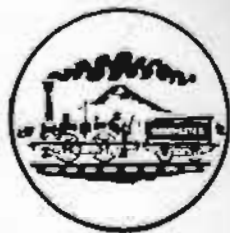
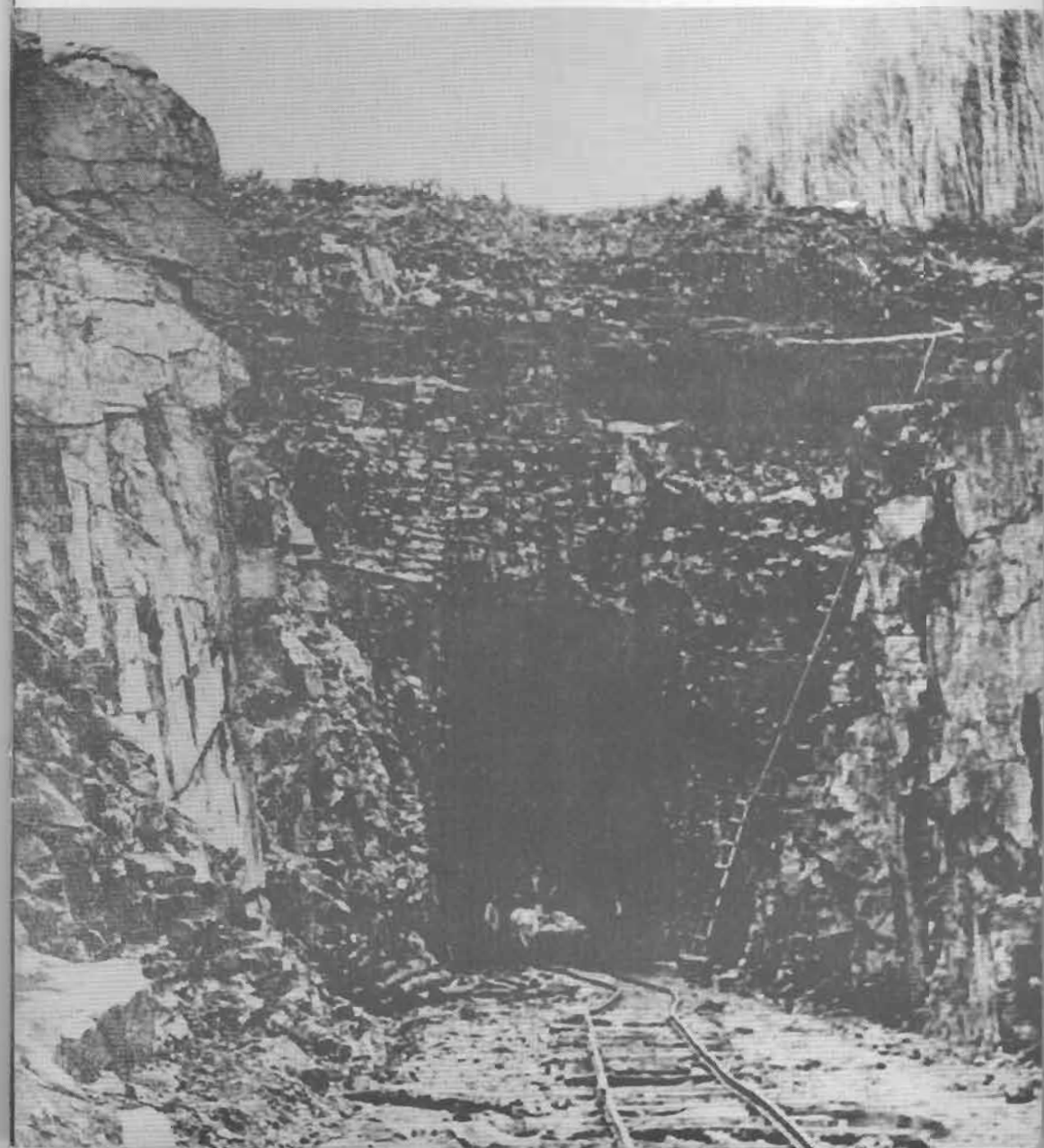


# Canadian Rail



No. 334  
NOVEMBER 1979







# CANADIAN RAIL

ISSN 0008-4875

Published monthly by The Canadian  
Railroad Historical Association  
P.O. Box 22, Station B  
Montreal Quebec Canada H3B 3J5

EDITOR: M. Peter Murphy

BUSINESS CAR: J. A. Beatty  
OFFICIAL CARTOGRAPHER: William A.  
Germaniuk

LAYOUT: Michel Paulet

CALGARY & SOUTH WESTERN  
L. M. Unwin, Secretary  
60-6100 4th Ave. NE  
Calgary, Alberta T2A 5Z8

OTTAWA  
D. E. Stoltz, Secretary  
P. O. Box 141, Station A, Ottawa,  
Ontario K1N 8V1

PACIFIC COAST  
R. Keillor, Secretary  
P. O. Box 1006, Station A, Vancouver  
British Columbia V6C 2P1

ROCKY MOUNTAIN  
C. K. Hatcher, Secretary  
P. O. Box 6102, Station C, Edmonton  
Alberta T5B 2N0

WINDSOR-ESSEX DIVISION  
R. Ballard, Sr., Secretary  
300 Cabana Road East, Windsor,  
Ontario N9G 1A2

TORONTO & YORK DIVISION  
J. C. Kyle, Secretary  
P. O. Box 5849, Terminal A, Toronto  
Ontario M5W 1P3

NIAGARA DIVISION  
Peter Warwick, Secretary  
P.O. Box 593  
St. Catharines, Ontario  
L2R 6W8

#### COVER:

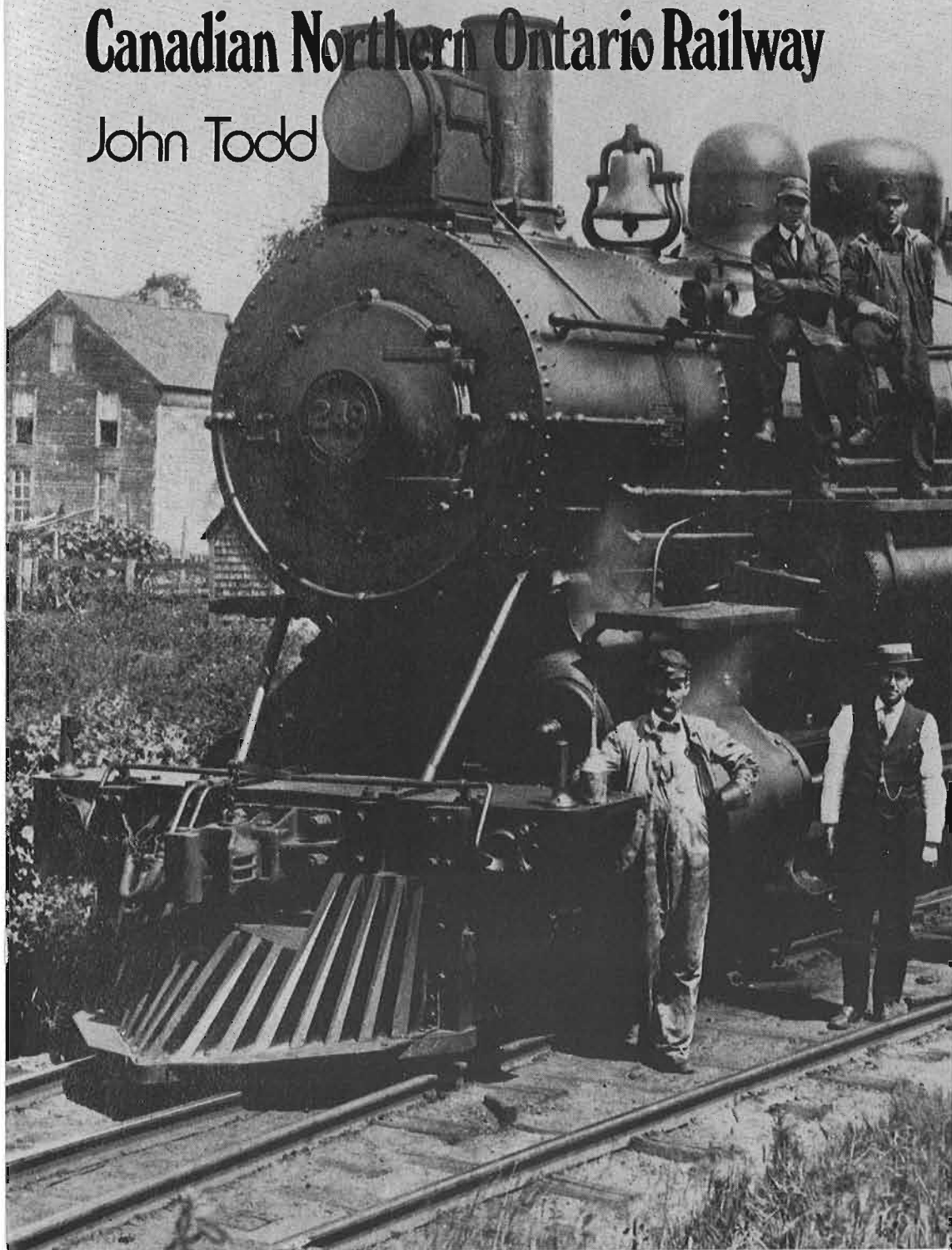
Rare photo showing the MacDiarmid Tunnel, under construction on the Canadian Northern Ontario Railway near Orient Bay on Lake Nipigon. Photo taken by Mr. A.J. Isbester the Chief Engineer for the Railway.

#### OPPOSITE:

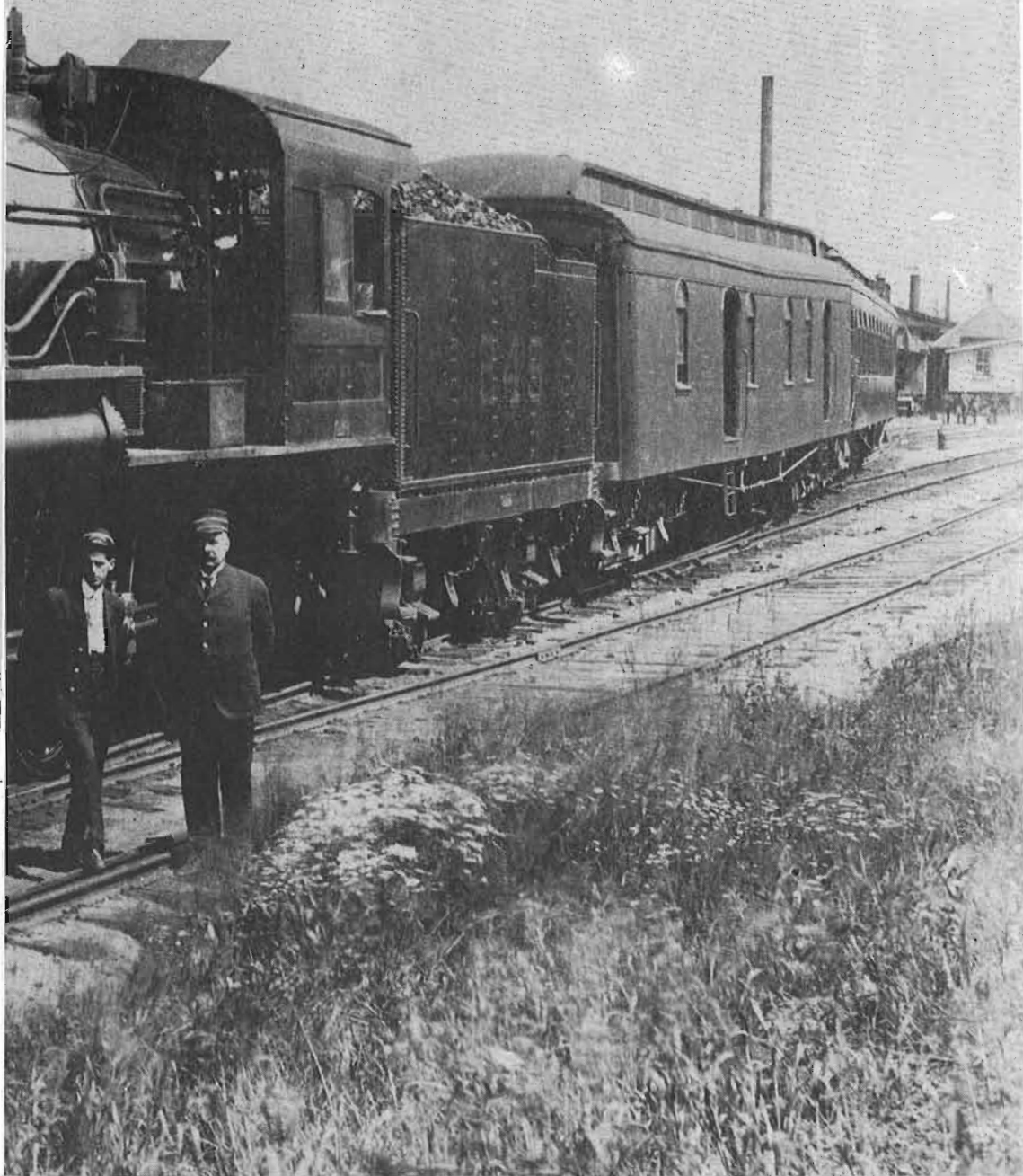
An unusual view taken inside the MacDiarmid Tunnel on the Canadian Northern Railway. The photo was taken by Mr. A.J. Isbester.

# The Driving Of The Last Spike On The Canadian Northern Ontario Railway

John Todd



Canadian Northern Ontario Engine 249, Parry Sound, Ontario in 1908. At this time the Canadian Northern Railway had 25 4-6-0 locomotives built by the Montreal Locomotive Works Ltd., (shop numbers 44775-99) numbered 227 to 251 inclusive. They had 20 X 26 " cylinders and 63" drivers. In 1912 they were re-numbered Canadian Northern 1288 to 1312, these numbers were retained when Canadian National took over. Photo courtesy of the Public Archives of Canada # 23241.



# The Driving Of The Last Spike On The Canadian Northern Ontario Railway

John Todd

With the completion of the Winnipeg-Port Arthur link, the Canadian Northern Railway continued its rapid expansion in Western Canada, it also made a beginning in Eastern Canada in January 1904 by acquiring the 244 mile Great Northern Railway of Canada. Traffic rights were also obtained over the Canada Atlantic Railway making it possible for the Canadian Northern to forward cargo in lake vessels from Port Arthur to Depot Harbour near Parry Sound, and then via rail to the Atlantic seaboard.

The Canadian Northern took over several other small railways and were soon operating a sizeable Eastern system. They then planned to build a transcontinental railway which would link the Eastern and Western divisions. This project received a temporary setback when the Grand Trunk Railway signed an agreement with the Government of Sir Wilfrid Laurier to jointly build the second transcontinental railway. The Canadian Northern had hoped to be chosen as the builders.

The Canadian Northern Ontario Railway had problems finding a suitable route from Port Arthur to Nipigon. The C.P.R. ran on, and controlled the shoreline from the C.N.R. station to Current River a distance of 2.1 miles, they also ran on the shoreline of Nipigon Bay, Lake Superior, from Red Rock to Nipigon.

It was not until 1910 that running rights over the C.P.R. were granted on the Port Arthur to Current River section but rights were refused over the C.P.R. from Current River to Nipigon. They then built their own line through this area beginning in 1911. The problem on the Nipigon Bay was overcome by building a cribwork and rockfill along the shoreline.



The route of the Canadian Northern Ontario Railway from Port Arthur to Sudbury was chosen in 1910, and the contract for its construction was awarded in the summer of 1911. It was completed in 1914.

Near Little White Otter River, at a point 254 miles east of Port Arthur, 615 miles northwest of Toronto and approximately 60 miles north of White River on the C.P.R., Sir William Mackenzie President of the Canadian Northern, on New Year's morning 1914, drove the last spike of the new line connecting the eastern and middle-western provinces of Canada.

The ceremony took place at eight o'clock, just as the morning light of early winter day in the quiet north country gathered strength to offset that sombre majesty of stately pines, and was witnessed by a small party of guests and officials. Barely ten minutes elapsed from the time the participants left the cars until the train was again in motion towards Port Arthur.

This first official act of 1914 was of vast significance to the Canadian Northern Railway and the Dominion for the reason that it established the necessary physical connections of the lines in the industrial east with those of the agricultural west, and gave the country its second cross-continental line from Quebec to the first divisional point of the company in British Columbia, 1574 miles west of Port Arthur and opened up extensive arable areas in Ontario for settlement.

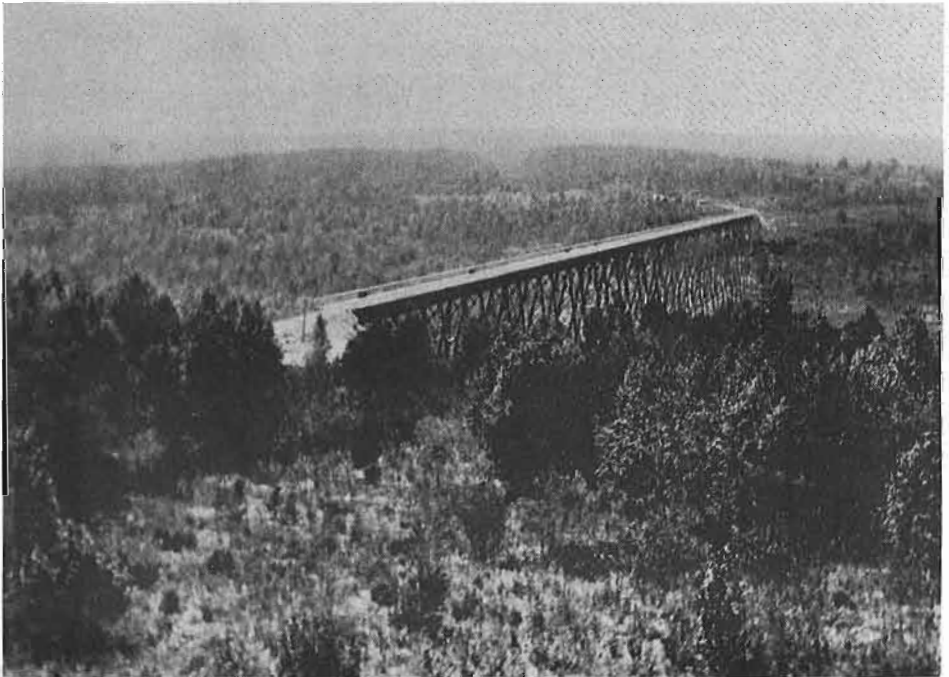
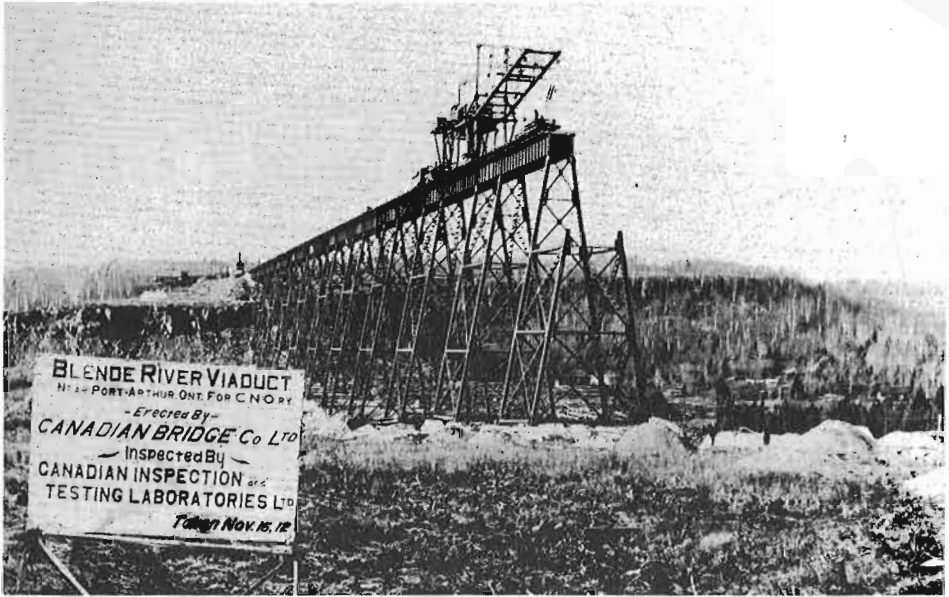
#### DRIVING THE SPIKE

I don't know whether I will be able to drive this spike straight or not said the great railroad builder, smilingly, as he drew off his outer coat and grasped the spike maul in preparation. "It is just twelve years since I drove the last one." The C.N.R.'s president was referring to the linking up of the Winnipeg-Port Arthur line. Sir William's doubts were, however, not realized, and five inches of prepared metal were imbedded in the tie, and a new era in Canadian transportation history inaugurated, almost before the interested crowd that had gathered could believe the fact accomplished. Their hands and hats were raised aloft in accompaniment to the cheers in which a large number of men from a nearby construction camp joined. Sir William Mackenzie, Sir Donald Mann and the Canadian Northern men followed. A few minutes later the train steamed slowly over the new steel, the great work done.

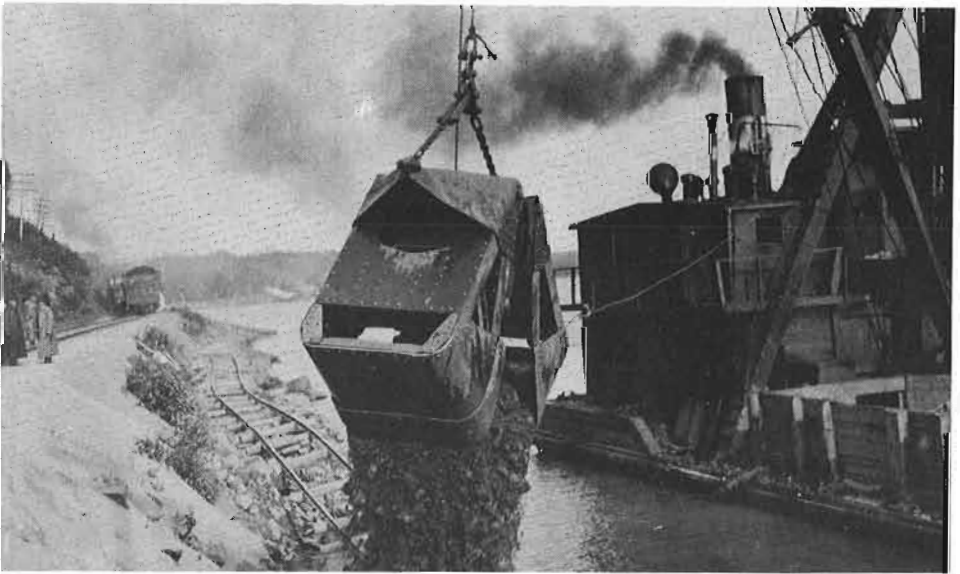
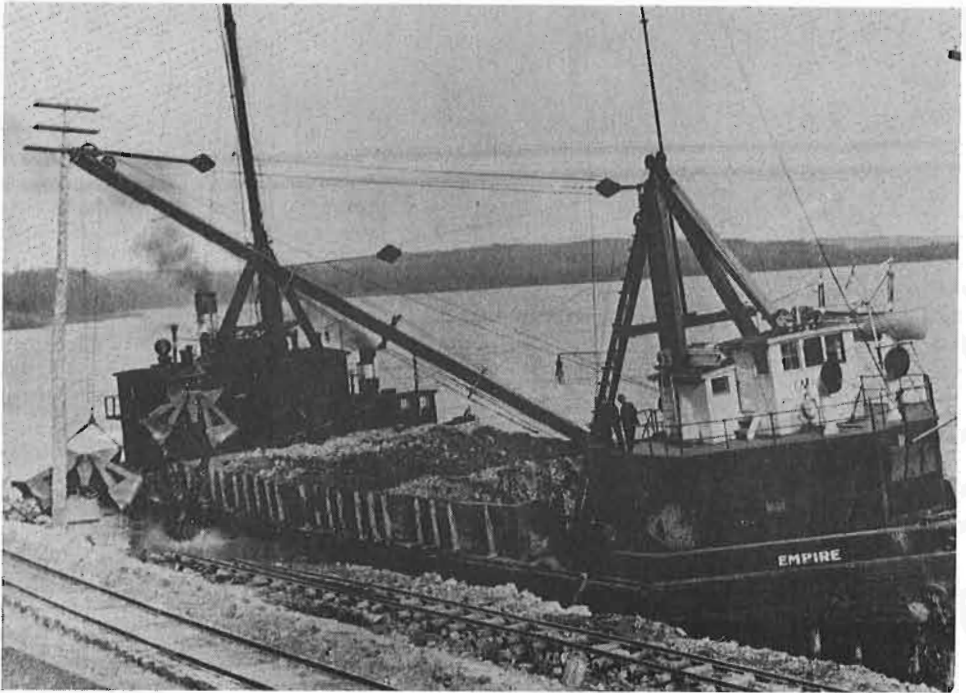
#### A RECORD ACHIEVEMENT

This new section of the Canadian Northern trans-continental when fully completed is remarkable for the rapidity of its construction and for its efficiency characteristics. It runs from Sudbury to Port Arthur in Ontario a distance of 617 miles. The contract was awarded to Foley Bros., and a subsidiary the Northern Construction Company in the summer of 1911. Only a small amount of work





The Blende River Viaduct as seen during construction in 1912 and as completed. The structure is 2258 feet long, 130 feet high and has 19 supporting towers. Both photos courtesy of Mr. A.J. Isbester, CNOR.



Two photos of the steamer "EMPIRE" placing fill for the roadbed of the Canadian Northern Ontario Line along the shore of Nipigon Bay, between Red Rock and Nipigon, Ontario. Both photos courtesy Mr. A.J.Isbester.

was done that fall. The food supplies for the army of men engaged, flour, pork, butter, canned goods and so on, together with hay and oats for the horses were hauled north and distributed at various points during the winter of 1911-1912. As a result real construction operations did not commence until the spring of 1912, which means that the entire contract has been worked out in two years. Despite this cutting down of available time, a rigid standard was insisted upon through and the gradients and curvature held down to an eminently satisfactory minimum. This works for economy in operation and expeditious handling of the heavy traffic of the coming years and should constitute a line that will contribute greatly towards the elimination of trade congestion in the future.

The official special train consisting of four business cars ran through over the C.N.R., from Toronto to Sudbury. Beyond, all the way to Port Arthur, the schedule was arranged to permit the keenest inspection by Sir William, Sir Donald, Mr. D. B. Hanna and other officers chiefly concerned.

#### SIR DONALD ON DEVELOPMENT

Discussing the construction of the new line and its place in the development of Canada, Sir Donald Mann, Vice-President of the company said, "The first section of this line north from Sudbury is known to contain enormous mineral deposits. The next 260 miles is suitable for agriculture when cleared, it is now covered by a dense growth of pulpwood and pine trees. The revenue from local traffic alone will suffice in a very short time to make the road self sustaining. The standard of the line is equal in every way to the National Transcontinental, compared by gradients, bridges, curvature and weight of rails. It was built in one quarter the time required to construct the National Transcontinental and of course, for very much less money. The new line has a grade of but four-tenths of one percent between Port Arthur and Montreal with an almost perfect alignment. It is the lowest graded road on the continent. Our roads are so much lower than our competitors that we can take one hundred per cent more tonnage over it at the same cost than any other road on the continent. To secure this grade our Chief Locating Engineer, Mr. H. K. Wicksteed, spent four years in the North Country winter and summer."

#### PERSONNEL OF PARTY

The party included in addition to those already mentioned, Mr. John Aird, Assist. Gen. Manager of the Canadian Bank of Commerce, Toronto; Major C.D. Hine, New York City; Mr. W. W. Butler, Montreal; Mr. Frederic Nicholls, President Canadian General Electric Co., Toronto; Mr. J. E. Mackenzie, Winnipeg; Mr. H. K. Wicksteed, Chief Locating Engineer, Canadian Northern Railway, Toronto, and Mr. W. H. Grant, Manager of Construction for the company, Toronto.

### IN BANQUET AFTER THE HOUR OF MIDNIGHT PORT ARTHUR HONOURS RAILWAY BUILDERS

Memorable affair was that early today when completion of big link in Canadian Northern celebrated.

Fresh from driving the last spike the crowning of their great work, Sir William Mackenzie, Sir Donald Mann and party arrived in Port Arthur at one o'clock this morning and, from that hour until 3:30 o'clock they were the guests of honour at a banquet at the Prince Arthur Hotel given by the Port Arthur City Council and the Board of Trade.

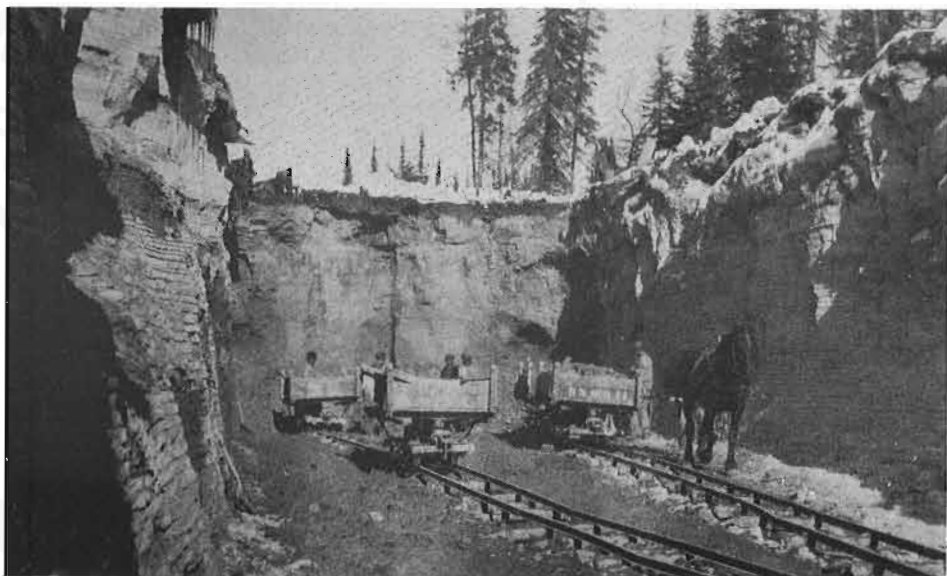
The holding of a banquet at that hour was perhaps without precedent in the history of Port Arthur, but interest never dulled and during the whole evening over one hundred of the prominent citizens of the city sat or strolled around the spacious rotunda of the hotel, smoking and chatting.

The 254 mile journey over the new unballasted line from Little White Otter River to Port Arthur had taken longer than anticipated.

#### ARRIVAL OF TRAIN

It was nearly one o'clock when the special carrying the railroad builders was aspid in the distance. When train engine number 1370 pulled into the depot, Mayor Oliver, Mr. J. J. Carrick, M.P., D. M. Hogarth, M.P.P., and many prominent citizens were there to meet them.

Sir William and Sir Donald alighted looking bright and spry and were at once escorted to the hotel.



Mayor Oliver presided and at his right sat Sir William Mackenzie, Mr. Frederic Nicholls, President of The Canadian General Electric Company, Toronto, and the former President of the C.N.R., and Mr. J. J. Carrick, M.P.P., on the left was Sir Donald Mann.

The Mayor in introducing Sir William and Sir Donald referred to them as "the two great pathfinders", and spoke of the occurrence of twelve years ago, when the last spike was driven in the Port Arthur-Winnipeg Division of the Canadian Northern Railway.

Mr. I. L. Matthews also spoke to the toast, he said "Twelve years ago, I presided at a banquet in the old Northern Hotel celebrating the completion of the Winnipeg-Port Arthur link of the C.N.R. Now we are celebrating the completion of 7000 miles or more of railway. Sir William Mackenzie and Sir Donald Mann have been truly termed pathfinders".

#### SIR WILLIAM

Sir William Mackenzie on rising to reply to the toast, was given an ovation. Of medium height, strongly built with iron grey hair, pointed beard and keen grey-blue eyes that see afar, the President of the C.N.R. spoke slowly as one who is accustomed to consider what he says before saying it.



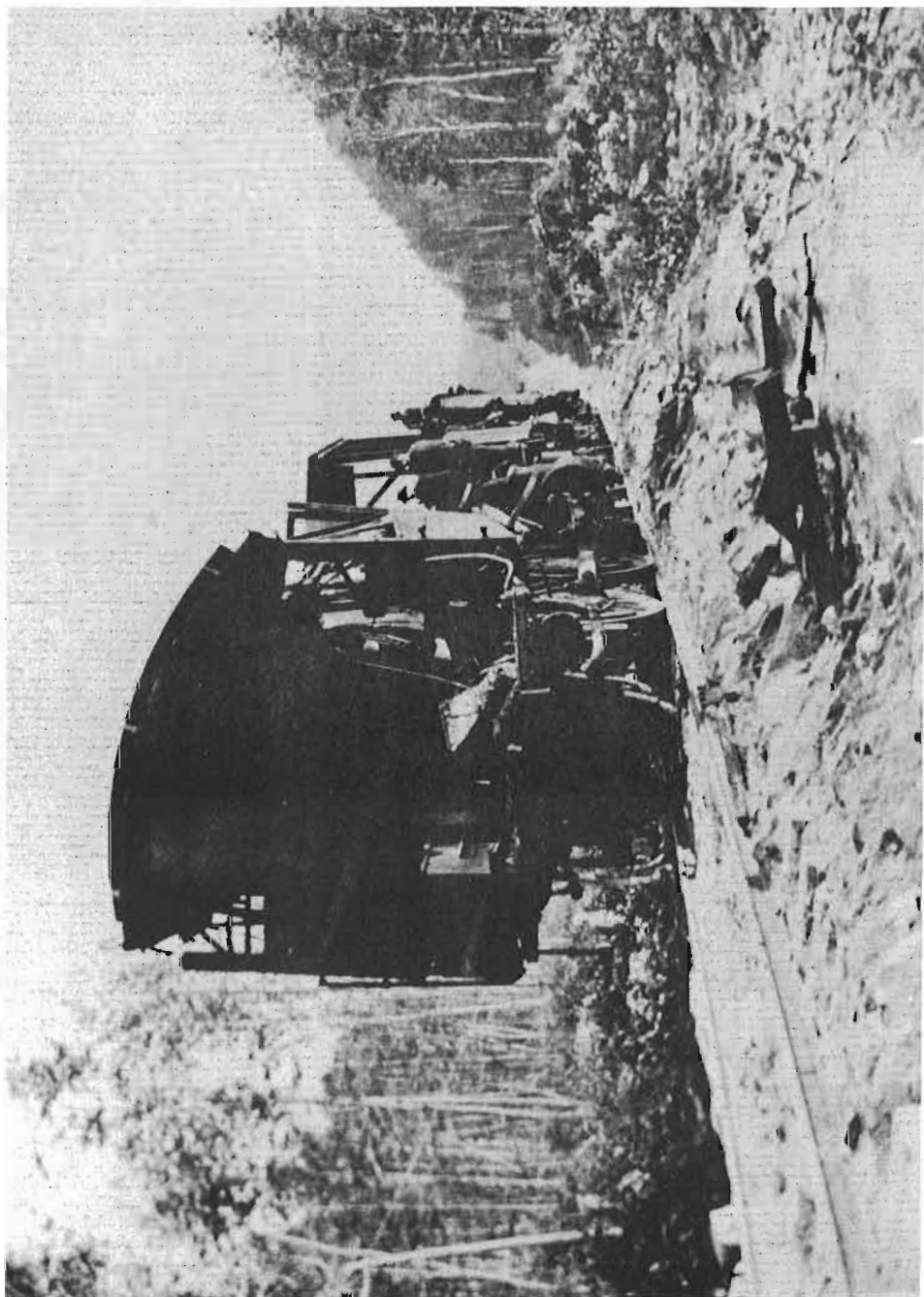
Photos showing the construction of trestle cribwork at Red Rock and the digging of a cut near Nipigon, Ontario for the Canadian Northern Ontario Railway. Both photos courtesy Mr. A.J. Isbester.



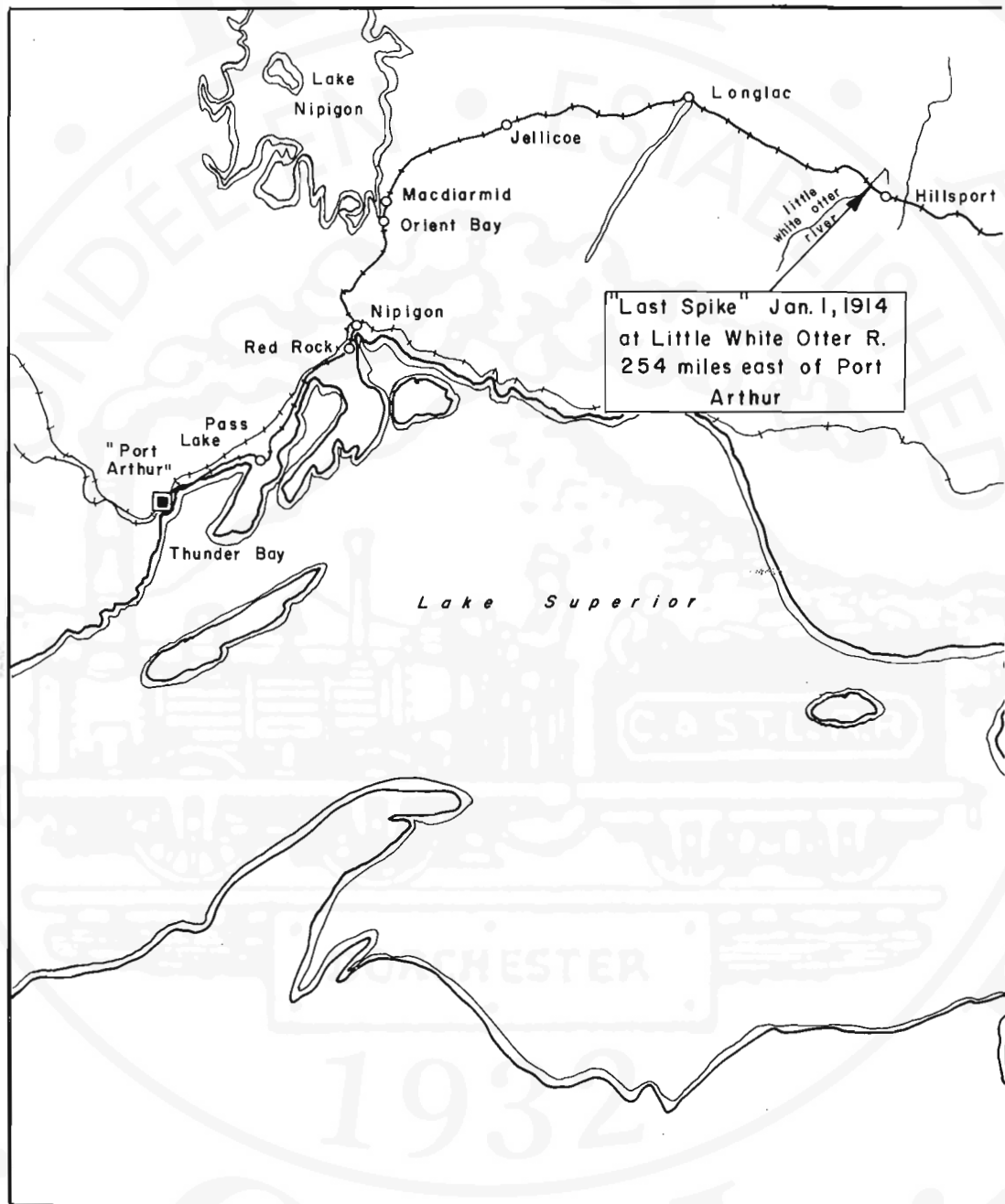
Railway Construction before levelling near Orient Bay, Ontario.  
Photo courtesy Mr. A.J. Isbester.



"Riprapping" at Orient Bay, by A.J. Isbester

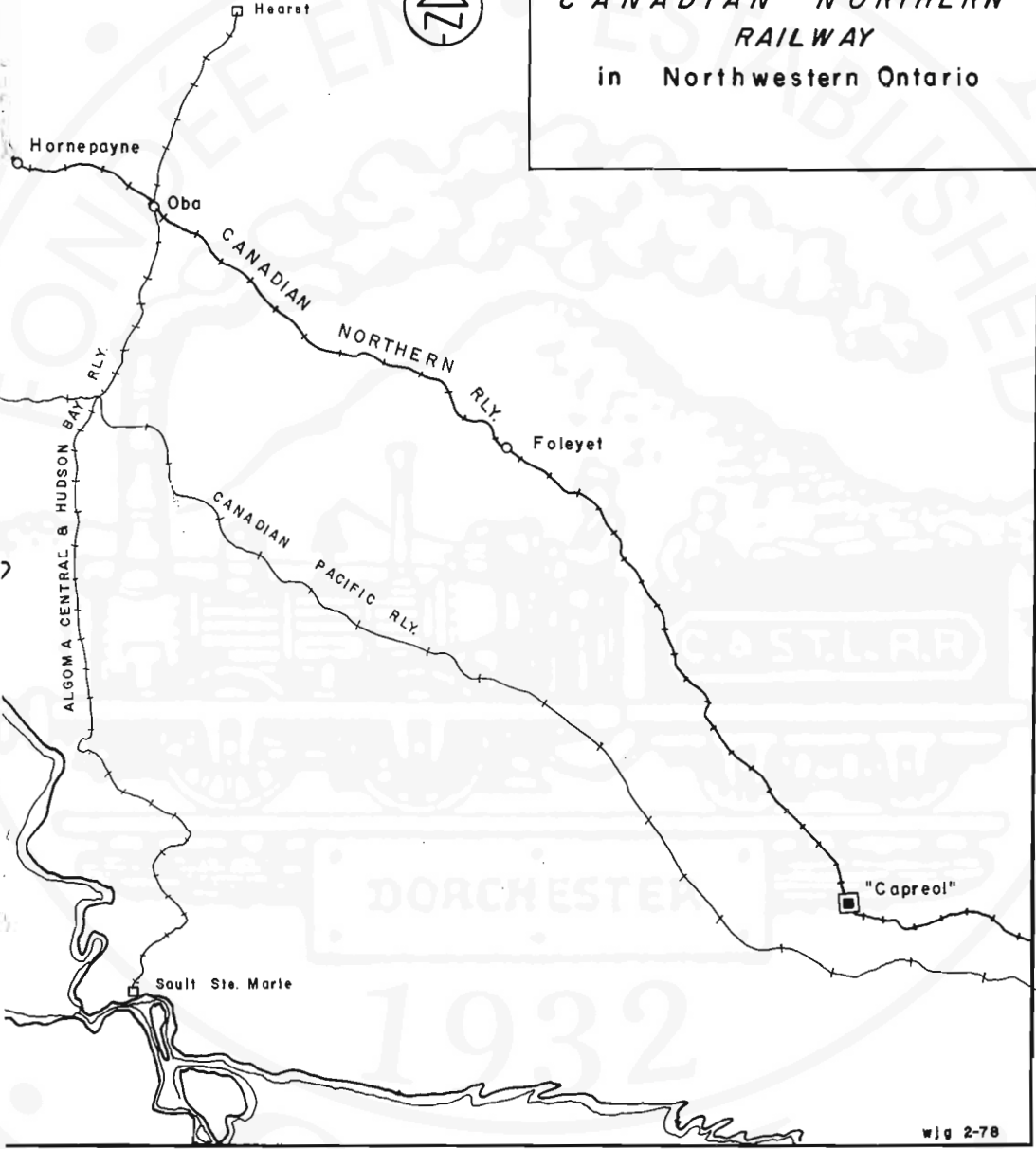


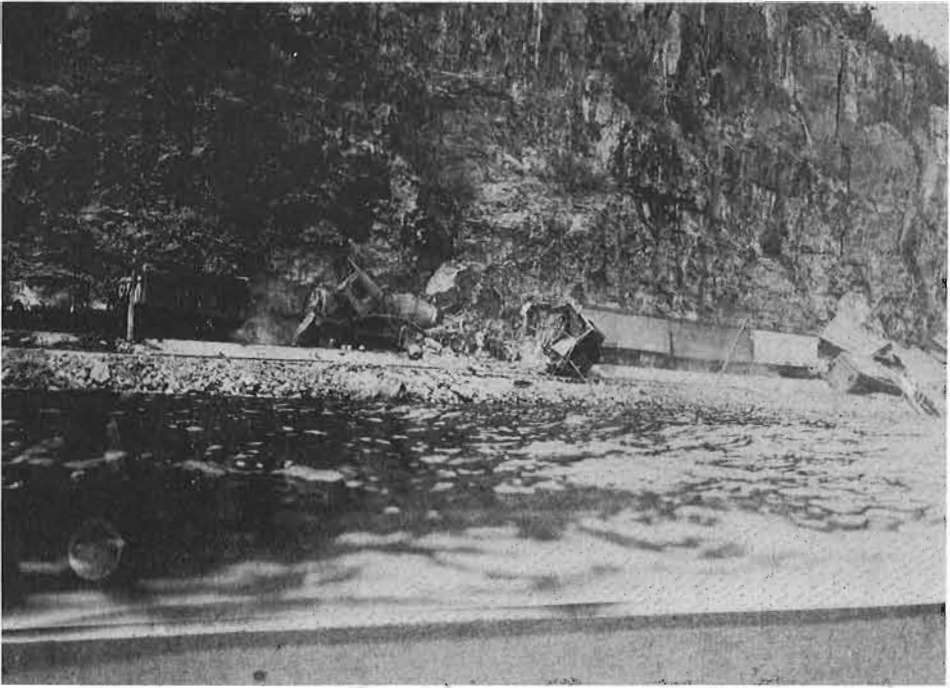
Construction locomotive being pulled out of the MacDiarmid Tunnel after having been involved in a collision. ( A.J.Isbester)

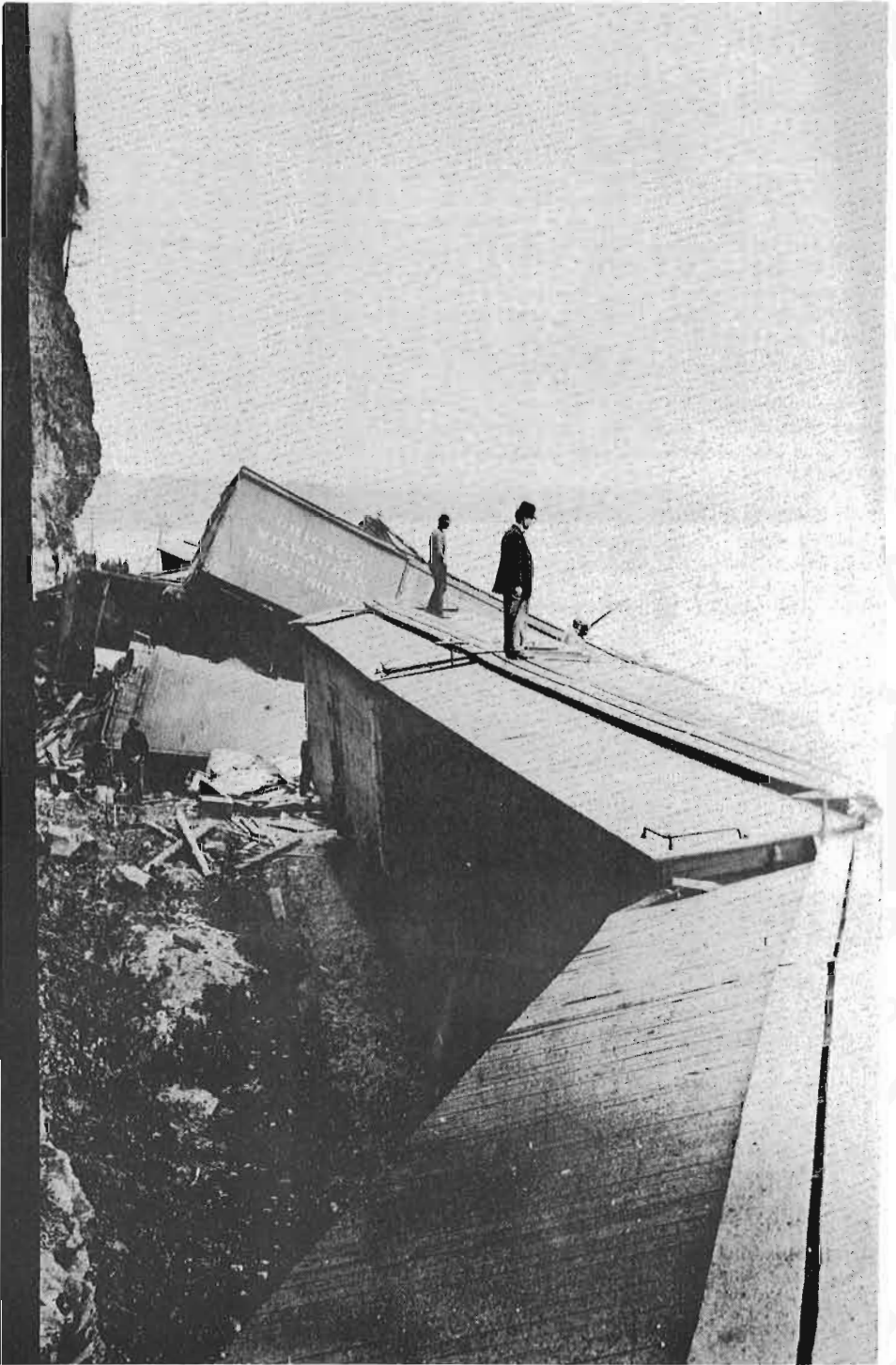




*CANADIAN NORTHERN  
RAILWAY*  
in Northwestern Ontario







Three photos of this C.P.R. wreck that spilled over onto the Canadian Northern Ontario at Red Rock, Ontario. Photos courtesy Mr. H.H. Matthews, Thunder Bay, Ontario

He opened his address by thanking the citizens for their splendid reception and wishing them a prosperous New Year. He also referred to the banquet of twelve years ago in the old Northern Hotel. "We at that time were very small," he said "We owned about one thousand miles of railroad. Today we have grown. You have grown. We are going to make Port Arthur our great terminal where rail and water meet." "Since the completion of the Port Arthur-Winnipeg line twelve years ago we have constructed 400 to 800 miles of railway a year. Today our system is close to 10,000 miles in length. We have had our difficulties. We have had to dispose of our securities unguaranteed to raise money to carry on the work. In the last two years we have spent from three to five millions of dollars a month on the C.N.R. Times have not been of the best of late and we have had difficulties, but we have now got rid of these big expenditures.

The building up of the east and west has come to such a point that expenditures will be much less in the future. Our lines in British Columbia will be completed by August or September of this year, and we will drive the last spike there and shall have spanned the continent."

#### SIR DONALD MANN

Sir Donald Mann, a man of few words, square, powerful and compactly built, was given a great ovation when he arose to reply to the toast.

"Thirty four years ago last July I came to Prince Arthur's Landing," said the constructive genius, "I worked near here for the C.P.R. for about a month. I then went to



White Otter Bridge, mile 255 courtesy A.J.Isbester

Duluth, which was simply a scar on the face of nature. In 1886-87 I came back to Port Arthur. There were three passengers on the train besides myself. You have grown some since then. We have grown. You are at the head of inland navigation, where wheels and keels meet. The wheels of three great transcontinental railways are centered here."

"Twelve years ago I made the prediction that within a decade one million bushels of grain would pour into the elevators at the head of the lakes in a day. It has come to pass."

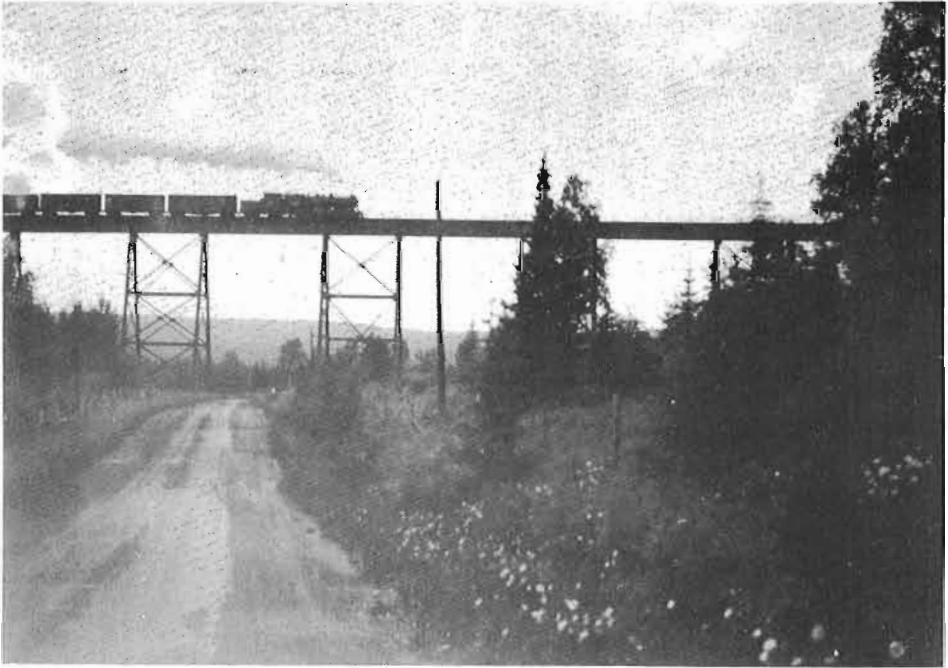
The banquet was brought to a close by the singing of Auld Lang Syne.

Mr. Hanna returned east this morning. Sir William and Lady Mackenzie went west as far as Winnipeg, Sir Donald Mann went through to the coast.

#### Note

Sir William Mackenzie and Sir Donald Mann were knighted in 1911 on recommendation of the new Prime Minister Robert Borden.

Roderick Mackenzie was the eldest son of Sir William Mackenzie.



Steam hauled freight on the Blende River Viaduct, photo courtesy Mr. Ed Christie, Thunder Bay, Ontario.

## Notes

Names chosen for divisional points on new C.N.R.O.

Jellicoe - after the British Admiral.

Hornepayne - after R. M. Horne-Payne financial adviser to Sir William Mackenzie and the C.N.R.

Foleyet - after Foley Bros., a Foley Station already existing in Manitoba, Foleyville was suggested, Sir Donald Mann was unimpressed and said "We'll call that place Foley-yet."

Capreol - named for Toronto man who had been a director of one of the first railways from that city.

## Note

Blende River viaduct near Pass Lake and east of Port Arthur, Ontario is 2258 feet long abutment to abutment, 130 feet in height.

References used in preparing this article.

Port Arthur Daily News January 2nd, 1914.

G. R. Stevens Canadian National Railways Vol. 2  
Clarke Irwin & Company Ltd., Toronto 1962.

D. B. Hanna. Trains of Recollection, the Macmillan  
Company of Canada 1924.

The Canadian Northern Railway. T. D. Regehr. The  
Macmillan Company of Canada 1976.

Notes on naming stations on Canadian Northern System (By  
A. J. Hills, Ottawa, 1956). Special collection H. Q.  
Library, Canadian National Railway, Montreal.

I wish to thank the following for their valuable assistance  
in preparing this article.

Mr. Clifford Brown, Thunder Bay, Ontario.

The Estate of the Late A. J. Isbester, Thunder Bay, Ontario.

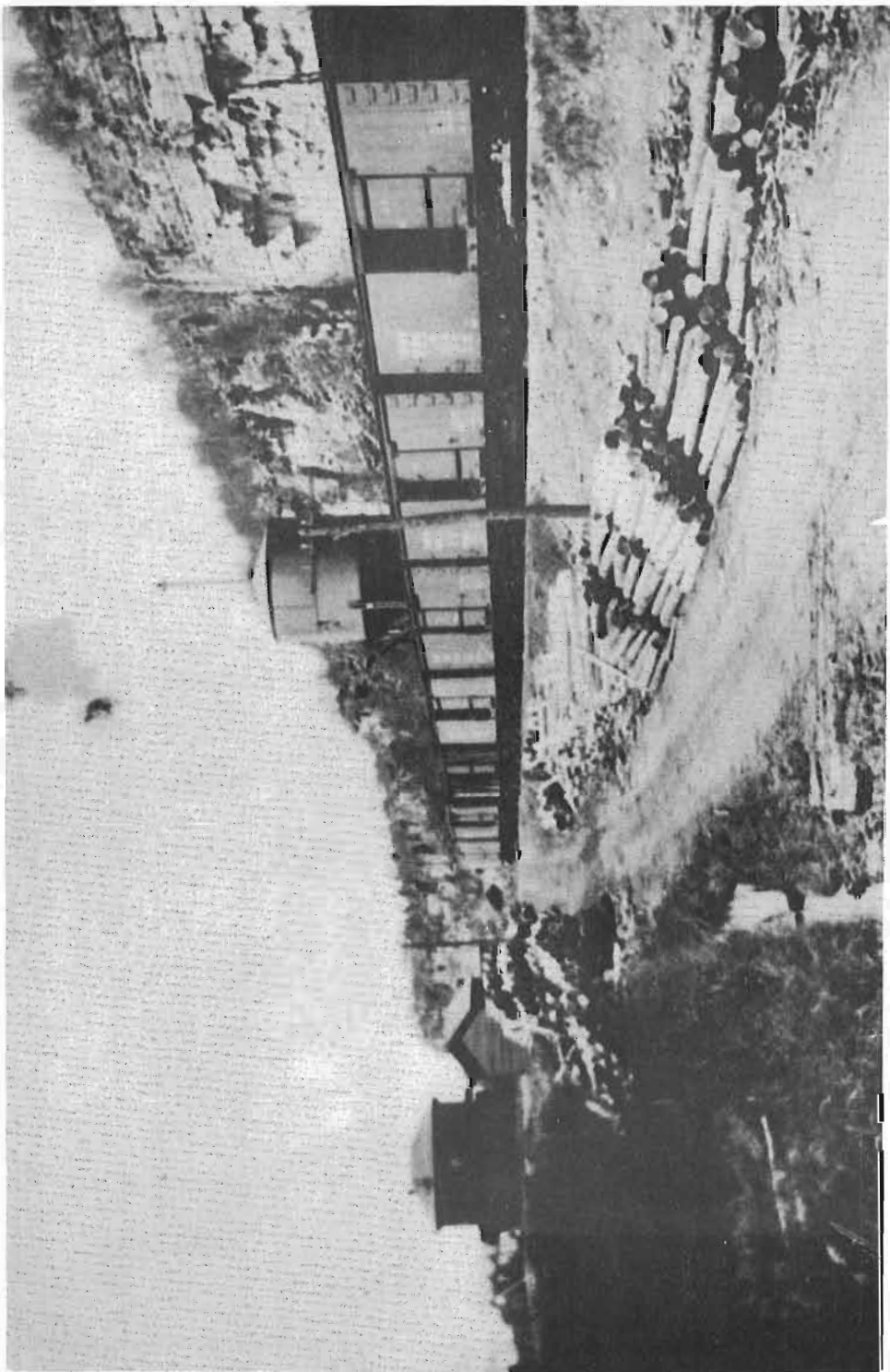
Mr. William Germaniuk, Thunder Bay, Ontario.

Mr. E. C. Everett, Nipigon, Ontario.

Mr. J. Norman Lowe, Historical Research Officer,  
H. Q. Library, Canadian National Railways, Montreal.

Thunder Bay Historical Museum Society, Thunder Bay.

Thos. Bell was stationed at Macdiarmid, Ontario (C.N.R.)  
for a number of years. He was a very obliging station agent,  
who gave all information obligingly to tourists and all who  
asked. Macdiarmid was a unique fishing place, a mixture of  
Indians, Scotch, Irish, French and Finns; often causing  
scraps and feuds.



Back in the days--- Pass Lake Ontario, courtesy Mrs. Rita Petersen.

## A TRIBUTE TO AN OLD STATION AGENT

Thomas Bell was a friend of mine,  
I used to know him down the line,  
For years and years for the C.N.R.,  
And before that too for the G.T.R.,  
This railroad man with his lights all green,  
Had highballed through - all slick and clean.

I knew Tom when he was in his prime,  
At Macdiarmid station at any old time,  
The trains came at night - and always were late.  
But Tom was there if you had to wait,  
With a roaring fire that gave lots of heat,  
The accommodation there was hard to beat.



CNORY on the bank of the Nipigon River where the CPR passes overhead and photo of Orient Bay Station. Both photos courtesy Mr. E.C.Everett of Nipigon, Ontario.

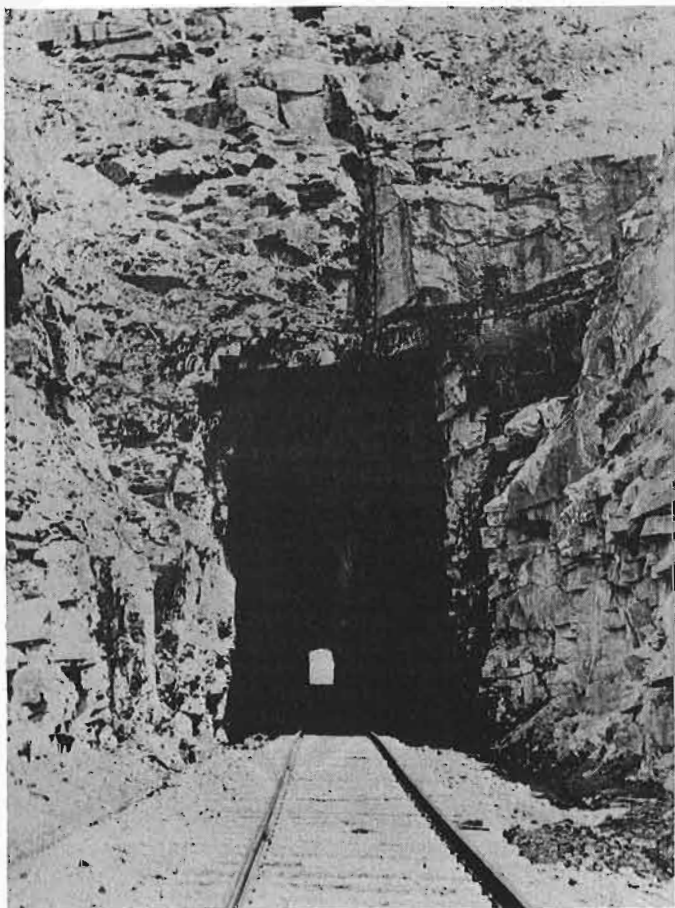


With Indians and dogs and passengers few,  
This agent cried out, "The train is due"  
'Mid the howling of dogs and the screeching of brake,  
And the echo resounding - clear across the lake.  
Number 79 is in boys - have tickets in hand,  
If you belonged to the Indian Lake Nipigon Band.

He was Telegrapher, Agent, Mailman and Mayor,  
Fisherman, Trapper, Fish Agent and square,  
Friend of all men - from tourist to tramp,  
To trapper and traveller, and men from the camp.  
With a pot bellied stove that gave lots of heat,  
And your lunch in a bag - if you had to eat.

There was Joe Snatch, Joe the Ghost, Adolph King and Moose McLeod,  
And many more Old Timers - who belonged to the crowd,  
Who played poker all night when the fish didn't bite,  
And when their money was gone, they'd all start to fight.  
But Tom was counsellor, peacemaker and friend,  
And everything turned out O.K. in the end.

By E. C. Everett



The MacDiarmid Tunnel now completed as photographed by Mr. A.J. Isbester of the CNORy.

# The Sad Saga of Rice Lake

by Fred Angus

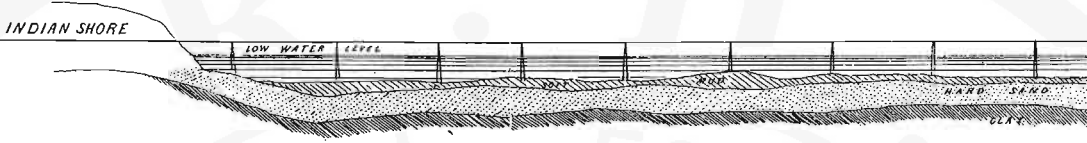
The network of Canada's railways covers almost every conceivable type of topography from the level plains to the mountain passes of the Rockies. In the more than 140 years since the first railway ran in Canada the development of this network has involved vast numbers of engineering projects, among the most spectacular of which are the great bridges which carry the rail lines over rivers, lakes and valleys. A considerable number of these bridges date from the nineteenth century, although in many cases the original structure has been rebuilt to handle heavier trains and increased traffic of the present day. Foremost among these nineteenth century bridges is the Victoria Bridge at Montreal, constructed in the 1850's, rebuilt in the 1890's and still in use. While the construction of the Victoria Bridge is one of the great success stories of mid-nineteenth century railway building, another, and even longer bridge of the same period offers an example of a spectacular failure. This latter bridge, almost forgotten today, was 2.6 miles long, possibly the longest ever built in Canada, and almost double the length of Victoria Bridge. This ill-fated structure was the Cobourg and Peterborough Railway bridge across Rice Lake.

In 1850 the aspect of Canada's transportation was just starting to enter its period of great change; the railway age. Until the late 1840's the most dependable, albeit seasonal, was by water, and up until 1848 the Canadian and British governments had spent huge sums on a network of canals in Canada. Although railways had been on the scene since 1836, the early lines were mostly intended to supplement existing waterways, and it is only after 1848 that the value of the railway development got under way the lines spread rapidly, and within ten years the Grand Trunk main line was essentially completed and the transportation map of Canada was irrevocably altered by this new fast system which could operate in all seasons. Among the places adversely affected by the coming of the railway were the old towns, on both river and lake, which had once handled freight shipments by water and which now were threatened with being bypassed by the railways. One such town was Cobourg on Lake Ontario which had once shown promise of rivalling Toronto, and was even then in the process of erecting a large new city hall which stands to this day. With the coming of the railway the citizens of Cobourg realized that they would lose much business unless they too had a railway going inland from Cobourg so making their town the point at which goods and passengers could be transferred from the boats, and from the projected Grand Trunk, to a northbound railway for travel to the interior. Thirty miles North of Cobourg lies Peterborough, and this was a

logical initial destination for such a railway. Accordingly, in 1852, an act of the Legislature of the Province of Canada was passed incorporating the Cobourg and Peterborough Railway Company, and authorizing the construction of the line.

The first sod was turned at Cobourg on February 9, 1853, the ceremony including a parade, ball, and torch-light procession. The citizens of Cobourg celebrated this event which was to bring even greater prosperity to their town in this era of great progress. No doubt the line would soon have been completed to everyone's satisfaction had it not been for one great obstacle. Midway between Cobourg and Peterborough lies Rice Lake, situated squarely in the path of the intended railway. Going around the lake would have unduly lengthened the route, so it was decided to carry the track across the lake by means of a timber bridge which would be one of the longest yet built in the world! The lake is shallow, the bottom consisting of black mud in a semi-liquid state which supported much growth of wild rice, but which afforded no support to piles. Beneath the mud is a layer of hard, compact sand, and below that, clay. Even at the start there were dire predictions from persons who knew the lake that the planned bridge could not stand up to ice in the winter. However, expediency overruled reason, and construction began on the project of which a contemporary writer said "A greater engineering or commercial blunder can scarcely be found in the Canada's". The contract for the construction was awarded to Samuel Zimmerman, contractor, builder, and self-styled "railway king" whose death in the Desjardins bridge collapse of 1857 was one of the contributing factors to the depression which set in later in the decade.

The bridge crossed from the south side of Rice Lake to Tic Island, a distance of 3,754 feet. From there, for the next 2,760 feet there was a series of wooden cribs 10' x 20' at 80 foot intervals, filled with stone and carrying a superstructure of "Burr's truss" spans. At the channel was a swing bridge giving two 50-foot passages when open. The remaining 6,728 feet to the north shore consisted of a pile bridge like the first except strengthened by crib work filled with stone. The entire bridge was 13,676 feet long, and required 184,000 feet of piling, 782,000 feet of timber, both square and round, in the crib work, and 1,932,000 feet of square timber in the bridge itself. In addition the bridge trusses required 250,000 lbs. of iron, while 20,000 cubic yards of stone were used in the cribs. Total cost was about \$175,000 which was a large sum for a structure on a short pioneer railway of the 1850's. In the sections built on piles, the piles were driven with great difficulty into the hard sand. While it was intended to penetrate through to the underlying clay, it was found so difficult to drive the piles (each blow drove it two inches at the most) that in most cases a depth of ten feet into the sand was judged to be sufficient. In the centre of the lake the hard bottom is about 40 feet below high water, pile driving to the clay was not even attempted, the stone in the cribs being deemed heavy enough to support the piers of the truss bridge. This judgement, like the bridge itself, was unsound as was to be painfully apparent before very long. To be strictly fair to the



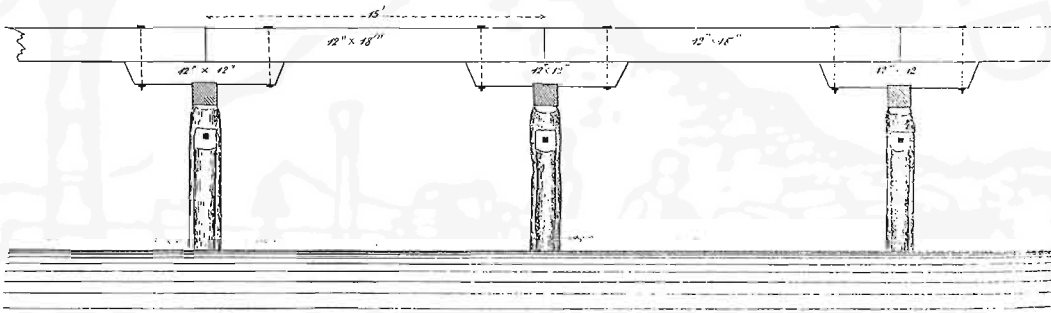
# Drawings of RICE LAKE RAILWAY BRIDGE,

to accompany a Paper  
by T.C. Clarke C.E.

for the "Canadian Journal"

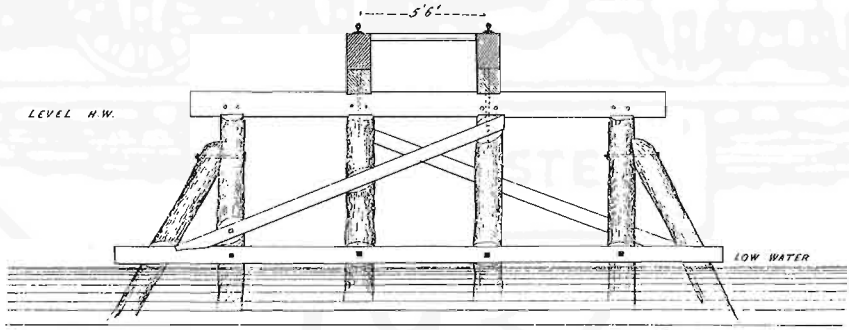
Nº 2.

ELEVATION PILE BRIDGE.



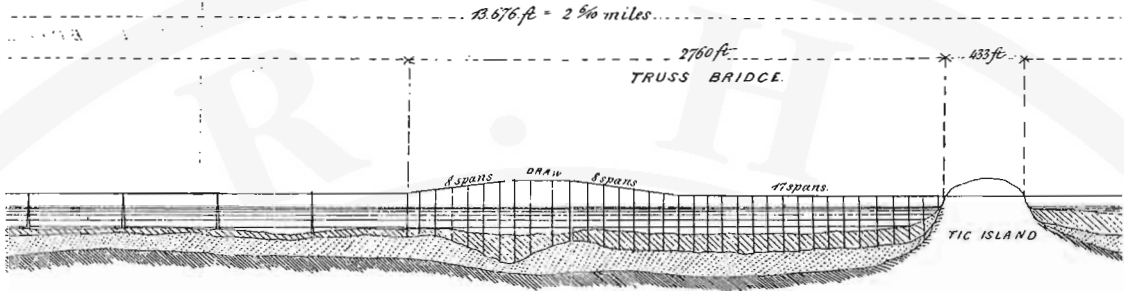
Nº 3.

CROSS SECTION PILE BRIDGE



promoters of the railway, the bridge was not intended to last indefinitely, but only until sufficient fill could be dumped around it so as to convert it into a causeway. It would have been better if this had been done at the start, however such a crossing might have been so costly that it would have killed the project at the outset, and by starting with a bridge the thought was that the fill could be placed over the next few years as revenue permitted.

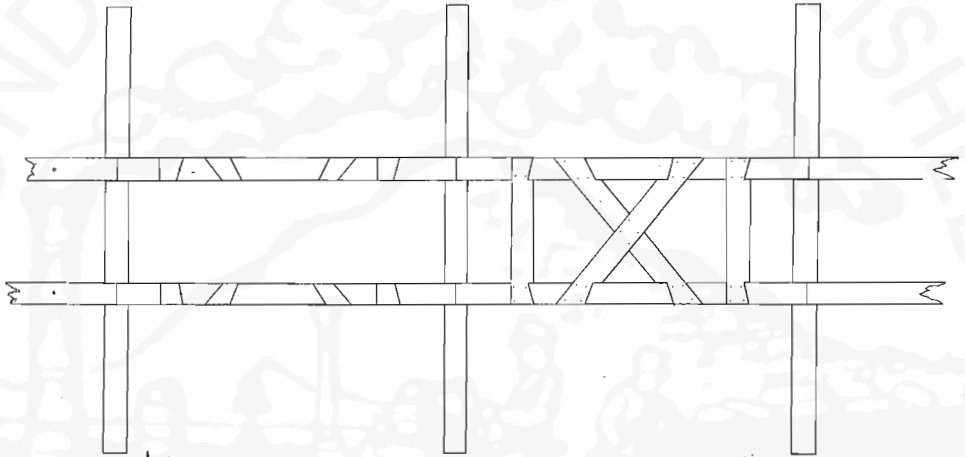
13,676 ft = 2 5/8 miles



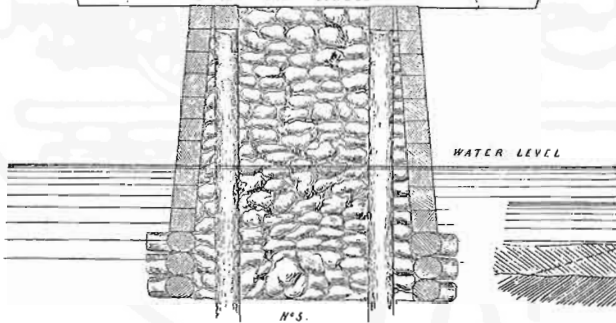
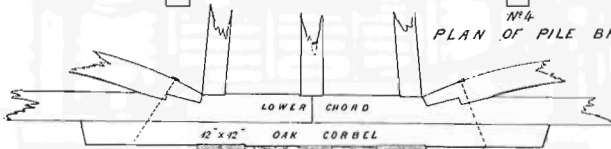
No 1.

### SECTION OF RICE LAKE

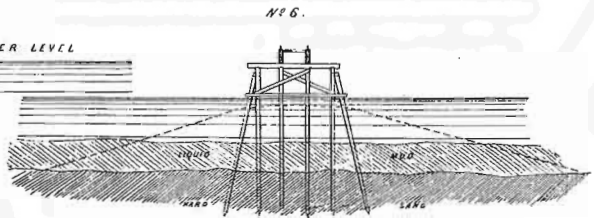
SCALE HORIZONTAL 600 feet to one Inch.  
VERTICAL 60 " " "



No 4  
PLAN OF PILE BRIDGE



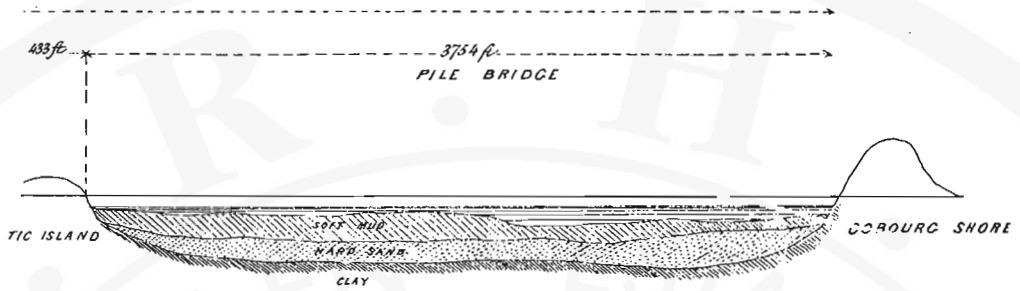
No 5.  
LONGITUDINAL SECTION OF PIER



No 6.  
CROSS SECTION OF PILE BRIDGE

after being filled to one foot of low Water with earth

Work on building the Cobourg and Peterborough continued during 1853 and 1854. During construction it became apparent that costs were greatly in excess of estimates, and a dispute arose between the directors of the company and the contractor. A shortage of material and outbreaks of sickness among the workers also complicated matters. Eventually the directors agreed to dispense with the services of Mr. Zimmerman and



continue the work themselves. The Rice Lake bridge was completed in the summer of 1854, and the line pushed on towards Peterborough. Despite difficulties with the bridge, the line was opened in December 1854 and, amid much rejoicing, the inaugural train, hauled by locomotive "Cobourg", newly built by James Good of Toronto, pulled the first train into Peterborough. The following year two additional locomotives, "Alma", named after the recent battle in the Crimean War, and "Peterborough" joined the fleet. These locomotives were also built by James Good. In addition two passenger cars, 82 freight cars, and five work cars completed the equipment. All were, of course of 5 ft. 6 in. gauge which was then the standard "Provincial gauge".

The line was scarcely opened when the ice began to play havoc with the new bridge. Ice two-and-a-half feet thick formed on the lake, this tended to buckle under the alternate heating of the bright sun and cooling of the cold nights. Furthermore, when the lake level rose the ice would lift too and pull the bridge with it, pulling out the inadequately driven piles. Although this effect had been noticed during the winter of 1853-54, at that time only part of the bridge was in place, but by 1854 the total effect was much worse, with the entire bridge subject to the moving of the ice. The worst damage was caused on January 1, 1855 when a massive shove moved two parts of the bridge in opposite directions, creating a seven foot gap. This of course stopped operations, but was eventually repaired and the spring of 1855 saw the bridge still in service but twisted and shaken and pushed out of line in many places. There is no record of the speeds of trains on the structure, but they must have been VERY slow. It takes some imagination to picture the scene of a 4-4-0 wood-burning locomotive hauling two light wooden passenger cars over the undulating twisting line. The creaking, pitching and swaying must have been incredible, enough to cause seasickness in the most experienced sailor!

By the start of 1856 the total cost of the line was almost a million dollars, and revenue was not sufficient to pay even the working expenses and bond interest, as money was being constantly spent to keep the bridge in repair. In 1867 the line was leased to a Mr. D.E. Boulton who appeared to be somewhat more successful in management. However just at this time, the Port Hope, Lindsay and Beaverton Railway obtained authority to build a branch line to Peterborough from Millbrook on their main line. This branch was opened on August 18, 1858, was only three miles long, and was more dependable than the Cobourg and Peterborough. As a result the latter's traffic fell so much that the bond-holders foreclosed on the line in the same year, and through service was discontinued. However, one last attempt was made, in 1860, to revive the line and replace the bridge with an embankment, this was also unsuccessful, and finally, in 1861, the ice completed its

destruction and the bridge was swept away, never to be rebuilt. So ended the through railway from Cobourg to Peterborough, and for some years the only connection to Peterborough was by way of Port Hope.

However the whole story was not quite ended. In 1865 what was left of the railway was sold for \$100,000, and the following year it was amalgamated with the Marmora Iron Works to form the Cobourg Peterborough and Marmora Railway and Mining Company. By 1870 total trackage was 25½ miles including a physically-separate branch to Blairton, the site of considerable mining operations. In the 1870's most other railways which had been 5 ft. 6 in. gauge converted to standard 4 ft. 8½ in., however the C.P. & M. could not afford to make the change. By the mid eighties it and the Carillon and Grenville were the only broad gauge lines left in Canada, and this situation continued until 1889 when the former Cobourg and Peterborough lines were abandoned. As the railway was 5 ft. 6 in. gauge to the end it is likely that the original locomotives survived until then when they were no doubt scrapped having served for 35 years.

So ended the story of a railway which had been conceived with such optimism and which proved such a disappointment. It is difficult to tell what might have happened if circumstances had permitted the building of a more substantial bridge across Rice Lake. Would this now have been a main connecting link in one of Canada's major railway systems and would Cobourg have become a large railway junction, or would the line have suffered the fate of so many other branch lines in the later twentieth century? This is difficult or impossible to say, but it is true that the Cobourg and Peterborough achieved three distinctions; it built the longest railway bridge in Canada. Portions of the line were among the first to be abandoned in Canada. The remaining part of the line became the "second-to-last broad gauge". Although the project failed to achieve its objective, the construction of such a long bridge was a good example of the spirit of the railway pioneers, a spirit which in so many other cases pushed railway lines on to success and helped to build the network which helped to bind together the nation.

#### BIBLIOGRAPHY

- Clarke, T.C. "On the action of the ice on the bridge at Rice Lake", Canadian Journal, Toronto. June 1855.
- Trout J.M. & E. "Railways of Canada", Toronto. 1871.
- Department of Transport: "Statutory History of Steam and Electric Railways in Canada", Ottawa. 1933.
- Lavallee O.S.A. "The Rise and Fall of the Provincial Gauge", Canadian Rail, February 1963.
- Keefer, Samuel "Report of the Board of Railway Commissioners of Canada", Hamilton. 1859.

#### Back Cover:

In the Fall of 1954 Jim Shaughnessy of Troy, New York photographed Central Vermont's No. 450 on the head end of a drag climbing up to the divide near State Line, Mass. Photo from an album in the CRHA Archives, S.S.Worthen Collection.

