

THE
SYDNEY AND
LOUISBURG
RAILWAY
III

C H RIFF

4500. furniture cars, 100 30 ton Rogers' ballast cars, 700 standard 30 ton box cars, 200 standard 30 ton flat cars. Work has not yet been started on these.

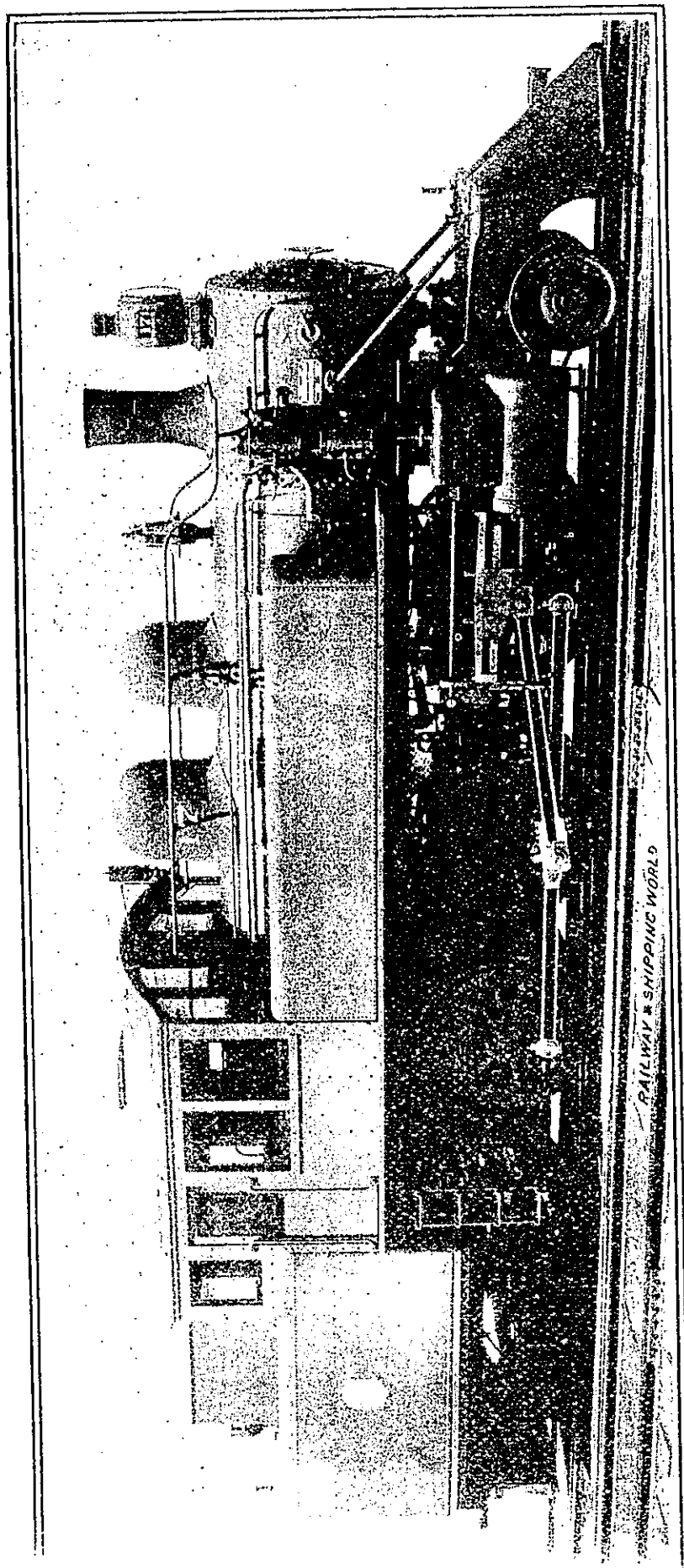
The narrow gauge locomotives which were used on the Columbia & Western Ry., between Trail & Rossland, B.C., before it was standardized, are to be sent to the Chilliwack district, New Westminster, having been sold to a dyking contractor there.

It is said the Minneapolis, St. Paul & Sault Ste. Marie Ry. will order 10 heavy decapod locomotives, probably early next year.

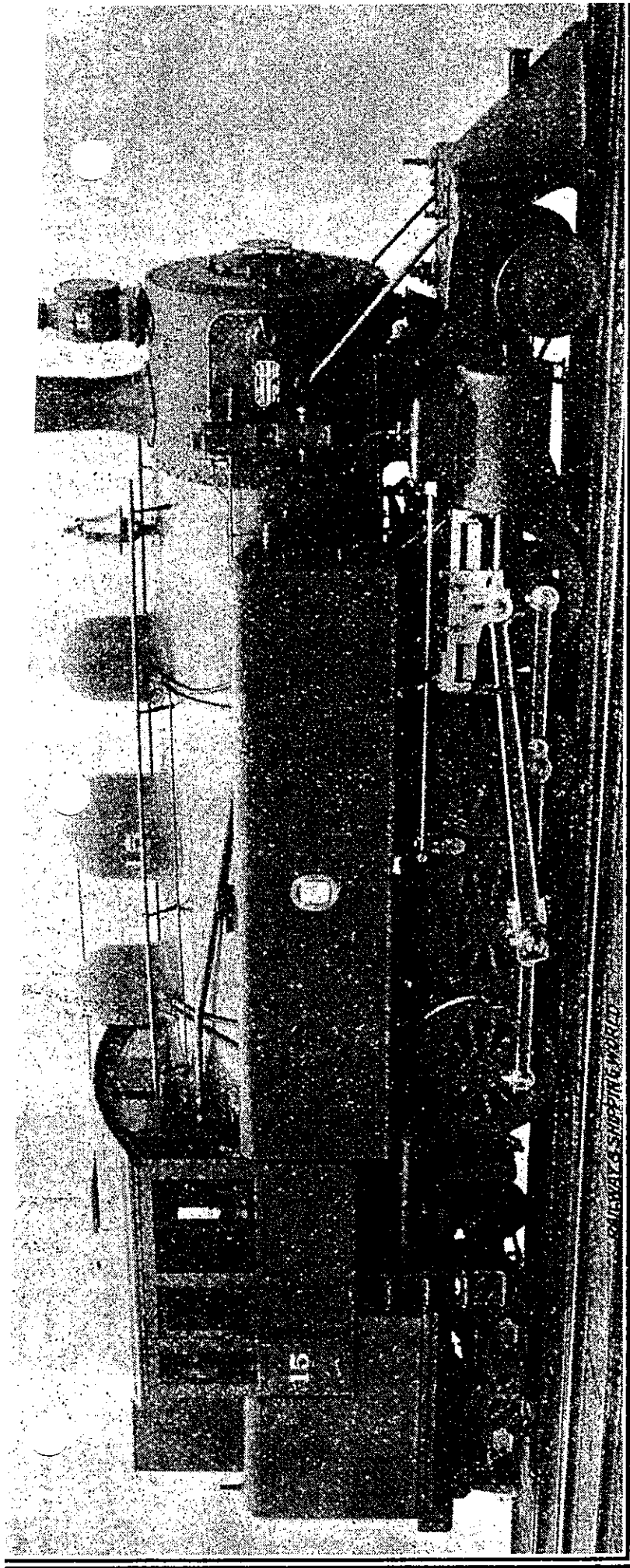
Sydney & Louisburg Locomotives.

This Co. has recently added to its equipment 2 double end locomotives, 1 mogul & 1 consolidation, which are believed to be among the largest double enders ever built. An illustration of a consolidation one is given on this page. Following are particulars regard-

Thickness of plates in barrel & outside of fire box	2, 3, 3 $\frac{1}{2}$, 9-16, $\frac{1}{2}$ & 11-16 in.
Horizontal seams	Butt joint sextuple riveted, with welt strip inside & outside
Circumferential seams	Double riveted
Fire box, length	114 ins.
Fire box, width	41 7-8 ins.
Fire box, depth	F. 70 $\frac{1}{2}$, B. 67 $\frac{1}{2}$ ins.
Fire box, material	Carbon steel
Fire box, plates, thickness	Sides 5-16 in., back 5-16 in., crown 3-8 in., tube sheet $\frac{1}{2}$ in.
Fire box, water space	Front 4 ins., sides 3 $\frac{1}{2}$ ins., back 3 $\frac{1}{2}$ & 4 ins.
Fire box, crown staying	Radial stays 1 1-8 ins. dia.
Fire box, stay bolts	1 in. dia.
Tubes, material	Charcoal iron, no. 12
Tubes, number of	348
Tubes, diameter	2 ins.
Tubes, length over tube sheets	13 ft. 10 ins.
Fire brick, supported on	Studs
Heating surface, tubes	2,512.55 sq. ft.
Heating surface, fire box	176.92 sq. ft.
Heating surface, total	2,689.47 sq. ft.
Grate surface	33.21 sq. ft.
Grate style	Rocking
Ash pan, style	Sectional, dampers front & back
Exhaust pipes	Single, high
Exhaust nozzles	5 $\frac{1}{2}$ ins., 5 $\frac{1}{2}$ ins., 5 $\frac{1}{2}$ ins.
Smoke stack, inside	meter
Smoke stack, top above rail	14 ft., 9-10 ins.



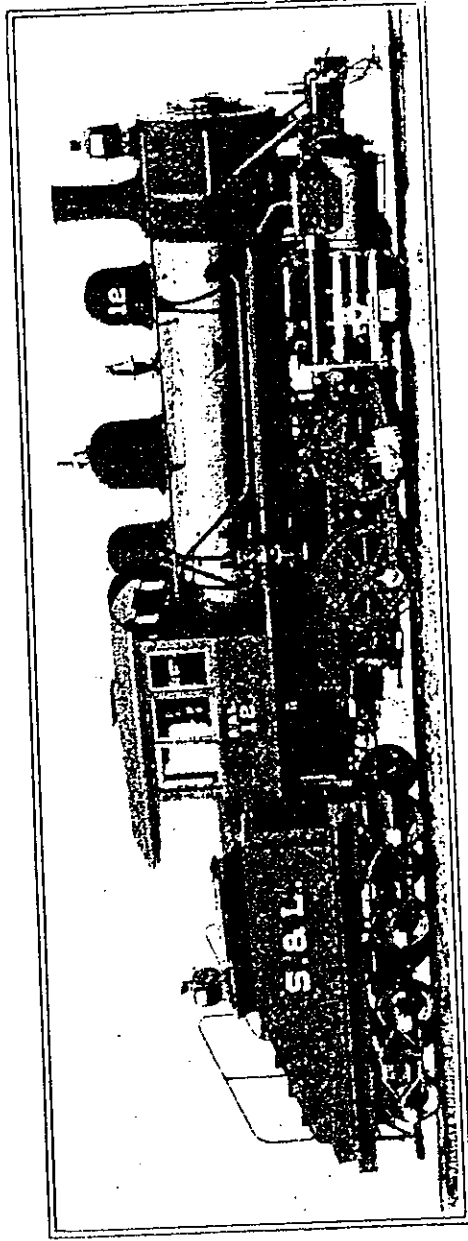
DOUBLE END MOGUL LOCOMOTIVE FOR SYDNEY AND LOUISBURG RAILWAY.



DOUBLE END CONSOLIDATION LOCOMOTIVE FOR SYDNEY AND LOUISBURG RY.

THE LOCOMOTIVE AND MACHINE COMPANY OF MONTREAL, LIMITED

Imperial Bank Building, Victoria Square, Montreal, Canada
Builders of LOCOMOTIVES for all Classes of Service



NEW YORK OFFICE, - American Locomotive Company, 25 Broad Street.

September 1904

DISASTER ON

S. & L. ROAD.

Engine and Several Cars Plunge Into the Stream Through an Open Draw at Mira Gut--Engineer Parsons Killed... Disaster due to Disregard of Signals.

The most appalling disaster in the history of the Sydney and Louisburg Railway occurred shortly after two o'clock yesterday morning, when engine No. 62 went headlong over the drawbridge at Mira Gut into the river, resulting in the death of Driver James Parsons and the almost complete destruction of the engine and several empty coal cars.

The steamer Alameda of the Mira River service was just ready to leave her moorings at Mira to bring Capt. Olsen of the stranded barque Amuly, Capt. Neilson of the steamer Britannic and Capt. Cahn of the steamer M. M. Cates to Seattle, where the last two named were to hold a court-martial over the wrecked vessel. The lines were about to be cast off, the public highway bridge about one hundred yards inside the railway was open, and James McDonald, the keeper of the railway bridge was in the act of opening the draw standing about three quarters open, when a train of empty coal cars from Louisburg bore in sight.

The train entered upon the first span at the rate of about a mile an hour. When half way across the brakeman was seen to leave the engine, and as the body wheels of the engine were just going over the abutment when the fireman leaped upon the bridge, and the next instant the engine plunged with tremendous force into the middle of the stream, where there was a depth of water of about twenty-five feet. The cab broke off and tumbled into the stream, followed by three of the empty cars. Just as the engine was being precipitated into the river Driver Parsons was seen standing up on the steps, and it is supposed that as he was about to jump clear he received a stunning blow, as shortly after his body was found floating some distance up the stream.

As the engine tumbled into the water there was a tremendous roar of steam, and those who witnessed it will never forget the sight. When a representative of the Board arrived upon the scene about two hours after the accident, the forward end of the engine was beached against the rest of the draw, while the broken tender was hanging over the end of the stone support of the first span, three cars were partially in the stream and two were completely in the

his son-in-law, is also a driver, running on the opposite train. Yesterday morning the two trains crossed at Clark's Crossing. They signalled one another, Atkinson little thinking it would be the last time he would see his father-in-law alive.

As soon as the accident occurred a boat was launched from the Alameda, and it was its crew, Angus McDonald and Ignatius Campbell, who picked up the body shortly after as it floated up stream. When found it was thought life was not yet extinct and every effort of resuscitation was made, but to no avail. When Dr. McKern arrived he pronounced the man dead. The lungs were filled with water, and on the back of the head was a wound which he received from a blow that no doubt stunned him.

The remains were in the afternoon brought by special train to Louisburg, where an inquest was held last night, and the funeral will take place today. Mr. Covert attended the inquest on behalf of the Company.

Ira L. Boomer, chief train dispatcher, of the Sydney & Louisburg, accompanied the remains to Louisburg, where he is to hold an investigation in the matter.

The damage to the rolling stock is estimated at about \$100, and strange to say the bridge received no injuries whatever.

April 5
1903
Sydney

Driver Parsons was on the steps, and it is supposed that as he was about to jump clear he received a stunning blow, as shortly after his body was found floating some distance up the stream.

As the engine dropped into the water there was a tremendous roar of steam, and those who witnessed it will never forget the sight. When a representative of the Post arrived upon the scene, about two hours after the engine was bedded against the rest-pier of the draw, while the broken tender was hanging over the end of the stone abutment of the first span, three cars were wholly in the stream, and two more were hanging over the corner. A wrecking train and crew had arrived from Glace Bay and the work of clearing away the debris was immediately begun. It is supposed the track will be opened for traffic this afternoon.

The train which was ordered out of Louisburg consisted of one engine, engine No. 12, one of the first large engines imported by the Company. It was in charge of Conductor C. J. McDonald, his brakemen being Harry Cann and George Waddell. The driver, James Parsons, who lost his life, and the fireman, Charles Dickson, Cann was forward brakeman and he was the first to leave the engine, followed quickly by the fireman, who escaped just in time to save himself from being carried over.

Dickson, the fireman, was the first to notice the danger, just as the engine was about to drop upon the first span, and as McDonald, the keeper, seeing the danger, stood by the draw with both hands on the lever, immediately reversing the engine and gave the signal for the train to stop. The train was stopped just as the engine was about to drop upon the first span.

April 5
1903

ROUNDHOUSE AT LOUISBURG IS DESTROYED

**Building Burned to the
Ground in Less Than
One Hour**

LOSS IS \$55,000

**Locomotives in Round-
house Being But Slight-
ly Damaged**

The Sydney and Louisburg roundhouse at Louisburg was completely destroyed by fire last night.

The fire was discovered about nine o'clock and it made such rapid headway that before an hour the round house was a mass of charred ruins.

At the time there were four locomotives in the shop, but the men who were working nightshift, succeeded in getting them all out. The cab of one engine was completely destroyed, while another was severely damaged.

When the firemen appeared on the scene, the flames had made such progress that they were powerless to check them. The different machines and shop apparatus were saved. The loss is estimated at about \$10,000.

An investigation will be held today into the cause of the fire, which is at present unknown.

Will Rebuild Immediately

The loss of the roundhouse will cause much inconvenience and it is understood that work will be started at once to replace it. The damaged engines were sent last night to Glace Bay where the necessary repairs will be effected.

One of the morning freight trains from Louisburg to Glace Bay will be cancelled, as a result of lack of accommodation.

The coal piers near the round house looked at one time to be in danger, but fortunately the wind carried the flames in the opposite direction.

February 2
1920

WRECK ON S. & L. PILED FREIGHT INTO THE DITCH

Express Delayed by The
Accident Near Dom-
inion.

BROKEN RAIL

Morning Express Had Pass-
ed Over Section Few
Minutes Before

The regular afternoon train from Louisburg did not pull into Sydney at her schedule time yesterday owing to the wreck yesterday morning of the regular freight. The track was not cleared up to last evening and the regular express train which arrives here at 5.50 only came as far as Glace Bay. The passengers came from the Bay to Sydney on the street cars.

Slightly Injured

Alexander McKinnon, engineer, and Dan McVicar, fireman, of the regular morning freight from Louisburg to the city were slightly injured in the wreck which occurred at Red Bridge, near Dominion. The locomotive turned over on its side and seven cars of freight which made up the train, also pulled into the ditch. The accident is believed to have been caused by a straight rail.

The morning express had passed over the same spot only about forty minutes previously.

It is expected to have the track cleared for today's train over the S. and L.

August 17

1920

Coal Train Engineer Sees Obstacle On Rail In Time To Avert Crash

Express Due Short Time After—Huge Stone Placed on Track to Derail Train, is Belief.

GLACE BAY, Oct. 20.—Quick work by S. and L. Engineer Jim McRury yesterday prevented a bad wreck on the railway and also prevented what was likely intended to be the wrecking of the Sydney and Louisburg passenger train that passes through to town after five o'clock each evening.

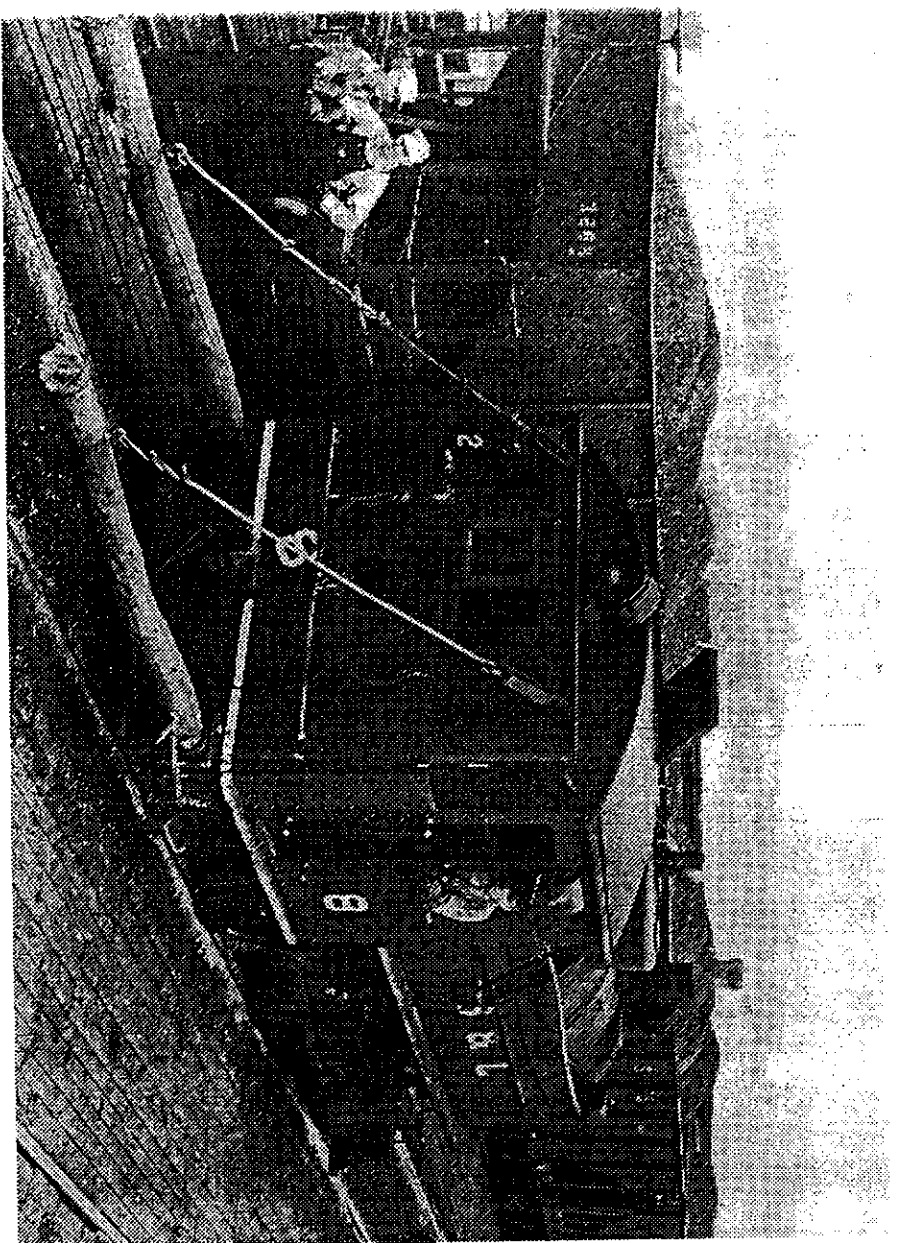
Yesterday, while Engineer McRury was going to Sydney at the throttle of engine 53 with a heavy train of coal, about midway between the Hub junction and O'Neill's Point he noticed an object on the rail a short distance ahead. Quickly applying all brakes, he brought the big train of coal to a stop and, dismounted with the other train hands, they discovered a flat piece of stone fourteen inches long and five inches wide and thick that had been placed across one of the rails and securely placed in shape with short pieces of two by four scantling.

WRECK ATTEMPT

WHAT was evidently the intention of the culprits who placed the stone where it was found was to wreck the S. and L. express which passes the spot where the stone was found at a rate of about fifty miles per hour and which was due to come along a short time behind the coal train that Driver McRury was hauling to International Pier at Sydney.

The stone was removed and the matter reported at once to the railway office and the coal company police department and the staff of the latter department are now working on the case. If the express train had come along first instead of the slower moving coal train, there is little doubt but that scores of people would have been seriously injured if not killed.

October 21 1929



ey and Louisburg Railway engine No. 8, an 0-4-0-0T equipped with "pusher", works the coal piers at Sydney, Nova Scotia on July 19, 1952.

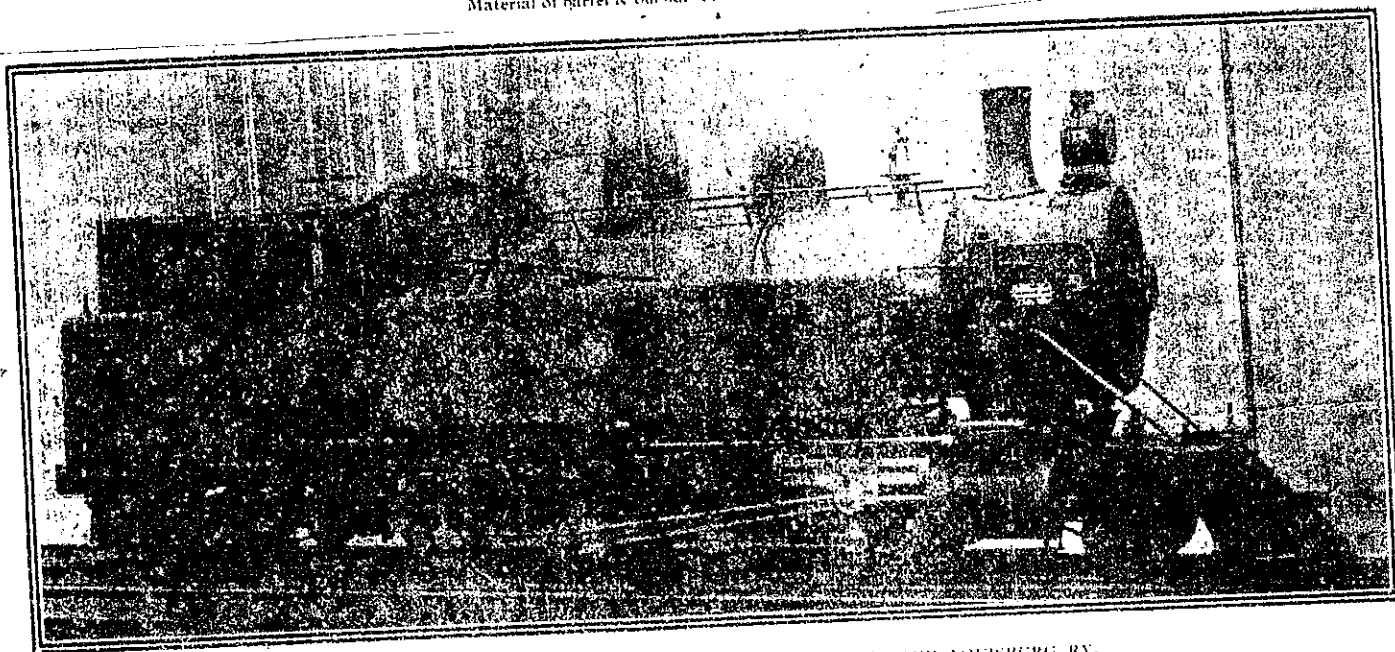
Scotian Railroad Society Collection #427b

CYLINDERS.
 Diameter of cylinders 22 ins.
 Stroke of piston 28 ins.
 Horizontal thickness of piston 31 ins.
 Diameter of piston rod 31 ins.
 Kind of piston packing Cast iron
 Size of steam ports 18 x 11 ins.
 Size of exhaust ports 18 x 11 ins.
 Size of bridges 18 x 11 ins.

VALVES.
 Greatest travel of slide valves 5 ins.
 Outside lap of slide valves 1 in.
 Inside lap of slide valves 10.32 in.
 Lead of valves in full gear 1.16 in.

WHEELS, ETC.
 Diameter of driving wheels outside of tire 55 ins.
 Material of driving wheels, centers Main, cast steel; Inter., steel cast iron
 Tire held by Shrinkage
 Driving box material Main, cast steel; Inter., steel cast iron
 Diameter & length of driving journals, main only 9 ins.
 diameter, 31 ins. dia. x 10 ins.
 Diameter & length of main crank pin journals, (main side 71 x 5 ins.) 7 in. dia. by 61 ins.
 Dia. & length of side rod crank pin journals, (15 x 4 ins.)
 Inter., 6 in. dia. x 41 ins.
 Engine truck, kind 2-wheel swing bolster
 Engine truck, journals 6 ins. dia. x 10 ins.
 Diameter of engine truck wheels 30 ins.
 Kind of engine truck wheels Plate

REATER.
 Style Straight
 Outside diameter of first ring 72 ins.
 Working pressure 200 lbs.
 Material of barrel & outside of fire box Carbon steel



DOUBLE END CONSOLIDATION LOCOMOTIVE FOR SYDNEY AND LOUISBURG RY.

Thickness of plates in barrel & outside of fire box 2.375 in.
 Horizontal seams Butt joint sextuple riveted, with welt strip inside & outside
 Circumferential seams Double riveted
 Fire box, length 41.75 ins.
 Fire box, width 41.75 ins.
 Fire box, depth 17.5 ins.
 Fire box, material Carbon steel
 Fire box, plates, thickness Sides 3/16 in., crown 3/8 in., tube sheet 1/2 in.
 Fire box, water space Front 4 ins., sides 3/4 ins., back 1/2 in.
 Fire box, crown staying Radial stays 1.58 ins. dia.
 Fire box, stay bolts 1 in. dia.
 Tubes, material Charcoal iron, no. 12
 Tubes, number of 118
 Tubes, diameter 22 ins.
 Tubes, length over tube sheets 13 ft. 10 ins.
 Fire brick, supported on Studs
 Heating surface, tubes 4,412.5 sq. ft.
 Heating surface, fire box 176.92 sq. ft.
 Heating surface, total 4,589.42 sq. ft.
 Grate surface 31.21 sq. ft.
 Ash pan, style Rocking
 Exhaust pipes Single, high
 Exhaust nozzles 51 ins., 51 ins., 51 ins.
 Smoke stack, inside diameter 10 ins.
 Smoke stack, top above rail 14 ft. 9.90 ins.

TENDER.

Wheels, number of 4
 Wheels, diameter 30 ins.
 Journals, diameter & length 3 in. dia. x 10 ins.
 Tender trucks, 4-wheel center bearing swing spring bol-
 ter carrying back end of engine
 Water capacity 4,000 U.S. gallons
 Coal capacity 4 tons

Sydney & Louisburg Locomotives.

This Co. has recently added to its equip-
 ment 2 double end locomotives, 1 mogul & 1
 consolidation, which are believed to be among
 the largest double enders ever built. An illus-
 tration of the consolidation one is given on
 this page. Following are particulars regard-
 ing it:

Gauge 4 ft 8 1/2 in.
 Fuel Anthracite
 Weight in shipping order 75,000 lbs.
 Weight on wheels 12,000 lbs.
 Wheel base, driving 15 ft.
 Wheel base, total 24 ft.

of the Brockville, Ont., shops, resigning succeeded by W. Marshall, of Ont., who was only able to hold the a few days, owing to illness. J. Martindale, has since been appointed.

Mont & P.E.I.—J. B. Lambkin, Dis-
passenger Agent, Halifax, & H. A. Price,
passenger Agent, Montreal, have been
assistant general passenger agents,
headquarters as at present. Mr.
will still attend to the duties of Dis-
passenger Agent east of Dalhousie, N.B.,
vice to the duties of District Passen-
west of Dalhousie, N.B., including

Price, Chief Clerk in the General
Department, has been appointed
land Agent, with headquarters at
pass., a new office. H. H. Melanson,
kin in the Department, has succeeded
as Chief Clerk.

Driver, who was mentioned in our
as having been succeeded as City
Agent at Montreal by J. W. Bry-
son retained as a clerk in that office.

St. Falls & Northern.—C. Shields,
ident & General Manager of this

Mainly About People.

Jas. Ross, of Montreal, has succeeded the
late Hugh McLennan as a director of the Bank
of Montreal.

Sir Rivers Wilson, President of the G.T.R.,
& Lady Wilson, are spending some weeks at
Brighton, Eng.

R. A. Ross, Consulting Electrical Engineer
for the C.P.R., has returned to Montreal after
making a tour of the world.

The Duke of Cambridge was recently the
guest of Lord & Lady Mount-Stephen at Brock-
et Hall, Hertfordshire, Eng.

J. A. Cuttle has been appointed Manager
pro tem. of the Montreal Transportation Co.,
in place of the late D. G. Thomson.

N. Tomney, C.P.R. Store-keeper at Moose
Jaw, Alta., was run over in the yard there
recently by a car & instantly killed.

It is said the office of the General Freight
Agent of the Dominion Atlantic Ry. is to be
removed from Halifax to Kentville, N.S.

Mrs. J. T. Craig, daughter of D. Brown,
Assistant General Freight Agent G.T.R.,
Chicago, died there Nov. 29, aged 31.

C. McGrath, of Lethbridge, Land Commis-
sioner of the Alberta Ry. & Coal Co., is to be
married in Montreal, Dec. 19, to Miss Mabel
Galt, daughter of the late Sir A. T. Galt.

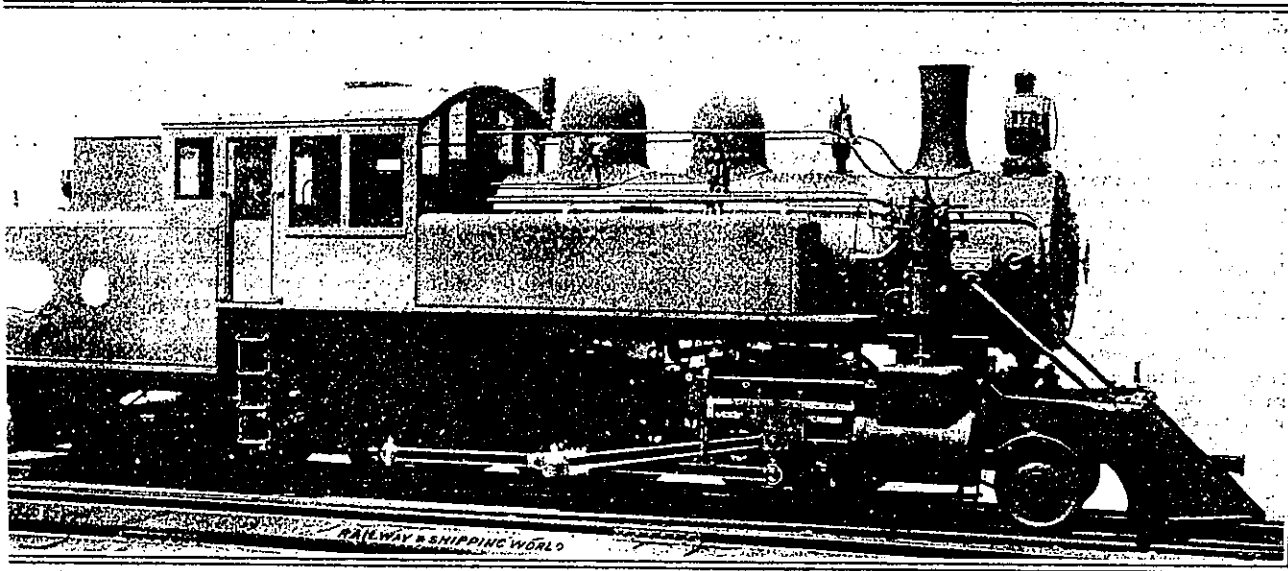
D. G. Sturrock has been appointed Mana-
ger of the Toronto office of the C.P.R. Co.'s
Telegraphs, succeeding A. W. Barber, pro-
moted to the Superintendency of the Ontario
Division.

D. Budge, of Halifax, has been appointed
General Superintendent on this side of the At-
lantic of the Halifax & Bermuda Cable Co. &
the Direct West India Cable Co., with quar-
ters in Halifax.

Winnipeg Town Topics mentions a rumor
that W. R. Baker, General Manager of the
Manitoba & Northwestern Ry., & Mrs. Baker
are contemplating a prolonged visit to the
Southern States.

Just before the recent Manitoba elections,
Hon. Hugh J. Macdonald resigned the solic-
itorship of the C.P.R. Land Department &
retired from the firm of Macdonald, Tupper,
Phippen & Tupper.

C. A. E. Huddart, midshipman on H.M.S.
Doris, who was killed recently while fighting



DOUBLE END MOGUL LOCOMOTIVE FOR SYDNEY AND LOUISBURG RAILWAY.

Assistant General Superintendent of
Northern (U.S.A.), has resigned.
one time on the Western Division
R. P. T. Downs has succeeded
G.N., but we are not advised as
of the S.F. & N. vacancy.

—R. Doyle has been appointed
r of the Buffalo Division, with
rs at St. Thomas, Ont., succeed-
ostello, resigned.

Yukon & Yukon.—The officers are :—
ves, President, Chicago; E. C.
General Manager; S. M. Irwin,
nager; E. B. Hussey, General
Agent; A. L. Berdoe, Auditor, all
at Seattle, Wash.; F. C. Elliott,
J. W. Probert, Treasurer, with
Chicago; J. H. Hislop, Assistant
eer; J. P. Rogers, Division Super-
nt. Vice at Skagway, Alaska;
Passenger & Freight Agent,
Career, Commercial Agent, Vic-
; C. W. Cook, Agent, Tacoma,
W. Joynt, General Agent at
A. H. B. MacGowan, Agent, Van-
; S. P. Brown, General Agent,
co; S. E. Adair, Agent, Dawson,

Mrs. J. G. Hampton, wife of the Superin-
dent of the North American Telegraph Co.,
died at Deseronto, Ont., Nov. 20, aged 33.

A. Fairbairn, Paymaster of the Montreal St.
Ry., has been appointed Comptroller of the
West India Tramway Co. at Kingston, Jama-
ica.

W. Ellis, at one time Superintendent of the
Welland Canal, died at St. Catharines, Ont.,
Dec. 15, aged 75. He was formerly a railway
contractor.

The office of W. Kelly, Jr., General Passen-
ger Agent of the Niagara Gorge R.R., has
been removed from Buffalo, N.Y., to Niagara
Falls, N.Y.

W. G. Ross, Comptroller of the Montreal
Street Ry., has been elected Second Vice-
President of the Street Railway Accountants
Association.

It is said the General Passenger Agent &
the General Freight Agent of the Intercolonial
Ry. have each had their salaries increased
from \$2,100 to \$2,400.

D. S. McKenzie, night chief of the C.P.R.
Co.'s telegraph office at Vancouver, has been
appointed Manager of the Government tele-
graph office at Dawson, Yukon.

at Graspan, South Africa, was a son of Jas.
Huddart, who is well known in Canada in
connection with the Canadian-Australian
steamship service.

Capt. T. H. Browne, of Montreal, died re-
cently at Havana, where he went as engineer
for the electric railway. He was at one
time engaged on the construction of the
Montreal & Ottawa Ry., & afterwards be-
came Dominion Government architect for the
Province of Quebec.

B. S. Jenkins, recently appointed General
Superintendent of the C.P.R. Co.'s Tele-
graphs west of Fort William, has been Super-
intendent of the Western Division since 1883.
Then the Winnipeg office staff consisted of
the manager, 2 clerks, 4 operators, & 3 or 4
messengers. To day it has 15 clerks, 40 op-
erators & 30 messengers.

E. V. Holcombe, Superintendent of Sleep-
ing & Dining Cars, Great Northern Ry.
(U.S.A.), died suddenly in the street in St.
Paul, Minn., Nov. 26, of heart disease. He
was born in Cincinnati, Ohio, in 1834, was
at one time a steamboat captain on the Mis-
sissippi & was afterwards Manager of the
Winnipeg & Western Transportation Co. at
Winnipeg.

Canadian Railway and
Marine World.

November 1921

7568

ney and Sydney mines is 18 miles, between Sydney and Point Edward quarry 6 miles, and between Sydney and Leitches Creek, 10.33 miles.

The S. & L.R. is not to act as a common carrier over the joint lines, but is limited to train load movements of goods and materials owned wholly by British Empire Steel Corporation, including coal, coke, ingots, scrap, silica, rock, limestone, and other materials and supplies used in connection with its business. The C.N.R. will operate S. & L.R. trains over the joint lines, with the C.N.R. crews, which will while so engaged be deemed to be exclusive S. & L.R. employees. If it can be arranged that the movements will be made by S. & L.R. employees, the C.N.R. will consent. The S. & L.R. is to pay the C.N.R. monthly for all payments made by the latter to employees engaged in S. & L.R. train movements, and in addition the S. & L.R. is to pay the C.N.R., \$2 a train mile. C.N.R. trains will have precedence over S. & L.R. trains. All train movements over the joint section will be governed by C.N.R. rules. Maintenance, repairs, and renewals of joint tracks, etc., will be done by the C.N.R., under its officials' sole direction. If any interlocking plants or other protective facilities should be ordered by the Board of Railway Commissioners, to be installed at the junction of the joint premises or at any point thereon, the C.N.R. will install them at the S. & L.R.'s expense. With regard to liability for accidents on the joint section, the provisions of the agreement between the Canadian Pacific and the Canadian Northern Ontario Ry. companies, sections 12 to 20 both inclusive, as contained in the Dominion Statutes, 1916, chap. 38, schedule A, shall apply.

The tentative agreement will remain in force until an agreement is entered into between the King, as represented by the Minister of Railways, and the S. & L.R. Co., which will embody the tentative agreement's provisions, and any other provisions approved by the Governor in council. The term of the agreement is for five years from Sept. 1921, and thereafter, unless then cancelled, from year to year, subject to 6 months notice by either party.

The traffic to be carried under this agreement will be that of the Dominion Iron & Steel Co. and the Nova Scotia Steel & Coal Co., both of which have been merged in the British Empire Steel Corporation. The Dominion Iron & Steel Co. has blast furnaces, steel mills, etc., at Sydney on the east side of the southern extremity of the harbor. Point Edward is near the extremity of the peninsula, dividing the harbor into the south arm and the northwest arm. It has extensive limestone quarries, the spur to the quarries leaving the I.R.C. at mile 6.03 from Sydney. The Nova Scotia Steel & Coal Co. has coal mines and iron furnaces at Sydney Mines, 17.76 miles by Canadian National Rys. from Sydney, and its piers and other shipping facilities are at North Sydney, which is on the west side of Sydney harbor and 15.14 miles from Sydney by the I.R.C. By the arrangement with the C.N.R., the British Empire Steel Corporation will be enabled to take coal from Sydney Mines to Sydney direct by rail. Limestone will be hauled from Point Edward to Sydney, and a return movement of coke from the Dominion Iron & Steel plant at Sydney will be handled to Sydney Mines.

Sydney & Louisburg Railway Given Running Rights Over Section of Canadian National Railways.

A tentative agreement has been entered into between the Canadian National Rys.' directors and the Sydney & Louisburg Ry. Co., under which the latter, which is a subsidiary of the British Empire Steel Corporation, and which operates a line from Sydney to Louisburg, N.S., 40 miles, with two short branches, will have its tracks connected with the Intercolonial Ry. tracks at Sydney Jct., and the British Empire Steel Corporation's tracks connected with the I.R.C. tracks at Sydney Mines, and will use the I.R.C. tracks between those points, and also the spur tracks at Point Edward quarry, and Leitches Creek, jointly with the C.N.R. The distance between Syd-

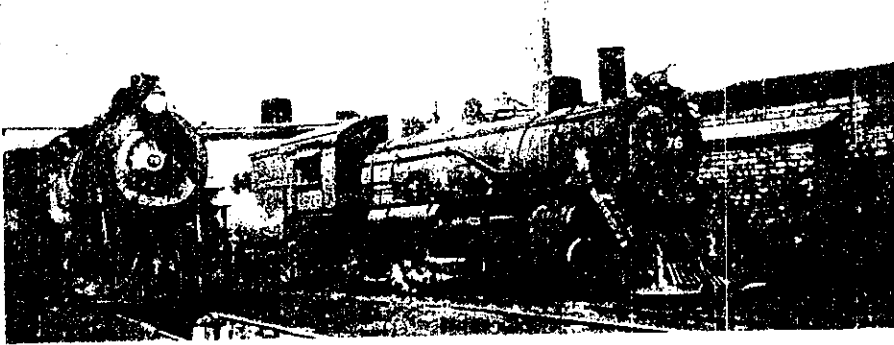
Long Service Locomotive Bearings on S. and L.R.

By the addition of 1.5% nickel to the metal of the rod and driving box bearing of Sydney and Louisburg Ry. locomotives, the service life, compared with that of ordinary bronze bearings, was practically doubled.

THE Sydney and Louisburg Ry., operating between the City of Sydney, N.S., and the Port of Louisburg, with branch lines to New Waterford and Morien, serves important coal mining, fishing and farming areas in Nova Scotia. Operation is carried on with 26 steam locomotives, with tractive effort varying from 17,500 lb. to 45,000 lb. The repair shops are located at Glace Bay, where the major portion of the locomotive repair work is taken

in service after receiving No. 1 repairs. In the course of these repairs, the rods and driving box bearings of this locomotive, which are of conventional design, were fitted with bearings made to the following specifications:—Copper, 78%; lead, 11%; tin, 6.5%; zinc and impurities, 3%; nickel, 1.5%. This locomotive was in practically continuous service until December 28, 1946, when it was taken out of service for repairs. During the period the

to the same specifications as that above for the rod bearings.



Sydney and Louisburg Ry. Locomotives in Front of the Locomotive House.

care of in a combined locomotive house and shop. Coal is the most important item in the freight traffic of the road. In the summer, the greater part of the freight traffic is handled through Sydney, either being shipped by water or turned over to Canadian National Rys. in Sydney for shipment by rail to various destinations in the Maritime Provinces and the Province of Quebec. The ruling grade between Glace Bay and Sydney is 1.5%, and the road's 2-8-2 (Mikado) freight locomotives have a tonnage rating of 2,500 over this part of the road.

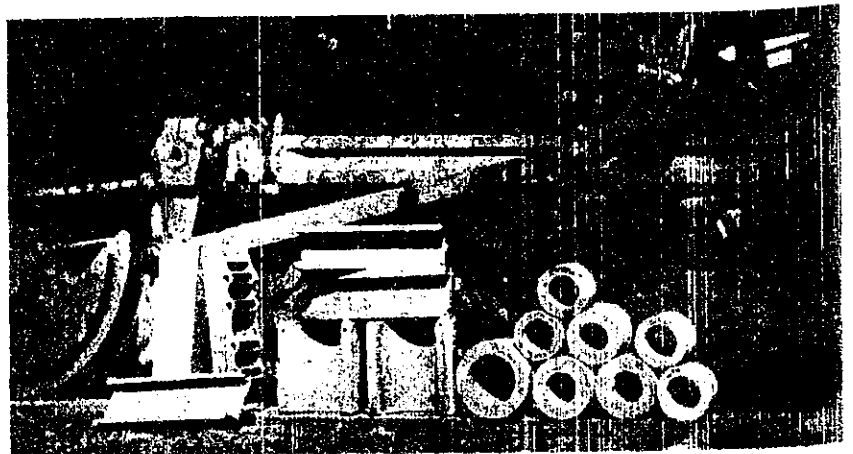
In connection with the locomotive repair work, the castings required for replacement and repairs are purchased for the most part from the Dominion Coal Co., which operates a foundry at Glace Bay.

According to information furnished by J. G. Fisher, Mechanical Superintendent of the road, the rod bearings and driving box bearings of the locomotives were originally made to a specification calling for 75% copper, 12% lead, 10% tin and 3% zinc and impurities. In 1937, experiments were begun with nickel bronze bearings, but the first experiments along these lines resulted in failure, due largely to the use of incorrect percentages of nickel. However, the experiments were persevered in, and finally highly successful results were secured. For example, on December 17, 1943, a Mikado locomotive, No. 73, with cylinders of 22 in. diameter and 28 in. stroke, 56 in. diameter drivers, 200 lb. boiler pressure and tractive effort of 43,000 lb., was placed

mileage made by this locomotive was 129,361. The only repair to rod bearings during the period was the replacement of the right main rod bearing, which became loose in the rod and consequently had to be replaced. The rod bearings, when removed, were worn to approximately the limits allowed by regulations, but otherwise they were in good condition. The service life of 129,361 miles obtained is about double that obtained previously with ordinary bronze bearings. The driving box bearings on the locomotive were in good condition, and were returned to service for a further period after they were refitted to the journals.

The road has also had similar success and long service life by relining the crosshead shoes with nickel bronze

Canadian
Transportation
February.
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Nickel Bronze Rod and Driving Box Bearings Employed in Sydney and Louisburg Ry. Locomotives

BEFORE THE S. & L.

Railroading in Cape Breton is inseparably tied in with coal mining. The railroads were built by mine operators to carry their product from the pit head to the sea for transport by ship to market.

For thirty years after 1827 the General Mining Association, an English company, held a monopoly on the mining of all minerals in Nova Scotia. As early as 1833 this company operated railroads on which horses were used for motive power at its coal mines at Bridgeport and Sydney Mines.

In 1857 the Provincial Government terminated the association's monopoly and granted them exclusive rights to mine coal at certain specified areas at Sydney Mines, Stellarton and Springhill. At this time the remainder of the coal fields in the province were thrown open to private search and development. There was an immediate scramble of individuals and small companies eager to get into the coal mining business, particularly in the region to the east of Sydney Harbour. The French had mined coal at several points in this area as far back as 1720.

Within the next thirty five years some two dozen mines had been opened and worked to a greater or lesser extent. Unfortunately, due to a number of factors, most of them failed.

Several coal companies operated railroads in this area at one time or another. These lines all started out as short tram railroads, some of which used horses. A few developed to the point where they used locomotives and built large shipping piers.

The organizing of the Dominion Coal Company Limited in 1893 meant the end of practically all the small companies. This article deals with several of the more important companies active prior to that date.

In 1858 E.P. Archbold of Sydney obtained a lease to mine coal in the Little Glace Bay area. Mining was started at a site where the French had mined coal early in the 18th century. Coal was hauled by horses and cart to the shore where it was loaded into scows and towed out to ships anchored in the bay.

With a view to mining coal on a more ambitious scale and to improve shipping facilities the Glace Bay Mining Company was organized in 1861. The company opened two new mines, the Glace Bay and the Stirling, and began

work on a shipping port. By 1865 a good harbour had been dredged and two 450 foot piers erected on the west side of the harbour.

A railroad about a mile long was built to connect the Glace Bay Mine with the piers and horses were used for a time. Later a line about a half mile in length was built between the Stirling Mine and the harbour. A locomotive replaced the horses and hauled coal in wooden cars of four ton capacity.

In spite of the ups and downs of the coal trade the company operated profitably. In 1893 the company was taken over by the Dominion Coal Company Limited, a new company organized for the express purpose of consolidating all coal mining operations in the region.

One of the Glace Bay Mining Company's locomotives was the "E.P. Archbold", a Baldwin 0-6-0 tank engine with a diamond stack, which eventually came to the S & L where it became Number 2.

A group headed by Converse, Howe and Emery acquired an area to the west of Big Glace Bay Lake and organized the Caledonia Coal and Railway Company. Caledonia Mine was opened in 1865 and a railroad was built from the mine to a wharf located at the

foot of the lake about 1/2 mile. Horses were used for motive power.

The company's first locomotive was a small 0-4-0 tank engine built by Nielsen and Son, Glasgow. It had 10 x 18 inch cylinders, 12 drivers and weighed about 10 tons. This little engine was fitted with a new boiler in 1890 and afterwards known popularly if not officially as the "Pinkie", from the name of the boiler maker who worked on it.

To improve shipping facilities a railroad was built across the bar to the opposite side of the lake where an artificial harbour had been dredged. Assisted by the Caledonia Company which operated some two miles to the north of the proposed site, the harbor was completed with its pier. The railroad proved impractical as the bar lay exposed to Atlantic waves and the task of maintaining it proved so great that some other shipping point had to be found where the company were to survive.

In 1884 the Caledonia Coal and Railway Company entered into an agreement with the Glace Bay Mining Company by which they were to ship their coal from the Little Glace Bay for payment.



"E.P. Archbold" an american import from Baldwin Locomotive Works shows some distinctive North American traits which were to remain at the end of the steam era. Notice the absence of flanges on the centre drive wheels.

4, 1903, a
empties was
Louisburg.
umber 62, a
2-8-4
he train
conductor
Donald, with
engineer;
on, fireman;
head brake-
man, and bra-

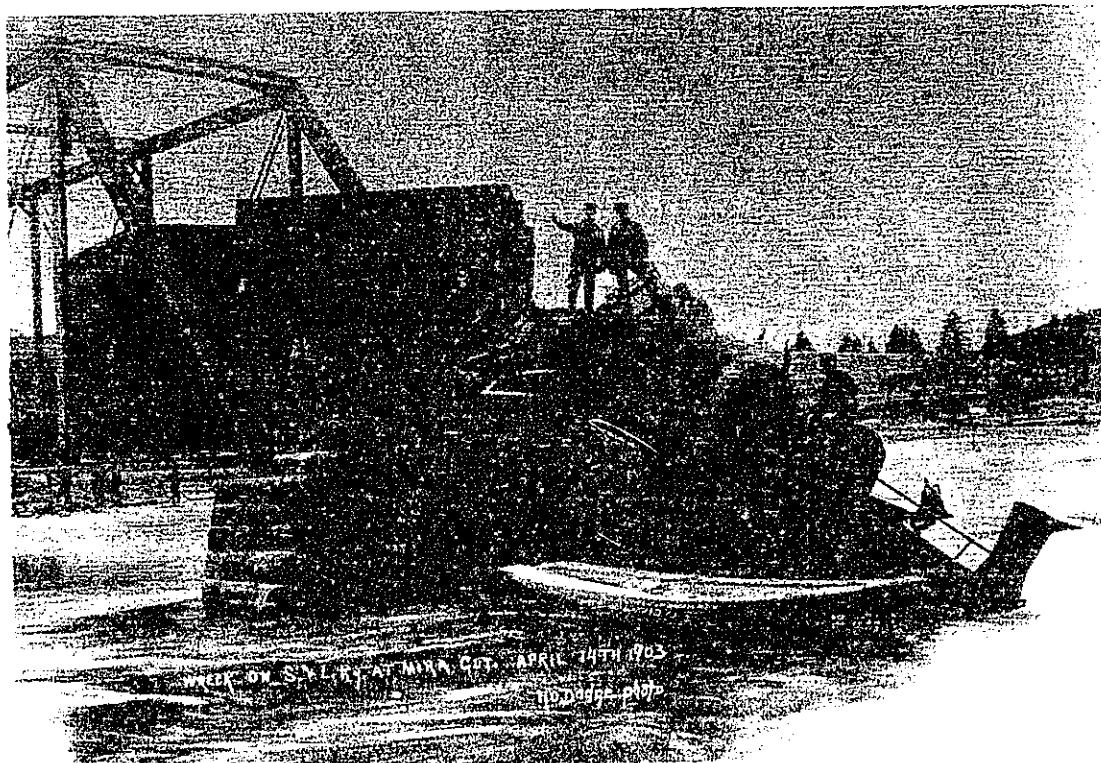
was making
treared Mi-
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a curve at
to the brid-
aw that the
He whistled
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and applied
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Dickson rea-
train could
ed he jumped
rider of the
near Parsons
the locomoti-
into the ri-
st. Several
ed into the
rushing the cab.

Crash Parsons was seen
the river. Conductor
brakeman Wadden com-
s-11 boat and he was

taken from the water. It was found
that he had died instantly, crushed
by the wrecked cab.

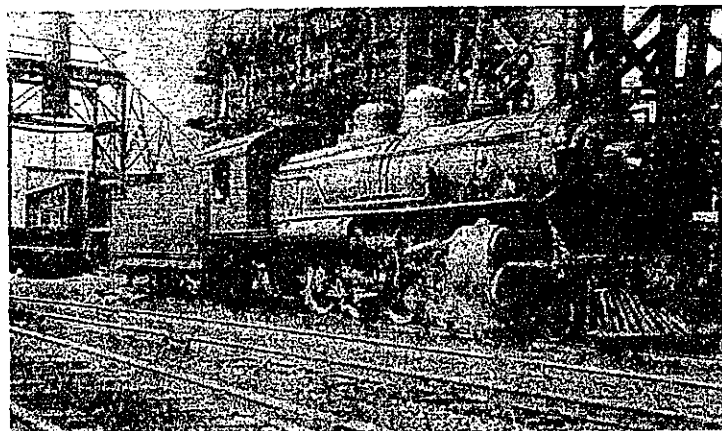
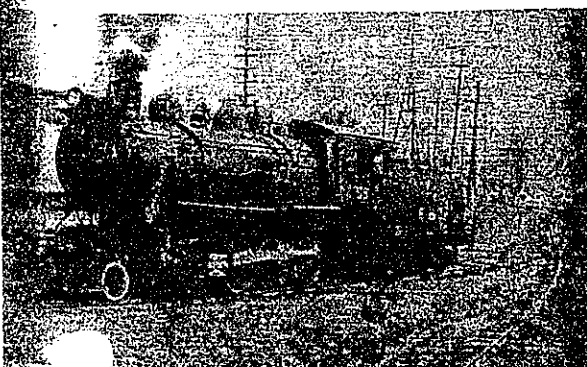
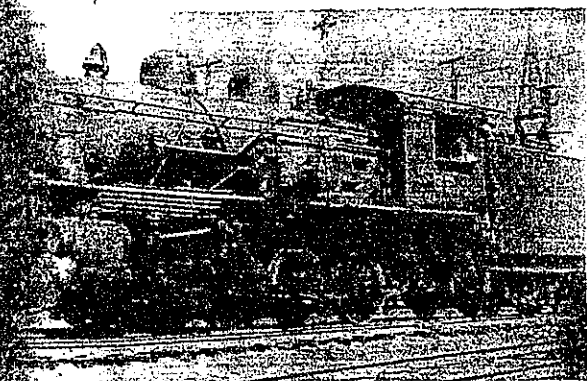
Removal of Number 62 from the river
presented quite a problem, due in

part to heavy tidal currents, and
traffic to Louisburg was tied up for
some time.



* VARIATION ON A THEME *

These three photographs of Sydney and Louisburg motive power, sent to us by Flyod Smith of Croton Falls, N.Y. are a good example of the variants in paint scheme on the road's locomotives. No. 52 has Sydney & Louisburg (barely visible on the photo) painted on the tender in small lettering and no number. No. 55 has the lettering S & L in the mid tender position and 55 near the top. (Note the alertness of the fireman. Ed.) On No. 76, the reverse was done. S & L was painted on the upper part of the tender and 76 in the center.



the guarding genius of the Dominion Coal merger, was also interested in the Rhode Island Locomotive Works which supplied S&L with a series of handsome Forney type tank engines. The Sydney and Louisbourg at the peak of its activity employed about forty steam locomotives of all types including the largest Mikados in Canada.

More recently, the railroad was known as the S&L division of the Cumberland Railway and Coal Company, although its engines and cars continued to carry the S&L emblem. (Today the S&L emblem can still be seen although the railway, the Devco Railway, is now a unit of the Cape Breton Development Corporation, a federal Crown corporation. Ed.) When mine disasters ended the career of the original Cumberland Railway and Coal Company some years ago, Dosco for legal and other reasons beyond the scope of this article transferred the name to its big Cape Breton subsidiary. It is one of the few cases on record of a dead railroad taking over a live and flourishing one.

One of the immediate effects of construction of the Inter-colonial Railway in 1872 was that the mines, steel plants and other industries sought connection to the mainline. Among the first of these branches was the Londonderry Railway which was operated by the Londonderry Iron Industry. Ottawa obligingly furnished the rails and fastenings if the company would grade the road and provide the ties, and thus a pattern was set that would continue for many years. The firm operated about 15 miles of track of both standard and narrow gauges. It had several locomotives, and it continued operation until the discovery of ore at Wabana, which killed the native ore smelting industry in the late 'nineties.

The second important Inter-colonial branch line was from Springhill Junction to Springhill Mines in 1872. Here again the company graded the line and the ICR provided the rails. After several shifts from one jurisdiction to another Ottawa finally gave the five-mile branch outright to

the company, where it continued in operation until after the general shutdown at Springhill a few years ago.

In 1872 the Springhill Mining Company hit upon the idea of shipping by water from Parrsboro as well as by rail at the Junction, and construction was started on a 26-mile railway called the Springhill and Parrsboro. The great panic of 1873 halted construction for several years so that the line was not completed until 1875. In 1883 the title was changed to the Cumberland Coal and Railway, and then, for legal reasons, to Cumberland Railway and Coal Co. in 1884.

In the early 1890's the Cumberland Railway and Coal constructed a long line down the Black River Valley, crossing the ICR at Salt Springs, and the River Philip at Oxford Town, where it expected to join the ICR short line for the remainder of the distance to Pugwash from which point coal would be shipped directly to Montreal.

As a result of a disastrous 14-month strike the Cumberland

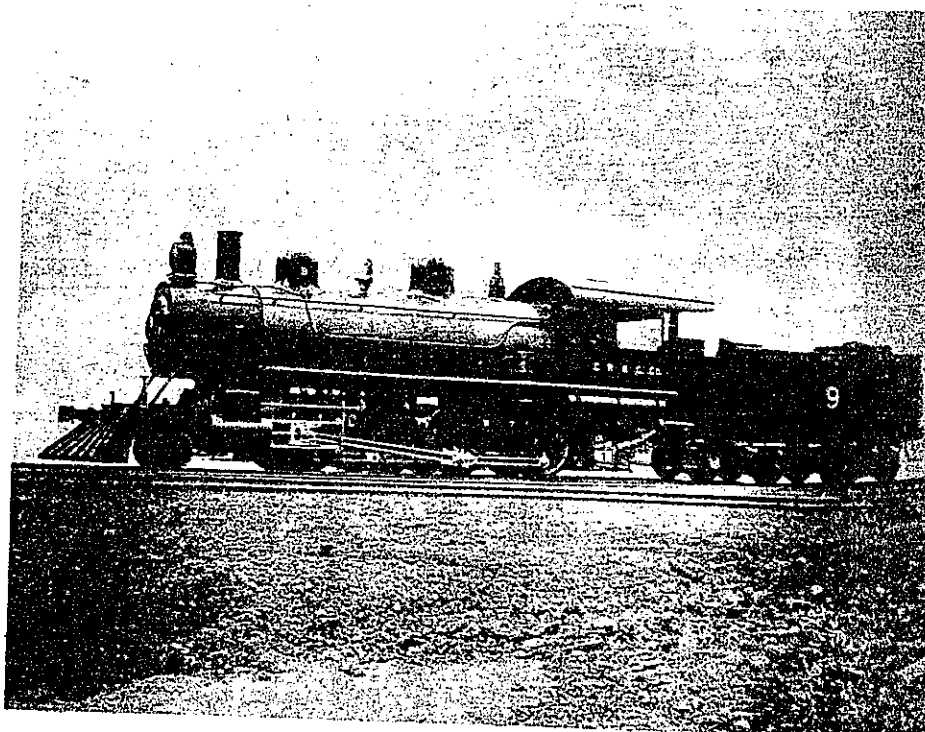
This trim-looking 2-8-0 engine, believed to be of Richmond manufacture, was one of several Consolidation locomotives of the Cumberland Railway & Coal Company.

Railway and Coal Company in 1910 became so weakened financially that it was taken over by Dominion Coal, and Springhill & Oxford was done as duplicating the Dominion Coal Company's Lawrence facilities already existing at Sydney.

This road was ballasted with culm coal and its trace can still be followed in a number of places over much of the original route. For many years the sole monument was a massive iron bridge over the River Philip at Pugwash. Local residents with a little ingenuity were able to use it as a convenient crossing place. During the Second World War it finally disappeared into the gaping maws of the blast furnace at Sydney.

Apart from the large lines like the Sydney & Louisbourg and the old Sydney Collieries network in and around Nova Scotia and Sydney Mines, Cape Breton County is literally laced with the abandoned cuts and fills of long forgotten small colliery railways.

Pictou also has an extensive network of lines both active





"A.C. Morton" of the International Coal and Railway Company, later Number 3 of the Sydney & Louisburg Railway was built in England by the Hunslet Engine Company.

was named the "A.C. Morton". It weighed about 20 tons, had 36 inch drivers and 12 x 20 inch cylinders located inside the frame, a practice common to Britain and the European continent but which never found favour on this side of the Atlantic because of difficult access to cross heads and guides and the belief that these parts so located were subject to unnecessary wear from grit whipped up under the moving locomotive. Coal was hauled in wooden cars of six ton capacity

A shop and shed to house two locomotives were built at Bridgeport. Coal handling facilities were improved and expanded as the railroad served not only the International Mine but the Old Bridgeport and Gardiner Mines to the west in the direction of Sydney.

Before long financial difficulties overtook the company. In 1877 the property was seized and sold at auction, and changed hands several times. The lease was taken up by Robert Belloni, who in 1864 had organized the Block House Mining Company at Cow Bay, now Port Morien. Belloni conceived the idea of building a railroad from Bridgeport to Louisburg to connect with all the small mines then operating along the coast and so provide them with transportation for their coal to both Sydney and Louisburg. He even went so far as to have a survey made of the proposed route but nothing further came of the idea.

The property of the International Coal and Railway Company came finally to the hands of Hugh MacLennan. His son John S. MacLennan, who later became Senator, conducted operations profitably until he sold to the Dominion Coal Company Limited in 1893. He

was one of the original promoters of this company. He too proposed the extension of the railroad from Bridgeport to Louisburg and employed P.L. Naismith to survey a route. Some years later this route was closely followed by engineers of the Dominion Coal Company Limited who laid out the S & L. The "A.C. Morton" and two 2-6-4 tank engines eventually came to the S & L the "A.C. Morton" became Number 3 and the tank engines "W.H. Whitney" and "Sir Donald", later Numbers 31 and 32 respectively.

An area to the south of the General Mining Association's holdings at Old Bridgeport had been held in reserve by the Nova Scotia Government. This area was known locally as the Reser-

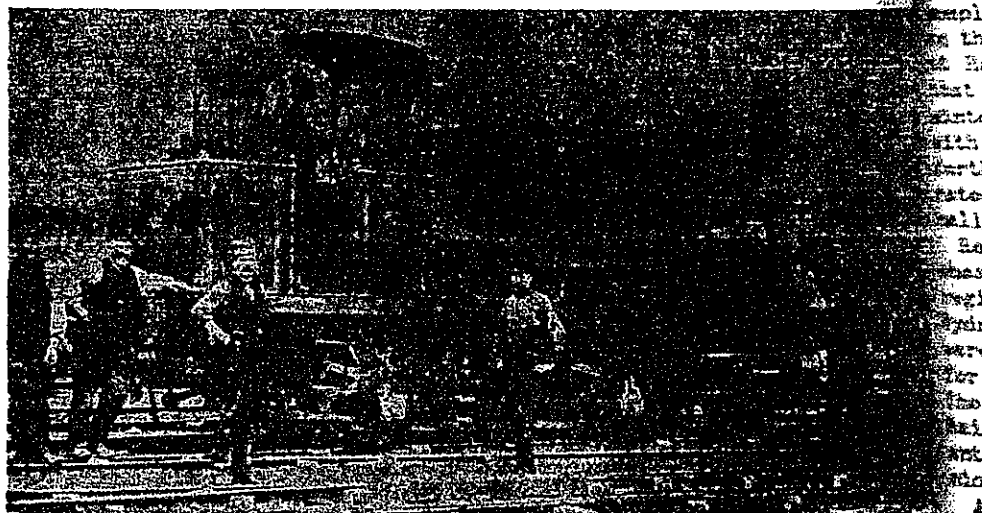
ve.

In 1868 an English company (the Glasgow and Cape Breton (Nova Scotia) Coal and Railway Company) was organized and authorized by the Nova Scotia Government to build a railroad from Sydney Harbour via Bridgeport. However, the project was delayed for some time.

Three years later F.N. Gilman owned the Schooner Pond Coal Company. A lease was obtained for coal at Reserve, the mine was opened and by 1872 a railroad of 36 inch gauge was completed from Sydney to Bridgeport, a distance of 10 miles where a 600 foot pier was built in the inner harbour. The original plan was not followed.

Motive power consisted of steam locomotives of a type known as the Fairlie Patent, built by Fox-Walker, Glasgow, Scotland, among the few locomotives of this type to operate in North America. The design was patented in 1862 by Robert Fairlie, locomotive superintendent of the Londonderry and Lough Swilly Railway in Ireland. These articulated locomotives included a boiler, water tank and coal tender were mounted on a frame carrying the two pivoted driving trucks, which allowed the locomotive a short rigid wheelbase and light axle loading. The engine had the fire box and cabin at the front end and a smoke box and a stack at the rear end. Fairlie strongly advocated the use of narrow gauge, his favourite being the metre.

The Fairlies had an 0-4-4-0 arrangement and were numbered 1, 2, 3 and 4. One was subsequently destroyed by fire.



Built in the General Mining Association Sydney Mine's shops, after the Fairlie Patent locomotive operating at Sydney Mines at the time "C.G. Swann" joins the ranks of the very few engines built from the ground up in Canada at that time, it operated on the Victoria Mines Railway. The track construction indicates a strong British influence in the early days of railroading in this country.

Sydney, N.S.W.

The locomotive of the Glasgow and Cape Breton Coal
Railway Company (Narrow Gauge), later the Sydney and
Cape Breton Coal and Railway Company. The latter company

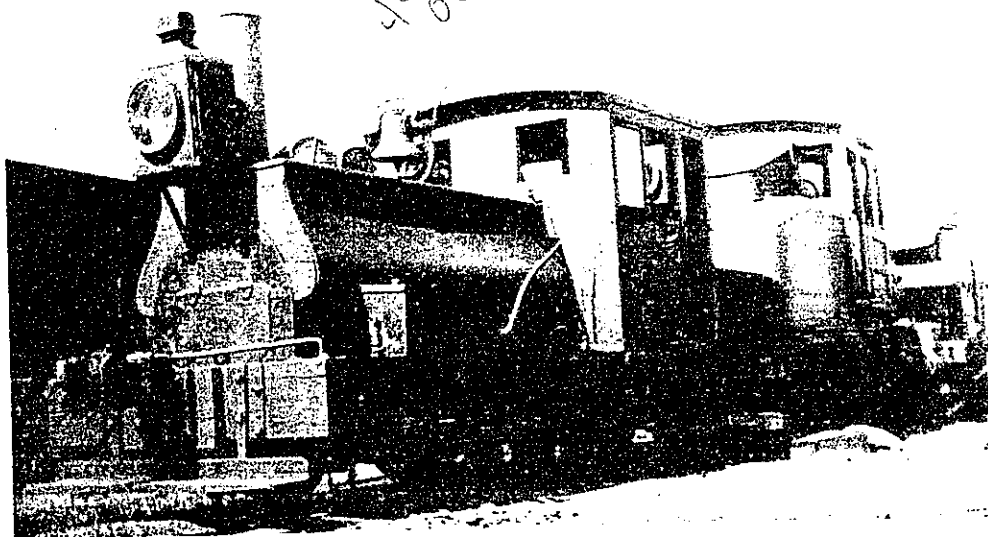
offered passenger accomodation on the tail end of their
coal trains.

per ton shipped. A rail line
over a mile in length was built
from the Caledonia Mine to the east side
of the harbour and piers constructed.
The company prospered and shipped
coal from this port until the Domi-
nion Coal Company Limited took over

"Pinkie" came to the S & L when
it became Number 1. It is commemo-
rated in a poem by Mrs. Ida MacAulay
of Sydney who as a child watched
the engine when it passed not
far from her home. This poem has been
set to music and sung by the miners
of the Men Of The Deeps.

As a group under General Strong
obtained the lease of the Union Mine
at Bridgeport. This should not be
confused with the Bridgeport of the
Nova Scotia Mining Association's early
days, a mile to the west, which
is now known as Old Bridgeport,
the present town of Dominion.
A new shaft was started on a new shaft and
a section was made of the coast
which was a site suitable for ship-
ping. Sydney Harbour was decided upon
in 1863 a survey for a railroad
was started. However the company ran
into financial trouble and operations
were suspended.

It was organized as the International
Coal and Railway Company under A.C.

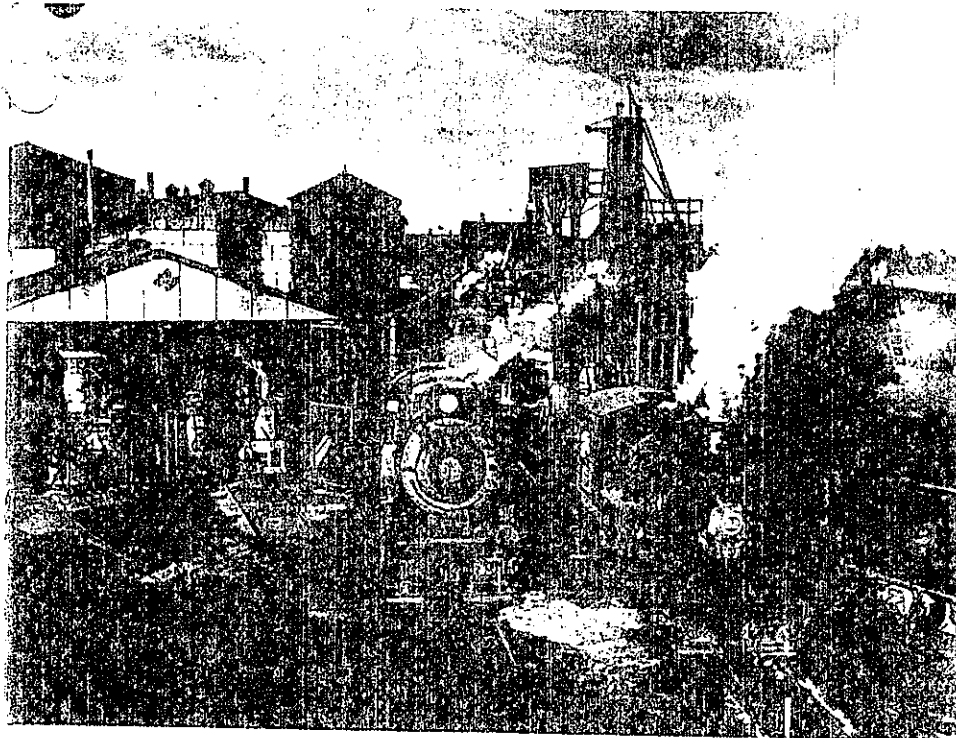


"Pinkie" built by Nielsen and Son, Glasgow, in 1867, received a new boiler, and the nickname, in 1890. She worked on the Caledonia Coal and Railway Company, later to become Number 1 on the S & L. This is a late photograph as indicated by the automatic coupler.

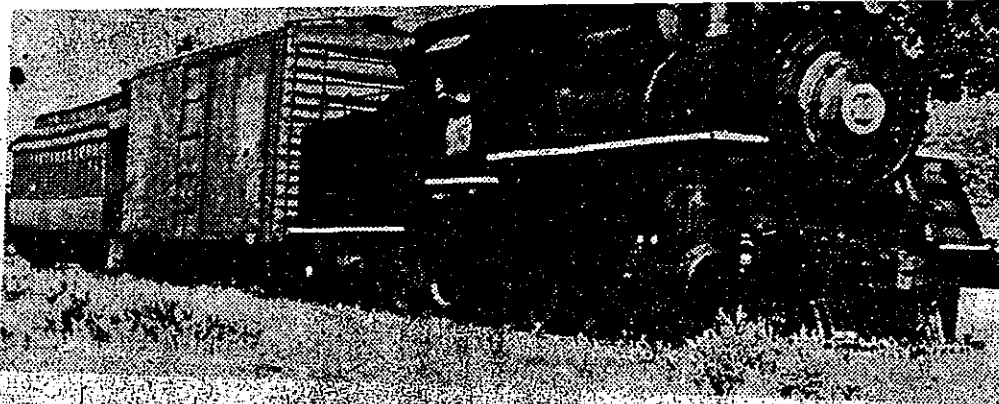
Morton who had been engineer with the
earlier company, the new company pro-
ceeded with the development of the
mine and the survey for the railroad.
In 1870 the line was completed to
Sydney, a distance of twelve and a

half miles, where a shipping pier a
thousand feet long was built on the
middle harbour, a mile below the town.

The company's first locomotive was
an 0-6-0 tank engine built by the
Hunslet Engine Company, England, and



Mr. S.M.DONALDSON OF PEMBROKE, ONTARIO SENDS ALONG THIS UNIQUE photo of the Sydney and Louisburg roundhouse, probably taken sometime in the late forties. This is an excellent example of the mixed bag of steam power as accumulated by small roads in their hey-day. Anyone with more information on the photo may contact Mr. Donaldson through the CRHA's Box 22, Address.



With its five-man crew in charge, No. 43 is seen chugging its way along the 32-mile route, without passengers or freight. — CP Photo

Railway Still Rolling, Losing

SPRINGHILL, N.S. (CP) — A pint-sized railroad that thrived in the days when three-masted schooners carried Nova Scotia products to world markets, chugs inconspicuously today on a bleak 32-mile run. It has not paid for itself in more than 15 years.

The 80-year-old railway, originally built to carry coal from here to Parrsboro, N.S., for shipment to Maritime and New England ports, is owned by the Cumberland Railway and Coal Company, which seeks to have it discontinued.

The rolling stock today consists of a locomotive, box car and passenger car. It makes one two-way trip a day and averages about five passengers a year. Up to the end of August this year eight had been carried, also 743 tons of coal.

Parrsboro ticket agent A. S. Tucker looks at his record of the last decade and moans: "It's a far cry from the days when we had five runs a day with 65 coal-filled hoppers on each trip." Last of these hoppers was destroyed this year.

The Old Days

"Those were the days when the port here was jammed with three top schooners, 60 at a time, loading coal and lumber." Mr. Rucker has been with the company 56 years.

The original Springhill and Parrsboro Coal Company was incorporated in 1872. With a capital of \$1,000,000 and a government subsidy, the company built a line costing \$5,000 a mile and covering 10,000 acres.

First coal car rolled from here to Springhill Junction on the present CNR main line, a distance of five miles, on December 6, 1873. Four years later the line to Parrsboro was completed and the town's citizens were invited by the company to spend a day in Springhill. They filled even box cars and vans in their eagerness to celebrate the railway's inauguration.

Purchase and amalgamation of the railway in 1884 under the Cumberland Railway and Coal Company simplified and led to an improvement in management. For many years the

hour through the Southampton Valley to Parrsboro. It has five scheduled stops but rarely makes them. The almost empty train carries a crew of five to comply with regulations.

Superintendent Bob Howard has been with the railway 35 years. Jack Cunningham has

been weighman, shipper, and section hand at intervals for 40 years.

Archie Fraser, 68, has been the train's conductor for 29 years and a company man for 50 years. In the old days he earned 20 cents an hour. The passenger car still has the oil lamps and pot-bellied stove of an earlier era.