy that Dad (an AER engineer) used to pick up at the North Star Mine and take into Creighton to school.

And (there was) the time the wayfreight crew left the engine at Crean Hill to hunt rabbits and partridge. During an elapsed time of 15 to 20 minutes, during which they shot several of each, they were completely away from the engine. On returning, they found the superintendent, Mr. F.M. Donegan, standing at the engine steps. His only comment was, "What a hell of a way to run a railroad!"

Nothing further was heard, but the crew decided to confine their hunting to non-working hours."

In general, the AER's prosperity continued up to 1929. Traffic seemed to increase gradually from 1924 onwards. Some temporary extra revenue came in 1927, when the CPR's Sault Branch trains were diverted over the AER. A mine collapse at Worthington had taken out 500 feet of CPR track and so the AER line from Turbine to Sudbury carried the heaviest traffic in its history. This arrangement continued for some weeks, as further threats of subsidence kept the CPR line closed. Passenger business flourished through the 1920s and particularly during the summer of 1928, when the Canadian Pacific ran a standard sleeping car through to Little Current from Toronto, primarily for tourists, in the same manner as the Canadian

Northern (Ontario) had done eight years previously.

In 1929, there were other ominous changes. The paper mill at Espanola, by this time owned by the Abitibi Power and Paper Company, was closed because its machinery had become obsolete. The AER had to cancel its one train a day. While this mill was used as a prisoner of war camp during World War II, paper-making operations were not to resume until 1946.

Once again, rumors of the possible sale of the AER began to appear in the pages of the Sudbury STAR, but this time there was more substance to them. Canadian Pacific was suggested as a potential buyer and this possibility was reinforced by a report that Mr. J.J. Scully, General Manager of Eastern Lines for the CPR, had visited Sudbury and had then gone on to Sault Ste. Marie with W.C. Franz, President and General Manager of the Algoma Eastern. Canadian National Railway Company was excluded from the picture when Sir Henry Thornton, the Company's President, denied any involvement of his company in the bidding for the AER.

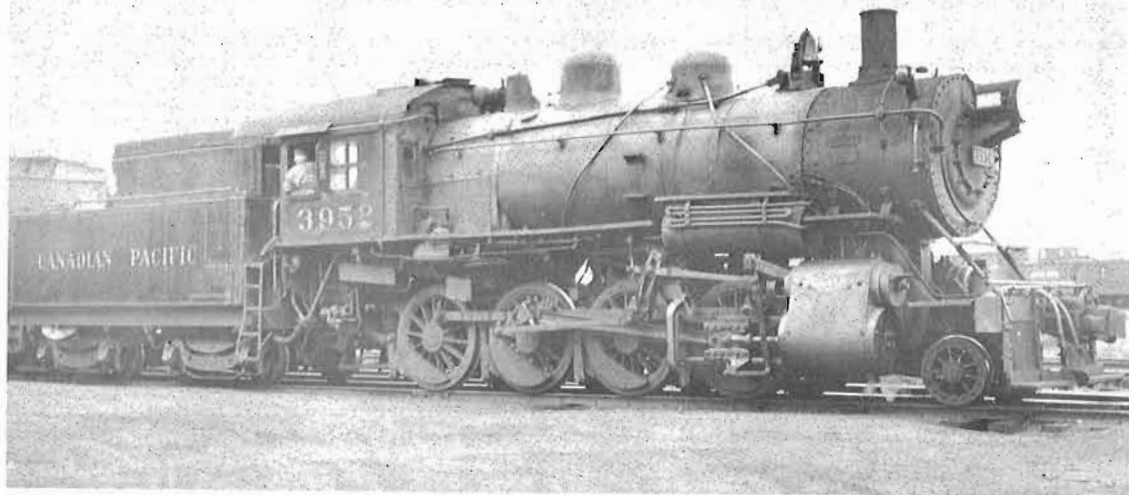
It is interesting to speculate why neither the Canadian National nor INCO seemed to want the Algoma Eastern. Canadian Pacific ownership threatened CNR access to a considerable amount of nickel traffic and INCO, already servicing some of its properties with its own efficient railway, would certainly have wished to be less dependent on the CPR. Furthermore, Canadian Copper/INCO had seemed to favour the Algoma Eastern over the years, often giving the railway preferential treatment.

The Sudbury STAR had predicted with accuracy what was to happen and in the months following, the pieces were fitted together. The problem of access by the CNR was settled and the CN proceeded to rebuild its bridge on the transfer line to the AER. This reconstruction was not as a result of any particular structural problem, but rather because the CPR was double-tracking and raising its main line through Sudbury and the transfer-line bridge was too low to provide the necessary clearance. After 1930, any fall from the new bridge would most certainly have proved to be fatal.

By February 1930, the acquisition of the AER by the Canadian Pacific was confirmed. Rather than a straight sale, there was the traditional 999-year lease to the Canadian Pacific Railway Company. The CP's new acquisition was healthy enough, for in the year ended June 30, 1929, the AER had enjoyed a net income of \$ 100,000 on a gross of \$ 270,000. Canadian Pacific paid \$ 3 million in cash for the lease and assumed liability for Algoma Eastern/Manitoulin & North Shore bonds worth over \$ 2 million.

Shortly after this, the Premier of Ontario, Mr. Ferguson, issued a statement declaring that the transaction had been effected to provide the parent Lake Superior Corporation with funds for "necessary iron-ore expansion". Notwithstanding this statement, it is interesting to note that from 1925 to 1939, Canadian iron ore production, including that which might have originated from the Wawa Mines, the property of the Lake Superior Corporation/Algoma Steel, was absolutely nil. A charitable evaluation of this fact might be that the onset of conditions of economic depression in Canada prevented the "necessary iron-ore expansion" from taking place.

News reports in June 1931 revealed another possible reason for the Lake Superior Corporation's need for money. Trouble had developed with the bonds of the Algoma Central and Hudson Bay Railway Company and a complete change in the corporate structure of the Lake



↑ CANADIAN PACIFIC RAILWAY ENGINE NUMBER 3952, CLASS N4a WAS ALGOMA Eastern Railway's Number 52. Built by Montréal Locomotive Works in 1913 - B/N 51182 - she had $22\frac{1}{2}$ x28 cylinders and 56" drivers. Dick George of Oakville, Ontario, photographed her at North Bay, Ontario on 7 September 1939.

Superior Corporation was announced. Although the infusion of money from the Algoma Eastern lease may have helped temporarily, within a few years, Francis Clergue's dream was to be shattered.

Soon after the inception of the lease, Canadian Pacific announced that the AER shop and yard facilities in Sudbury would no longer be required. AER locomotives were rapidly repainted with CPR colours and numbers. AER ore cars were also repainted and used by the CPR everywhere in the Sudbury district. The AER had converted a number of wood-sheathed boxcars into cabooses and these were used in service on the Creighton ore-train runs and on worktrains for the CPR for many years after the change in ownership. Mr. George S. Dennis is of the opinion that the Algoma Eastern passenger cars, wooden, open-vestibule type, were used for some years in passenger service to Creighton.

The operating point "Clara Belle" returned to its former location when the CPR decided that two stations named "Copper Cliff" were impractical and confusing.

During 1931, the "Great Depression" began to deepen more seriously in the Sudbury district. There were newspaper headlines about relief payments, soup kitchens and "make-work" projects and the Sudbury STAR reported these with monotonous regularity. Predictably, the Canadian Pacific Railway felt the pinch and, in September, the announcement came that the 16 miles of the Nickel Subdivision, once the Sudbury-Espanola section of the AER, would be abandoned and dismantled. There was no justification for the luxury of duplicate trackage from Sudbury to Turbine. Traffic was light and the section was costly to maintain. The AER track from Turbine to Gertrude was retired from regular use and became a siding to store surplus cars. Stored cars were spaced in groups of 18 to 25, with a six or eight-car space between, for fire prevention. About 1935, the track from Turbine east to and including the Vermillion River bridge, was ta-

ken up. East of the Vermillion, O'Donnell and Gertrude provided but little traffic and by 1946, timetables showed only the Sudbury to Creighton section of the Nickel Subdivision in service. However, it is probably that the Gertrude Wye remained in service at least until the end of steam on the CPR.

Approximately one mile of former AER main line, that immediately east of the Espanola Wye, is in use in the '70s as a car storage and cleaning track for cars destined for the paper mill at Espanola. The balance of the former Algoma Eastern Railway, from McKerrow through Espanola to Little Current, continued to be used through the 1930s and up to the present day as Canadian Pacific Railway's and CP RAIL's Little Current Subdivision.

What would have happened if the Algoma Eastern Railway had not been leased to the Canadian Pacific? Up to the end of its independent operation, the AER was a successful enterprise and bond interest had been paid regularly, except during the brief slump of the early 1920s. There is no doubt that, had the AER been left on its own, it would have had a grim time in the '30s. No help would have been forthcoming from the parent Lake Superior Corporation in the Sault, as that enterprise itself was doomed.

Even so, the case of the Algoma Central and its contemporary at the Sault, is interesting. The ACR was able to remain independent, although insolvent, because the company's bondholders had assumed control and managed to retain it through very difficult times. Perhaps the same courage could have resulted in an independent Algoma Eastern Railway Company.

What about the '70s? How would the AER be doing today? One of the major criteria for profitable operation would have to be the volume of traffic generated at Little Current, Espanola and from the nickel industry in the Sudbury area. In each of these three regions, rail traffic has never been heavier. On the abandoned portion of the AER main line, the Crean Hill and Mond Mines are again producing, or about to do so. A new mine is being developed just east of Crean Hill. Ironically, all three properties will be served by a new spur from CP RAIL's Sault Ste. Marie line, a rebuild of the CPR 1910 spur which was abandoned when the two properties became practically "on line" customers of the Algoma Eastern.

There is just no question about it. The Algoma Eastern Railway certainly would have been right at home in the 1970s.

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Algoma Eastern Railway - Structures and Facilities (1930).

Stations:	7	Copper Cliff; Creighton; Nairn; Espanola; Birch Island; McGregor Bay; Little Current; Sudbury (CPR).
Shelters:		Passenger shelters at several other locations.
Section Houses:	7	Creighton (2); Mond; Drury; Espanola; Birch Island; Turner.
Coal Facilities:	3	Sudbury; Creighton; Turner.
Water Facilities:	5	Sudbury; Crean Hill; Espanola; Whitefish Falls; Turner.
Passing Tracks:	11	Creighton (2); Gertrude; Mond; Drury; Nairn; Espanola (2); Anderson Lake; Carson; Birch Island.
Wyes:	5	Copper Cliff; Gertrude; Crean Hill; Espanola Wye; Turner; use of CPR wye in Sudbury.
Engine Houses:	2	Sudbury; Turner.

ALGOMA EASTERN RAILWAY LOCOMOTIVE ROSTER.

<u>Nos.</u>	<u>class</u>	<u>Type</u>	<u>Cyls.</u>	<u>Driv.</u>	<u>B.P.</u>	<u>T.E.</u>	<u>Wt. on drivers</u>	<u>Engine weight</u>	<u>Tender wt.loaded</u>	<u>Builder & C/N</u>	<u>Date blt.</u>	<u>Acq'd.</u>	<u>Disp.</u>
(This roster will be more understandable if read in conjunction with Note 1.)													
40 (Note 2)	T-1	4-6-0	20½x28	63	200	31,800	128,280	180,280	120,000	BALDWIN 20272(?)	1902	ca.1912	Scrapped ca.1927
50 (Note 3)	M-1	2-6-0	20x26	63	180	28,410	124,550	146,150	103,508	M.L.W. 41092	Jan. 1907	New	Scrapped ca.1927
51	M-2	2-6-0	20x26	56	180	28,410	128,400	150,400	123,200	M.L.W. 51183	Sept. 1912	New	CPR 3051 Scrapped 1952
52	C-1	2-8-0	22½x28	56	180	38,800	168,800	194,500	134,800	M.L.W. 51182	Feb. 1913	New	CPR 3952 Scrapped 1955
53	C-2	2-8-0	22x28	56	200	41,100	166,566	191,350	125,850	C.L.C. 1351	1916	New	CPR 3953 Scrapped 1956
54	C-2	2-8-0	22x28	56	200	41,100	166,566	191,350	125,850	C.L.C. 1352	1916	New	CPR 3954 Scrapped 1958
55	C-3	2-8-0	23½x30	57	200	49,410	218,150	242,500	254,760	M.L.W. 62598	Jan. 1921	New	CPR 3955 Scrapped 1957
56	C-3 (changed to)	2-8-0 24 x30	23½x30 24 x30	57	200	49,140 51,500	218,150	242,500	254,760	M.L.W. 62599	Jan. 1921	New	CPR 3956 Scrapped 1957

Roster Notes:

Note 1: The origin of the Manitoulin and North Shore/Algoma Eastern Railway locomotive number series is now obscure, but it is obviously similar to that of the Algoma Central & Hudson Bay Railway. The first locomotive, M&NS Number 27, took the next unallocated number in the AC&HB series, following Numbers 25 & 26, acquired about 1903. The subsequent numberings and renumberings were interspersed with the AC&HB numbers, as follows:

AC&HB	25)	second-hand	ca. 1903
	26)		
M&NS	27	new	1907
AC&HB	28	new	1911
	thru 37		
AER	40	second-hand	ca. 1911-12

(This locomotive was in an entirely new numbering series, a practice subsequently followed by the AC&HB to identify different classes of locomotives.)

AC&HB	38	new	1913
	thru 42		

(Number 40 should not have been duplicated.)

AER	50	ex-M&NS Number 27	ca. 1911
AER	51	new	1912-1921
	thru 56		
AC&HB	50	new	1929
	51		

(In the light of the impending lease by the CPR, this duplication was not important.)

Note 2: It is possible that the Algoma Eastern Railway's Number 40 may have been the Chicago Great Western Railroad's Number 220, one of a group of Baldwin 4-6-0s built in 1902. Number 220 was Baldwin Locomotive Works S/N 20272, built as a compound. Similar engines, CGW Numbers 200-209, 211, 214, 216 and 217, were sold to the Canadian Government Railways in 1917.

Note 3: Algoma Eastern Railway engine Number 50 was originally Manitoulin and North Shore Railway's Number 27 and was purchased new by the latter company. Whether or not she was lettered for the M&NS is unknown, but the locomotive was considered as part of the Algoma Central & Hudson Bay Railway's Mechanical Department responsibility, as substantiated by its road number and the fact that it appears in the AC&HB diagram book. When the M&NS became the AER in 1911, the locomotive was renumbered Algoma Eastern Railway Number 50.

Locomotive Tonnage Ratings

Employees' Timetable No. 20 - June 1, 1924.

Eng. No.	Sudbury/ Crean Hill	Crean Hill/ Espanola	Espanola/ Little Cur.	Little Cur./ O'Donnell	O'Donnell/ Sudbury	
40)						
50)	560	1020	600	700	625	(A)
51)						
52)						

53)	870	1550	1025	1050	960	(B)
54)						
55)	1075	2000	1250	1250	1125	
56)						

Reduction to ratings:

(A)	bad rail; +15-0°	7%
(B)	+15-0°	10%
	0- -15°	10%
	-15- -30°	15%
	below -30°	20%
	For fast freight	10%

Rail on the Algoma Eastern

The original Manitoulin and North Shore Railway was laid with 60-pound rail for the main line and 56-pound rail or possibly lighter for sidings, passing tracks, etc.

New construction and rebuilding occurred in 1910-1913, using 80-pound rail for the main line and some 72-pound for passing tracks.

In 1930, most track other than the main line was 60 and 72-pound. Main line was predominantly 80-pound. Rebuilding of small sections was undertaken in 1928 and 1929, using 85-pound rail.

Algoma Eastern Railway - Rolling Stock (1930)

Baggage Cars	1
Boxcars, 36 feet 8 inches long	18
Cabooses	8
Coaches, Passenger	3
Combines, Passenger and Express	2
Flat Cars, 40-foot	61
Gondolas, 24-foot, 4½ inch; 38-foot 9-inch; 40-foot	196
Hopper Cars, 22-foot 6-inch	14
Maintenance-of-Way cars, miscellaneous	9
Total	312

Postscript.

On March 30, 1963, the Canadian Pacific Railway Company terminated its mixed-train service, Trains 873-874, daily except Sunday, from Sudbury to Little Current, Ontario.

The consist of the last passenger train over part of the former Algoma Eastern Railway was six freight cars, RPO-baggage car Number 3617 and coach Number 1481, hauled by diesel-electric unit Number 8159.

Sources.

Newspapers:	The JOURNAL - Sudbury, Ontario	1900
	The STAR - Sudbury, Ontario	various issues
Journals:	CANADIAN RAIL - Canadian Railroad Historical Association	various issues
	NEWSLETTER - Upper Canada Railway Society	April, 1963

INCO TRIANGLE - International Nickel various issues
Company of Canada

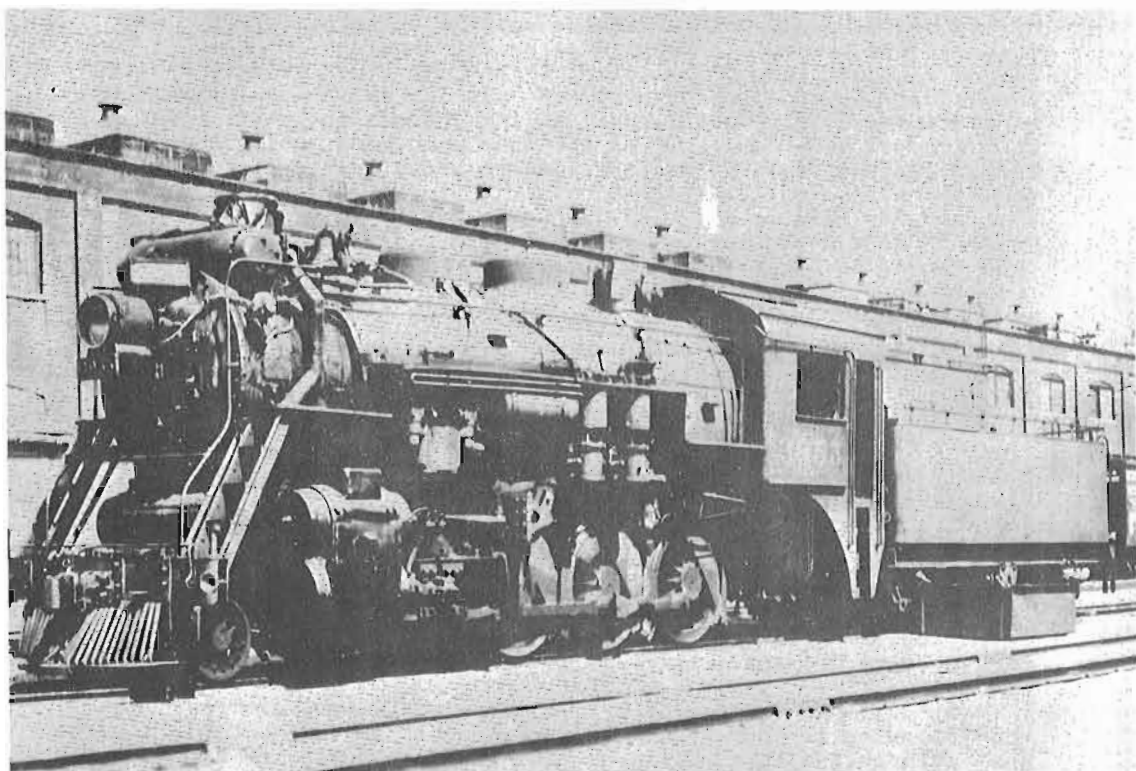
OFFICIAL GUIDE OF THE RAILWAYS 1905

POOR'S MANUAL OF RAILROADS 1906

Published Reports: Royal Commission Report on the Nickel Industry:
R.W. Carlson 1917

Personal Communications: Mr. John Cooshek, Vancouver, British Columbia
Mr. R.F. Corley Peterborough Ontario
Mr. G.S. Dennis Terrace Bay Ontario
Mr. J.P. Mader Hilton Beach Ontario

EX-ALGOMA CENTRAL RAILWAY NUMBER 55 WAS BUILT BY THE MONTREAL LOCOMOTIVE Works, Montréal, in 1921 - B/N 62598. She had $23\frac{1}{2}$ x 30 cylinders and 57" drivers. When the Canadian Pacific Railway purchased Number 55, together with the rest of the railway, in 1931, she was renumbered 3955 and classed as N4c. Ernie Plant of Vancouver, B.C. supplied this picture of Number 3955, taken at CPR's Angus Shops, Montréal, August 15, 1948.



E PLURIBUS LIBRIS. UNUM.

S.S.Worthen

Late in 1972, Mr. Nicholas Mika, photographer and composer of sundry publications about Canadian railways, in company with Mrs. Mika, emitted yet another book on the same subject, past and present. RAILWAYS OF CANADA is about 10% extracts and advertisements from old newspapers and journals, 60% photographs, good and bad - which have appeared before - and 30% other material. If you want to be clinical, there is a number missing on page 19, there are more than a few technical inaccuracies and the irritating editorial quirk of capitalizing the names of ALL of the railways, large and small, is indulged in. But somehow the Government of Canada doesn't rate .

About one-sixth of the text is southern Ontario; there are two pages on the antediluvian Chignecto Marine Railway, which is as relevant to Canadian railway history as the duck-billed platypus. May be Mr. Mika did not intend the work to be scholarly; but why, then, in the acknowledgements does he say that the preparation included several years of research. If the statement is accepted, then one wonders how it happens that, on page 12, there is a photograph of a drawing of the "Dorchester" of the Champlain and St. Lawrence Rail Road of 1836, the work of the late John Loye, which has been recognized as erroneous and so reported about once every three or so years since it appeared.

And Mr. Mika doesn't have to go to George W. Pangborn's gold watch to find a drawing of the same locomotive. This is available from the files of the Canadian Railroad Historical Association.

Anyway, the book is a slick volume and no doubt will sell well to the uninformed, who will still thereafter be uninformed.

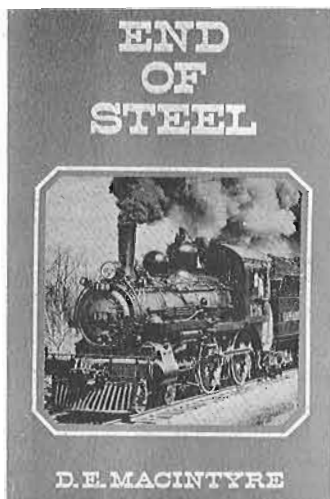
RAILWAYS OF CANADA N. and H. Mika Canadian Heritage Library 1972
McGraw-Hill Ryerson Limited, Toronto 176 pp. b&w illus. \$ 9.95

Of the many books that have come to hand in the past summer, without question the most entertaining, light-hearted, non-specific "remembrance of things past" is Colonel Duncan E. Macintyre's END OF STEEL. Although this slim volume has a railroad title and a picture of ex-Canadian Pacific Railway 4-4-0 Number 136 on the dust-jacket, it isn't at all a book about railways. Or perhaps one should more properly say that it isn't "all" about railways.

There are vastly amusing paragraphs about the construction days on various Canadian railways and the descriptions are fascinating because they are subjective and atmospheric rather than objective and definitive.

Of particular attraction to the reader is a sympathetic and understanding account of the life of a small boy in Montréal's Westmount in the late 1880s, to which readers in the 1970s may have some difficulty relating; however, this will not mar their enjoyment.

The illustrations really do not do justice to the narrative, and they should. There are a number of non-sequitur photographs, with one teeth-jarring transition from the Lakehead in 1902 to central Ontario in the '60s.



Colonel Macintyre is to be congratulated - at the extraordinary age of four-score and seven years - for having written a most readable and truly entertaining work, a feat which many authors of various ages have essayed valiantly to accomplish, but with indifferent success.

It is the Colonel's second work in the idiom which describes intimate aspects of human existence in various parts of Canada around the turn of the nineteenth century.

END OF STEEL D.E. Macintyre Peter Martin Associates, Toronto, Ont.
 1973 133 pp. 8 pp. illus. Casebound \$ 5.95

Alas! There are books about the railways of Nova Scotia which should never have been written. Among these are "Clarke's History of the Earliest Railways in Nova Scotia" (price 50¢), now happily long out of print and IRON ROADS, which appeared this year. The new work reiterates most of the inaccuracies of the old.

It is one thing to be a serious student of railway history in any area of Canada and quite another to be an instructor of Graphic Communications. And this book certainly demonstrates that difference. The seriousness of the work may be estimated by the fact that the entire history of ALL of the railways of Nova Scotia and Cape Breton Island, including the Intercolonial and the European and North American plus the Dominion Atlantic, have been forcefully compressed into less than 75 pages. In addition, some space had to be found for the irrelevant pictures from the Nova Scotia Information Service and those illustrations inexpertly extracted from Marguerite Woodworth's "History of the Dominion Atlantic Railway" of 1936, without even an acknowledgement.

The printing job by the Lancelot Press of Windsor, Nova Scotia, is quite primitive - at least, in the copy reviewed - and how it passed inspection one cannot guess.

IRON ROADS may be interesting reading for some, but the amateur railway historian should employ the utmost caution in his repetition of the pseudo-historical information presented.

IRON ROADS David E. Stephens Lancelot Press, Windsor, N.S.
 1973 78 pp. 30 illus. 6 maps \$ 1.95 paper.

Any book with the name "Keefer" on the cover is sure to excite the curiosity and interest of most Canadian railway historians and,

when the cover is printed in red, blue and black on white stock and declares that the book is about "railroad promotion and manipulation in the 19th. century", there is an obvious intended result.

It is a sorry situation when the University of Toronto Press is obliged to resort to such stratagems to sell a reprint of Thomas Keefer's PHILOSOPHY OF RAILROADS, which first appeared about 1850. In addition, in case the purchaser might feel he had been defrauded, also included is the text of one of two lectures delivered by Keefer at the Mechanics Institute of Montréal in 1854, a notable chapter which Keefer contributed to Henry Youle Hind's "Eighty Years' Progress of British North America" published in 1863 and a hodge-podge of miscellaneous papers from his bottom desk-drawer. These are mostly diatribes by Keefer relating to positions he thought he should have had and include some really vituperative editorials.

But peace be to his ashes. His personal disappointments have been dissected at length in other erudite publications. And there is little or no justification for their republication in this new paper-back reprint.

Let us then turn to the introduction of guest-editor H.V. Nelles, Assistant Professor of History at York University, Toronto. A book in itself, the introduction and notes thereto occupy 63 of the volumes 248 pages - some one-quarter of the contents. From the quantitative to the qualitative aspect, the reader will note at once (page ix) that Professor Nelles makes some rather extravagant and questionable statements and some which are downright wrong. The ratio of logic to piffle is about 1 to 47 and how this proportion was allowed to prevail, even in the introduction of a guest-editor, boggles the reason. The reader may well wonder if this is typical of lecture material being presented to serious students of history at a university, or elsewhere.

While Thomas Keefer was undoubtedly motivated to write as he did by the rough-and-tumble of Canadian punch-in-the-nose politics and business tactics of his time, it ill becomes an educated educator of a century later to describe a man of Keefer's accomplishments as a "slightly pompous author" who owed "his later decorations to political influence" and that "in earlier happier days...he had not been so morally fastidious".

Indisputably, Thomas Keefer was, among other things, the builder of the suspension bridge over the Ottawa River at Chaudière, as well as the first public water-works in Ottawa. He was the first president of the Canadian Society of Civil Engineers, today the Engineering Institute of Canada. Despite his personal grievances - and there were a few - he was a competent civil engineer. His critics have had to admit that there is no gainsaying these non-political accomplishments.

The introduction of material in this reprint which is not relevant to the main text does little to enhance the credibility of the guest-editor.

Thomas Keefer, now as then, speaks for himself, by himself.

PHILOSOPHY OF RAILROADS AND OTHER ESSAYS Thomas C. Keefer
intro. by H.V.Nelles Social History of Canada Series
University of Toronto Press, Toronto 1972 lxiii and 185 pp.
\$ 3.95 paper \$ 12.50 cloth.

It is extremely difficult to make an objective appraisal of a work which exhibits, at one and the same time, attributes of both the professional and the amateur. Reading ONTARIO'S GOVERNMENT RAILWAY: GENESIS AND DEVELOPMENT, one has the distinct feeling that the anxiety of the author to publish largely influenced considerations of presentation, design, production and quality. The hard work of

research and the final composition of 108 standard pages of text surely deserves a better fate.

Without any doubt, a great deal of very hard work was required to research the interesting information which the author presents, but somehow, in the final chapters, much of the enthusiasm demonstrated in the initial pages disappears and the story of the Temiskaming & Northern Ontario/Ontario Northland comes to an end, not with a shout, but with a snore.

In the Foreword, it is stated that this book is presented as a basis for a larger, more extensive work. With this contention the reviewer cannot agree. Sufficient material has been researched to produce a definitive history of the T&NO/ONR and this account surely is such a work. But the manner in which the material is structured is sometimes uneven and erratic. Tabular information is scattered about throughout the text. In one person's opinion, it would have been preferable to examine other affiliated railways at the end of the principal exposé, rather than presenting them as a sort of "change of pace" which interrupts the main narrative.

It might also be contended that graphics, not related to the immediate text, should be presented elsewhere, perhaps in the appendix. The maps are excellent, but the charts and tables are not well organized. The provision of foot-notes on the pages with the text is disconcerting and distracting.

The apocryphal story of Fred LaRose's discovery of nickel is rehearsed, apparently as essential to T&NO/ONR history as Father Lacombe's one-hour term as president is to the history of the Canadian Pacific Railway. The two-page discussion of Canadian Northern-Grand Trunk-National Transcontinental relationships is not relevant to the story, except in explaining the necessary relocating of the T&NO at Cochrane. In this interim, the main justification for the National Transcontinental - the movement of western wheat to eastern seaports - is not mentioned.

What is very relevant is the tongue-in-cheek description of the infancy and early childhood of the T&NO, when the startled godparent, The Government of Ontario, suddenly realized that the child needed nourishment but could not decide how it should be administered!

Since uncoated paper is used throughout, the result, as far as the illustrations are concerned, is disastrous. Poor quality of printing shows to advantage in pictures and, no matter how well the text has been polished, it cannot mitigate this unhappy situation.

Nonetheless, the description of the Nipissing Central Railway and its rolling stock will be of interest to the electric railway enthusiast, while readers specializing in private railways will be regaled by the accounts of the Smoky Falls Railway, the Mattagami Railway and the Kidd Creek Mine Railway.

For the reader interested in railways as distinct from pioneering, mining and farming, more and better pictures of T&NO/ONR equipment, especially in open country, would be desirable. And, while these additions are being made, it would be most salutary if a printing process, other than stencil duplication, could be used to reproduce the text.

All of these improvements and more could be made with funding by a Canada Council grant, or by support from the Government of Ontario, which surely must recognize the merit - and worth - of a work so painstakingly prepared.

ONTARIO'S GOVERNMENT RAILWAY: GENESIS AND DEVELOPMENT: R.D. Tennant, jr.
The Tennant Publishing House, Halifax, N.S. 1973 xv and 109 pp.
26 illus. Limited edition. \$ 7.50 paper.

longer and heavier freight trains. This was the first time that the AAR had contracted for such a study outside the United States. CN's Technical Research Centre at Montréal utilized advanced computer techniques for the study.

The first phase of the project was the accumulation of performance data on existing braking systems and was completed at the end of 1972. The second phase included the development of methods to incorporate advanced concepts in existing systems. The final phase resulted in recommendations to be applied to actual operating conditions. The total information package was to be made available to the entire US and Canadian railway industry.

KEEPING TRACK - Canadian National Railways.

SURELY THE MOST HILARIOUS "HAPPENING" IN THE PROVINCE OF ONTARIO IN

1972 was the eighth "familiarization trip" since 1949 for Members of the Provincial Legislature of Ontario, which departed from Toronto Union Station on 4 September 1972. The train which took the MPPs north from Queen's Park was composed of 22 Canadian National Railways' cars, hauled by three Ontario Northland Transportation Commission diesel-electric units - ONR units, to you and me!

For side-trips, the touring MPPs used three ONRTC buses, which followed the special train for four days, from Sault Ste. Marie to Cochrane.

About 70 of the 114 eligible MPPs were expected. Only about 40 joined the tour. Ontario Premier William Davis never did catch up with the train. Several MPPs only made it for the trout-fishing.

The budgeted cost of the caper was \$ 100,000 for the 2,500-mile tour by private train, chartered bus, special boat and muskeg-buggy. An official of the government admitted that the cost reached \$ 200,000 for the 9-day perigrination.

Participants grumbled that the underground tour of the mines at Timmins was cut short. Parts of the Algoma Steel property at Sault Ste. Marie were "too dangerous to visit" or "closed for the Labour Day weekend". The bus tour of the Timmins area took place in the dark! The train and buses were never more than half-full. But the Toronto STAR, from which this information was taken, said that the fishing and the free-loading were great.

Eleven cabinet ministers were to have made the trip. Two showed up. Nothing daunted, Premier Davis wrote, "I am sure these opportunities will provide all of us with a new appreciation of northwestern Ontario which will reflect in our future deliberations at Queen's Park".

The participants ended the formal part of the tour at Moosonee on 9 September, but three 'planes then took some of the MPPs, government officials and reporters almost 300 miles further north for a relaxing weekend of fishing at Hawley Lake in the sub-Arctic wilds on Hudson Bay.

Some of the reporters, six officials of the Department of Natural Resources and three MPPs were flown back to Toronto in an aircraft chartered by the Provincial government.

MR. RAYMOND F. CORLEY, OUR READER IN PETERBOROUGH, ONTARIO, WRITES

to point out an error in the spelling of Mr. Pierre Berton's name in the "Waybills" item on page 286 of the September 1973 issue of CANADIAN RAIL. Mr. Berton spells his name with an "e" and not with a "u". We thank Mr. Corley for pointing out this typographical error and regret that it was not corrected by our proof-reader.

THE CAPE BRETON STEAM RAILWAY HAD A VERY SUCCESSFUL SUMMER SEASON, reports Mr. Martin Boston of West Bay Road, Nova Scotia.

In the 2½-month 1973 operating season, the CBSR carried 14,963 passengers, to the astonishment of the promoters. The steam-hauled train has been such a success that the Cape Breton Development Corporation is looking for a second steam locomotive, possibly one of the ex-CPR 1200s from Steamtown U.S.A., and additional passenger cars for a second train, to run over an alternate route in 1974. Mr. Boston has promised to send us additional information, so that any of our readers intending to vacation in Canada's Maritime Provinces in 1974 will have adequate advance information.

MR. EDWARD EMERY, CO-AUTHOR OF THE ARTICLE "LAMBTON ROUNDHOUSE 1890-1965" which appeared in the August 1973 issue Number 259 of CANADIAN RAIL has asked that corrections be made in the captions of the pictures on pages 236, 237 and 238. CPR engine Number 2228 on page 236 was a G-1-s class; Number 2664 on page 237 was a G-2-u class and Number 2857 on page 238 was an H-1-d class. The CPR steam locomotives, at first saved for preservation, were finally scrapped in the following years, Mr. Emery concludes: Number 815 - 1960; Number 1271 - 12/1960; Number 2414 - 1961; Number 2857 - 1961 and Number 5118 - 12/1960.

WITH THE PURCHASE OF MR. SAMUEL PINSLEY'S ST. JOHNSBURY & LAMOILLE County Railroad imminent, The State of Vermont is almost in the rail transportation business. Purchase price is \$ 1.25 million. The operation of the line by the Vermont Transportation Authority has been approved by Governor Salmon and Treasurer Frank Davis, but details had to be worked out. Meanwhile, the StJ&LC operated the line from East Swanton to Hardwick, Vermont, with trackage rights over the Central Vermont from East Swanton to Fonda Junction on the CV's main line. Cost of keeping the line open this winter was estimated to be \$ 11,000 per month with \$ 75,000 required to put the line in reasonable condition. In mid-October, three ex-StJ&LC GE 70-tonners and one ex-Montpelier and Barrie Railroad were being shipped out to an unknown destination. The ex-M&BRR unit and one ex-StJ&LC were on the siding at Fonda Junction while two ex-StJ&LC units were in the CV's Italy Yard at St. Albans, Vermont, when the Canadian Railroad Historical Association's sold-out trip to Richford, Vermont passed. Philip Mason.

THE ACCIDENTAL TRANSFER OF OWNERSHIP OF EX-CANADIAN PACIFIC 4-4-0 Number 136 from Mr. Neil McNish to Mr. Neil McCarten, as indicated on page 286 of the September 1973 issue Number 260 of CANADIAN RAIL was due in part to the fact that ex-Canadian Pacific Railway locomotive Number 1057, with which Number 136 frequently runs in tandem, was originally purchased by Mr. W. McCartney of Toronto. Any confusion which was created is regrettable.

THE WEEK BEFORE THE DELAWARE & HUDSON'S FALL TRIP FROM ALBANY TO Binghamton, New York, on October 7 1973, consternation ensued at Colonie Shops when D&H PA 1 Number 17, having just emerged from the paint shop all shined up for the trip, stood with its prime-mover idling. Suddenly, the engine hiccuped, gasped, growled and emitted noises like grinding up metal - and stopped. Oh horrors! One of the connecting rods had broken and had jammed in its cylinder. The engine block was broken, the crankshaft damaged and the prime-mover was definitely unworkable, with no replacement available. D&H MM Dave Huggins and his Resourceful crew installed a 12-cylinder 244 from a spare RS 3 in five (5) working days so that,

according to the advertisements, the third PA 1 was operational, if only just, when the "Binghamton Bash" rolled around. What will happen next in the true-life drama of the "Perennial PA 1s"? Watch this space!
CALL BOARD - Mohawk & Hudson Chapter:NRHS.

IN LATE SEPTEMBER 1973, CANADIAN NATIONAL RAILWAYS ANNOUNCED THAT its first major order for prestressed concrete ties had been placed with FRANCON, division of Canfarge Limitée of Montreal. The order was for 300,000, some of which were for use on a 45-mile section between Winnipeg and Portage La Prairie, Manitoba, where the main line is being doubled.

CN's Chief Engineer R.L. Gray said that escalating world timber prices were diverting sawmill output away from lower-priced timber ties, but that the possibility of laminated wooden ties was being explored. There is still the question as to whether or not the laminated tie can compete economically with the solid wooden treated tie or the concrete tie.

Concrete ties have been used in Europe for more than 30 years. The French National Railways (SNCF) began using the improved VW 2.3-metre solid prestressed concrete sleepers with RN spring clips for rail attachment as early as 1946. CN installed a test section of RS prestressed concrete ties (two concrete rail pedestals joined by a steel tie-bar) with double-flexible insulating STEDEF rail fastenings near Ste-Germaine, Québec, about 1960. The RS sleepers were laid on 76 cm centres with 60 kg rail and, with daily tonnages as high as 45,000, axle loads of 30 tonnes and temperature variations of 100°C, no rail creep was detected.

However, the 76 cm spacing was too wide and the ballast deteriorated, resulting in the removal of the test section in 1966. Subsequently, other sections of concrete ties were laid near Napa-dogan, New Brunswick and on the Rivers Subdivision in Manitoba. These sections were laid with a prestressed concrete tie of British design on a 62 cm spacing, with 2,000-foot lengths of welded rail. Results were better.

In 1973, prior to placing the order with FRANCON, CN was using prestressed concrete ties of British design on a 3-mile portion of the Mountain Region in Alberta.

In Great Britain, BRITISH RAIL is predicting life-expectancies of 80-100 years for prestressed concrete ties. In Canada, where conventional treated wooden ties last 30 years on the average, prestressed concrete ties are expected to last 50 years or more.

Wayne Hoagland.



QUEBEC NORTH SHORE PULP & PAPER COMPANY, BAIE COMEAU, QUEBEC, USES three GE side-rodged, centre-cab units to haul newsprint rolls from their mill to the dock. Pierre Patenaude caught Number 3 on the dock on 9 August 1973.



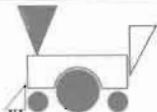
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