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# News Report

P.O. BOX 22.

STATION "B"

MONTREAL 2, QUEBEC

NUMBER 108

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FEBRUARY 1960



ROCKY MOUNTAINS NARROW GAUGE - A gasoline car of the Canadian Pacific's Lake Louise Tramway, is pictured leaving the upper terminal at the Chateau Lake Louise, in Alberta, for its 3.61-mile run down to the Canadian Pacific Railway station, 800 feet lower in altitude. The car was built at C.P.R. Angus Shops in 1925.

Photo Canadian Pacific Railway.

## NOTICE OF MEETING:

The Regular Monthly Meeting of the Canadian Railroad Historical Association will be held at the Redpath Library, McGill University, on Wednesday, February 10th, 1960, at 8:15 PM. The members and other visitors will be the guests of Mr. Richard Pennington, Librarian, who will show the Library's collection of railway books. This should be a very interesting meeting and all members are urged to make every effort to attend. As usual, guests will be given a cordial welcome.

Entering McGill campus from Sherbrooke Street through the Roddick Gates, the Redpath Library is the building on the left at the head of the center road and sidewalk. Mr. Stephen Cheasley will be at the outside door, to receive and direct those attending the meeting. Those interested in having their names proposed for membership should also mention this fact to Mr. Cheasley, who is the Chairman of the Membership Committee, and who will arrange to have their names proposed.

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THE ANNUAL MEETING

The Annual General Meeting of the Canadian Railroad Historical Association was held on January 13th, 1960. Reports of 1959 activities were given by the President, the Vice-President in his capacity as Librarian and Custodian, the Treasurer, the Secretary, and the chairmen of the Trip, Publicity, Membership and Editorial committees, as well as the Railway Division.

In his comments as President, Dr. Nicholls reviewed the notable progress which characterized our activities in 1959, dwelling briefly on the work of securing a site for the museum; he gave an outline of the various important stages attained during the year, lending emphasis to the Canadian Pacific Railway's offer of cooperation in connection with the museum exhibits.

The Treasurer's report, which was audited by Mr. Charles Viau, C.A., showed a total revenue of \$7,875.44 for 1959, and total expenditures of \$7,184.06, leaving a balance of \$691.38 which was transferred to surplus account. As a matter of interest to our readers, the Editorial Committee's News Report budget had a deficit of \$150.68, which supports your Editor's continuing appeal for new subscribers to offset this expense, and to enable improvements to be made in the publication without increasing subscription fees. The cooperation of all members and subscribers is invited. Reports of other committees brought out the fact that new regular members since June totalled two-

nty, due to the energetic efforts of the new membership committee, while the Railway Division reported that rolling stock as at December 31st, 1959, totalled two steam locomotives, one electric locomotive, one railway official car, two electric interurban cars, one electric suburban car, and five electric streetcars. Out-of-pocket expense of the Railway Division for purchase, movement, and maintenance of rolling stock amounted to approximately \$2,200.00

Following the reading of reports, the meeting proceeded to the election of officers. The Nominating Committee's slate was read, and there being no further nominations from the membership or the floor, the following officers were declared as elected for 1960:

PRESIDENT: Dr. R.V.V. Nicholls,  
 VICE-PRESIDENT: Sanborn S. Worthen,  
 TREASURER: A. Stephen Walbridge,  
 SECRETARY: C.W. Kenneth Heard,  
 DIRECTORS: R.G. Harries,  
 Omer S.A. Lavallee,  
 John Marjoribanks, Jr.,  
 Lorne C. Perry.

Mr. Marjoribanks replaced Mr. William Pharoah, who relinquished his duties due to being appointed a Travelling Auditor by Canadian National Railways, by whom he has been employed since graduation, necessitating almost continuous absence from Montreal. Mr. Pharoah's efforts in handling much of the correspondence during his term on the Executive, were applauded at the meeting.

The Honorary Officers for 1960 were then elected, as follows:

**HONORARY PRESIDENT:**

Donald F. Angus,

**HONORARY VICE-PRESIDENTS:**

N.R. Crump, President, Canadian Pacific Railway Company.

Arthur Duperron, Chairman & General Manager, Mont'l Transp'n Com.

Donald Gordon, President, Canadian National Railways.

**HONORARY LEGAL COUNSEL:**

Leonard A. Seton, Q.C.,

**HONORARY AUDITOR:**

Charles Viau, C.A.

During the election of officers, the chair was occupied by Mr. R.M. Binns, and the Chairman of the Nominating Committee was Mr. Anthony Clegg. Following the elections, some projects for 1960 were discussed. It was agreed that a dinner could be scheduled for March or April, and a Committee will be appointed to select a suitable time and venue.

**C.R.H.A. MUSEUM IS THE SUBJECT OF A NEWSPAPER EDITORIAL**

It was with considerable gratification that the Montreal members of the Association read the editorial which we reproduce below, which appeared in the Montreal Daily Star, for Monday, January 18, 1960. Let us glean some satisfaction from the fact that the Star has always been an outspoken advocate of cultural and educational projects for Montreal, and that its efforts in informing the public in such matters have frequently been crowned with success. In any event, the Association appreciates the support of this respected Montreal newspaper. The editorial is reprinted herewith in its entirety:

**RAILWAY MUSEUM**

IN THE Lachine Museum and in the basement of the Chateau de Ramezay, there are reproductions of the Dorchester, Canada's first railway locomotive. Apart from these, there's nothing much hereabouts to signify that this city was

**MEMBERSHIP**

Beginning with this issue, the News Report will carry the names of members proposed, and those elected to membership at each meeting. At the January meeting, the following person was elected to Regular Membership in the Association:

Mr. CAROL C. SAIT

The following persons were proposed for the first time, for Regular Membership in the Association:

Mr. JACK A. BEATTY,  
Mr. WARREN Y. SOPER (absent)

The following person was proposed for the first time, for Junior Membership in the Association:

Mr. ROBERT HALFYARD

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the birthplace of Canadian railroading back in 1836, or to trace its development into the national hub of rail transportation. This year the railway buffs who make up the Canadian Railroad Historical Association hope to get started on a long-planned project, a national rail museum.

Over the years, its members have built up the most extensive collection of antique rolling stock in Canada, from the Victorian heyday of steam and the vanished street railways to the early years of electric motive power. All of it, including Sir William Van Horne's palatial private car and a steam engine from the 1880s in operating condition, is stashed away in odd spots until a proper display area can be obtained.

The idea isn't merely to plant them as a memorial in some park, where they soon become rusted junk and a target for vandalism by pranksters. Canada's two major roads have been wary of providing old-time equipment because, in the past, some lovingly restored old locomotives have degenerated into public

## THE LAKE LOUISE TRAMWAY

by Omer S.A. Lavallee

THOSE OF OUR READERS who have visited Lake Louise, Alberta, in the Canadian Rockies, are aware of the fact that the Canadian Pacific Railway station is some four miles distant from the Lake proper, with its famed backdrop of the Victoria Glacier. The station is also some eight hundred feet lower in altitude.

Nowadays, busses take hotel guests from the station to the Chateau Lake Louise and Deer Lodge, but this is a comparatively recent and less interesting means of transportation as far as the railway enthusiast is concerned, since the station and hotel were once linked by a 42-inch gauge "tramway", operated by the Canadian Pacific Railway, but now out of existence for some twenty-five years. The roadbed is still plainly to be seen, and forms an interesting hiking or bridle path for visitors to the Lake Louise resort area.

It was in 1912 that the railway, seeking more reliable and dependable means of transportation than horse-drawn vehicles hitherto used between the station and the chalet at the lake, envisioned and constructed the Lake Louise Tramway. As constructed, the tramway extended officially "from a point in Section 28, Township 28, Range 16, west of the 5th Meridian, to a point in Section 20, Township 28, Range 16, west of the 5th Meridian". The line was opened in July 1912, and had a main-line length of 3.61 miles. It started on the opposite side of the present railway station from the CPR main line, curved sharply in a semicircle, crossing the Bow River, and started its steep ascent of the foothills of the main range of the Rocky Mountains. The line, in plan, was in "switchback" fashion, with sharp curves at the angles (see map). Its upper end was the CPR hotel at Lake Louise,

where there was a carhouse and a loop, and a covered platform with covered passageway from platform to hotel. At the lower end of the line, Laggan (now Lake Louise station), the cars were turned on a turntable.

Original rolling stock on this line included two 28-foot open-bench "gasolene" passenger cars, each seating 35 and weighing about ten tons. Also two freight motors using the same design of frame as the passenger cars. All of this equipment was propelled by internal-combustion engines of the same type, a contemporary account states, as those "used in touring automobiles". Like the proverbial Toonerville Trolley, the cars met all the trains at the station, including such famed favourites of the past as the Imperial Limited and the Trans-Canada Limited. The passenger cars were CPR Nos. 40 and 41, while the freight cars were 48 and 49. All were delivered on July 31, 1912. These cars were all of the 4-2-0 wheel arrangement.

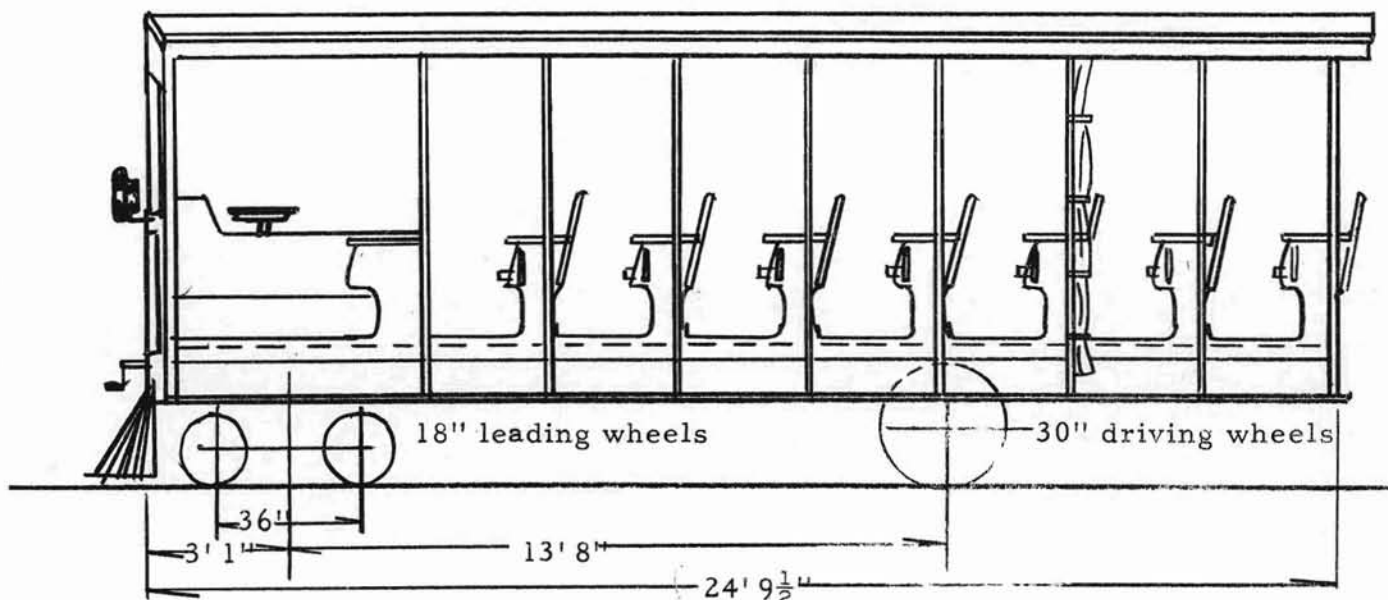
After a year and a half of use, it was determined that a third passenger car could be more useful than a second freight motor; accordingly, on April 20, 1914, No. 48 was rebuilt into passenger car 42.

As far as can be ascertained, the line closed down in the winter season, its period of operation generally corresponding with the open season for the CPR hotel at Lake Louise, roughly May to September. The line possessed no snowplow equipment, so that winter operation is unlikely ever to have been undertaken. Repairs were made in the running shed at Lake Louise.

In 1925, the original equipment was supplemented by two additional passenger cars, closed vehicles this time, which more resembled street railway cars. Unlike the original open-bench cars, the new cars were double-trucked, and propelled by Sterling "Seabull" gasoline engines

LAKE LOUISE TRAMWAY

40 CLASS 42" GAUGE OPEN GASOLENE PASSENGER CAR



Built: Canadian Pacific Railway Co.,  
Angus Shops, Montreal, 1912.

Seating capacity: 35 passengers.

Car floor is 36" above rail level.

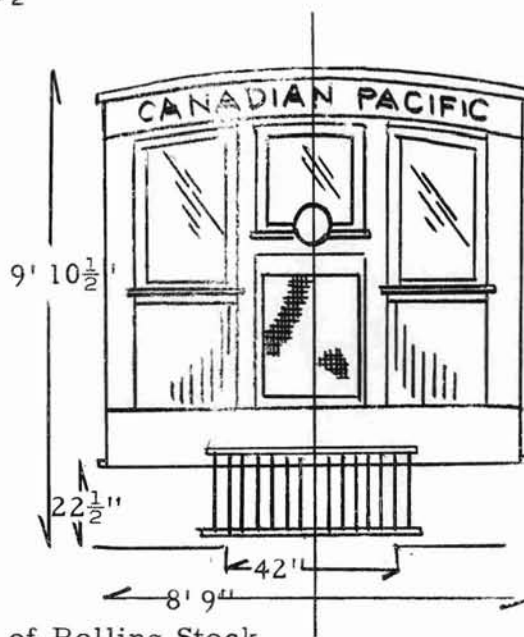
Seats are on 2' 9" centres.

**MOTORS:**

Originally built with 60 h.p. 6-cylinder  
Alco engines. Remodelled in 1913 with  
66 h.p. 6-cylinder Pierce-Arrow motor.  
Cars capable of 15 m.p.h. and can negoti-  
ate grades up to 4%.  
Scrapped in 1931.

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Sketch is approximately 1/4" scale.  
OSAL. 21/1/60.

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LAKE LOUISE TRAMWAY - Roster of Rolling Stock.

40	4-2-0	Open bench psgr.car	Reo engine	Built CPR, Angus, Montreal, 1912
41	"	" " " "	"	" " " "
42	"	" " " "	"	" " " "
48	4-2-0	Flat freight car	Reo engine	Built CPR, Angus, Montreal, 1912
49	"	" " " "	Reo engine	Built CPR, Angus, Montreal, 1912
50	B-B	Closed psgr. car	Sterling engine *	" " " " 1925
51	"	" " " "	"	" " " "

All equipment taken off inventory November 1930, scrapped 1931.

### CANADIAN PACIFIC STEAM LOCOMOTIVES IN RESERVE

In this winter of 1959-60, the "happy hunting ground" for the Canadian Pacific Railway's remaining steam power is Saint Luc Yard at Montreal, where those engines which still remain serviceable on the Eastern and Atlantic Regions, have largely accumulated. A visit by some members of the Editorial staff on Sunday, January 24th, showed eighty-eight locomotives at the yard, with stacks covered and headlights boarded up for the most part, though a few were in the roundhouse under steam. Also stored with the eighty-eight, was the Association's engine, CPR No.144, coupled and facing up squarely to No.2819. For the information of those who keep informed on such matters, we give below a list of the engines at St.Luc on that day. Before errant enthusiasts from other parts swiftly converge on Montreal, we might caution them that this situation is fluid, and can have changed radically by the time that this News Report is in the hands of the readers:

Class A2: No.144.

- " D10: Nos. 807, 870, 882, 953, 964, 1004, 1015, 1080, 1085, 1088, 1092, 1095.
- " G1: Nos. 2200, 2206, 2214, 2224, 2237.
- " G2: Nos. 2500, 2514, 2559, 2599, 2629, 2659, 2664.
- " G3: Nos. 2328, 2334, 2397, 2409, 2454, 2471.
- " G5: Nos. 1201, 1223, 1224, 1228, 1231, 1256, 1262, 1263, 1270.
- " H1: Nos. 2811, 2816, 2819, 2827, 2841, 2856, 2858.
- " M4: Nos. 3462, 3504, 3507.
- " N2: Nos. 3607, 3610, 3638, 3642, 3694, 3759.
- " P1: Nos. 5102, 5114, 5118, 5135, 5137, 5145, 5146, 5147, 5149, 5152, 5160,  
5162, 5163, 5168, 5170, 5171, 5175, 5183, 5187, 5214, 5225.
- " P2: Nos. 5325, 5330, 5343, 5370, 5394, 5405, 5406, 5410, 5411, 5449, 5458.
- " V4: No. 6933.

--List compiled by Bill McKeown.

The A class, of course, is a 4-4-0, the Ds are 4-6-0, the Gs are 4-6-2, the Hs are 4-6-4, the Ms and Ns are 2-8-0, the Ps are 2-8-2 and the V is an 0-8-0.

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### LAKE LOUISE TRAMWAY (cont'd)

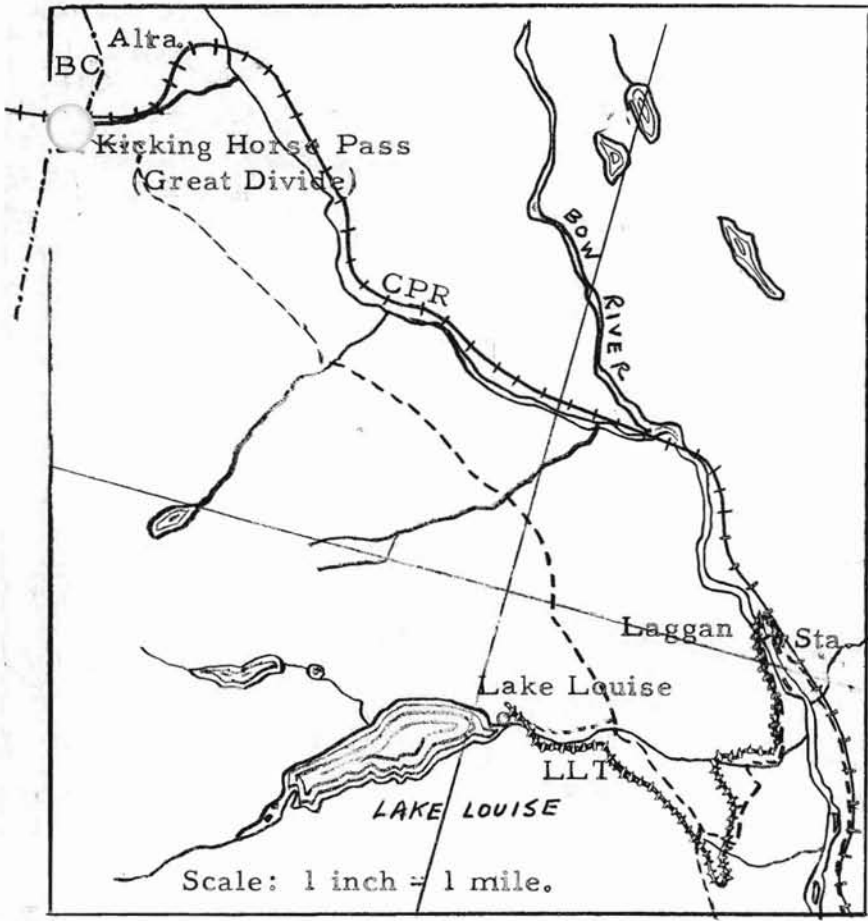
having six cylinders and 150 horsepower capacity. The fuel capacity was 34 Imperial gallons, and the cars seated 43, though it is recorded that car 51 was tested with a capacity load of 68 passengers and baggage. The cars weighed only 34,000 lbs. These two cars arrived at Lake Louise on May 27th, 1925; they were lettered "Canadian Pacific" as was the other equipment but in the interim, while they were en route to the west, it was decided to reletter them to "Lake Louise Tramway", and accordingly, all equipment was changed.

The Lake Louise Tramway came under the jurisdiction of the Canadian Pacific Railway's Hotel Department. One of our Calgary members, Mr. W. R. Jones, interviewed Mr. Fred King, who was an operator around Lake Louise in the latter

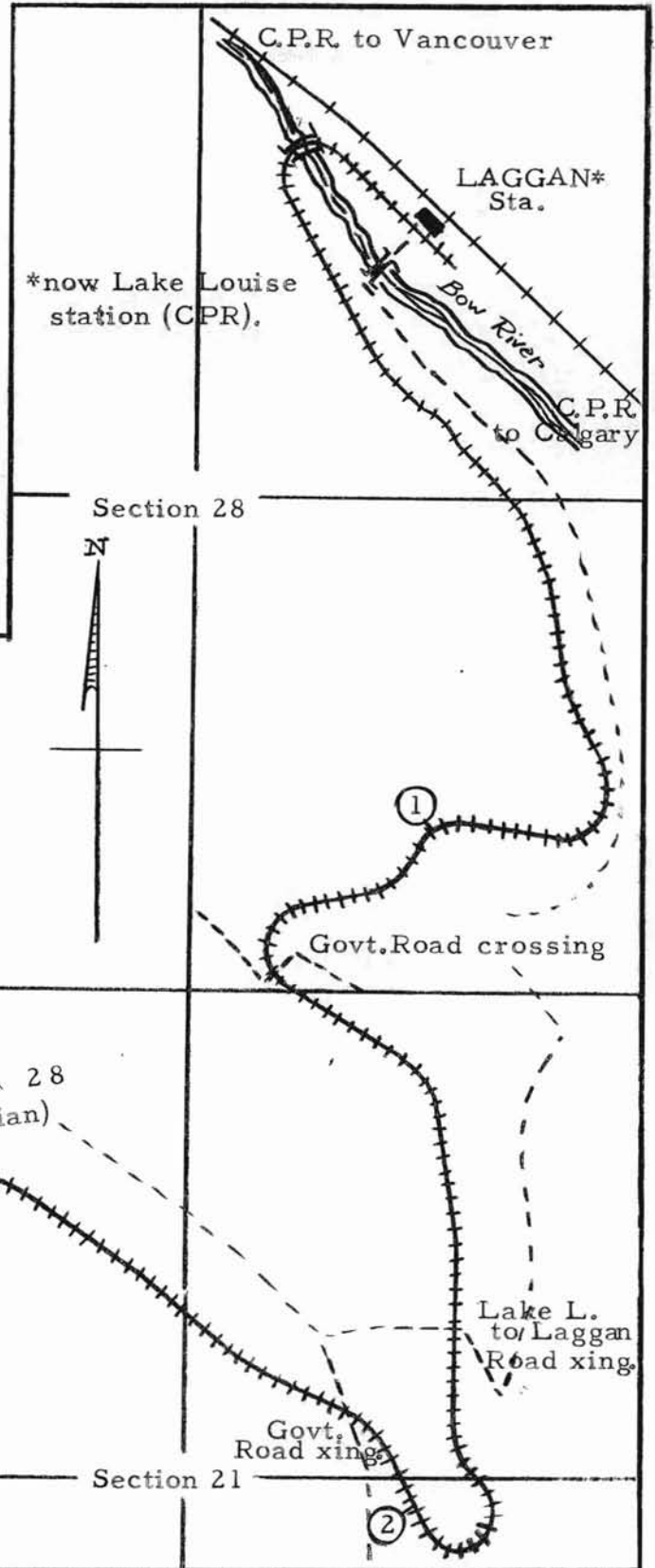
years of the LLT's operation. Mr. King says that the frequency of operation was as high as thirty round-trips a day. The cars met CPR trains 1-2-3-4-5-6-7-8-13- and 14, as well as passenger extras. Operation of the line was carried out by a telephone system linking the termini, but a form of train order terminal clearance was also used. From the same source, we learn that there was a passing-track about halfway up the line, which the "up" tram always tried to make in case the "down" tram's brakes didn't hold! Yes, they had many a wild ride on the Lake Louise Tramway.

In the latter years, the old equipment was kept as standby rolling stock for unusual crowds and tour groups.

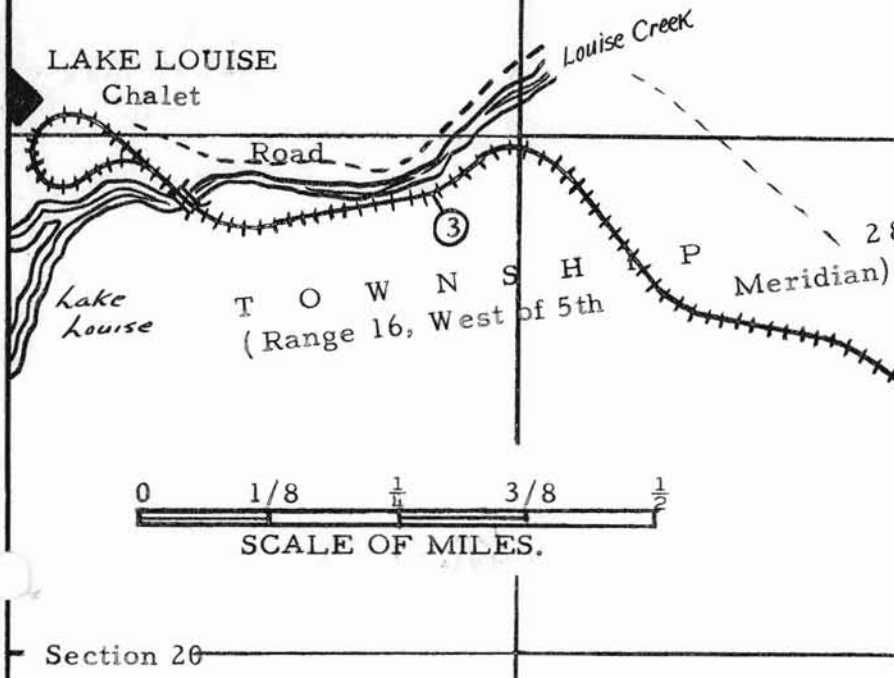
Service on this line passed with the end of the season of 1930. The cars were removed from inventory in November 1930.



LEFT: Map showing location of Lake Louise Tramway in relation to the Canadian Pacific Railway mainline.  
 BELOW: Large scale map of L.L.T. showing road crossings and mile posts.



Canadian Pacific Railway Company  
**LAKE LOUISE TRAMWAY**  
 Plan:- Mile 0.00 to Mile 3.61  
 As constructed, 1912. Gauge: 3' 6" .



MUSEUM EDITORIAL (cont'd)

eyesores. The Association hopes to acquire a tract of land close to rail facilities, and to provide a building or buildings where they can be properly tended and shown to the public.

More power to them. Generally speaking, we as Canadians have been pretty casual about the mementos of our past, be it in architecture or in transportation or in anything else. The past century of our national development has been vitally involved with rail transportation. A well-organized rail museum in the region where rail operations began is a worthwhile project indeed.

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THE "1311" FUND .....

On the inserted photograph page this month will be found a photograph of one of our latest acquisitions -- interurban electric car No.1311 of the British Columbia Electric Railway Company, Limited, which was purchased last autumn from Mr. Ernest Plant, of Horseshoe Bay, British Columbia. Those of our readers who are trolley or interurban enthusiasts, and perhaps even those whose interests do not necessarily embrace electric traction, will have to agree that No.1311 is a very fine example of its type. The Association is much indebted to Mr. Plant, a railway enthusiast of some repute in western Canada, in his own right, for cooperating with us so that the Association could acquire this fine car, and keep it in Canada.

No.1311 is still in British Columbia, being stored at Squamish, British Columbia, by the Pacific Great Eastern Railway. Much expense will be entailed in moving it from its present site to our museum project near Montreal. If any of our readers feel that they would like to demonstrate their support of the Association's museum policy in tangible form, a donation towards the fund to acquire & move No.1311 will be sincerely appreciated. Many members have already contributed generously. Others have promised similar support. The names of those members who contributed to the purchase of our two Ottawa cars, and of M&SC No.611, will someday appear in the appropriate vehicles. Perhaps you would like to be listed as one of the supporters of No.1311. Contributions may be sent to the Treasurer of the Association, P.O.Box 22, Station "B", Montreal 2, or to the undersigned at 7440 Durocher Avenue, Montreal 15, Canada.

Thank you for your support.

CANADIAN RAILROAD HISTORICAL ASSOCIATION

News Report No. 103  
February 1960.

Editorial Address:

P.O.Box 22, Station "B",  
Montreal 2, Canada-

EDITOR: Omer S.A. Lavallee,

PUBLISHER: John Saunders,

COMMITTEE: Anthony Clegg,

David R. Henderson,

Paul R. McGee,

Lorne C. Perry.

THE BANQUET -- Final arrangements have now been made for the banquet, as announced on page 11, this issue. It will be held on Tuesday, March 1st, 1960, in "La Salle Canadienne", Windsor Station restaurant. The dinner will start at 7:00 PM, but those who wish to come early will be admitted after 5:30 PM. Tickets, \$3.75 per person, and information, may be obtained from the Secretary, Mr. Heard, Apartment 36, 3563 University Street, Montreal, or 'phone VI.5-9487.



CANADIAN PACIFIC SCRAPS 220 ENGINES IN 1959

During the year 1959, the Canadian Pacific Railway scrapped no less than 220 locomotives, and disposed otherwise of four more, all steam units. The accelerated rate of scrapping characterized the year in which the Company accepted its 1000th diesel locomotive. Unlike the contemporary National system, however, Canadian Pacific still makes fairly extensive use of its steam locomotives, many of which have a good amount of usable mileage left. Paradoxically, the year in which so many engines ended up in the scrap dock was also the year in which the Company dropped its long-term aloofness from historical preservation projects, and four engines, happily escaped the fate of the majority. The four included a 4-4-0, a 4-4-4, a 2-10-4 and a 0-6-0 switching engine. The last three were sold to interested individuals or groups in Canada or the United States, while the 4-4-0, No.144, was presented to our Association on November 21st, 1959. Of the famed Selkirk type 2-10-4 engines, only one remained at December 31st, No.5935, the last steam locomotive to be built for a Canadian railway. It is being held, with a number of others, at the request of our Association, for possible inclusion in the Association's long-planned museum project.

The engines disposed of are given below, by class:

A2: No.144 - to Canadian Railroad Historical Assoc'n, Montreal, Nov.1959.

D4: Nos. 417, 434.

D10: Nos. 776, 802, 806, 827, 833, 840, 844, 847, 852, 855, 858, 866, 861, 891, 892, 893, 903, 909, 913, 914, 915, 918, 923, 927, 931, 933, 936, 937, 939, 942, 945, 956, 961, 971, 973, 976, 981, 983, 984, 991, 992, 996, 1012, 1019, 1022, 1018, 1035, 1036, 1050, 1067, 1071, 1073, 1078, 1082, 1068, 1102, 1006, 1109, 1111.

F1: No.2929 - to "Pleasure Island", near Boston, USA., June 1959.

G1: Nos. 2207, 2223, 2226, 2233, 2236.

H1: Nos. 2802, 2803, 2804, 2814, 2815, 2821, 2823, 2826, 2833, 2836, 2859.

G2: Nos. 2503, 2505, 2516, 2520, 2536, 2551, 2555, 2558, 2581, 2582, 2585, 2586, 2588, 2597, 2604, 2595, 2610, 2611, 2622, 2627, 2658, 2662.

G3: Nos. 2316, 2356, 2365, 2415, 2420, 2460, 2466.

G4: Nos. 2700, 2702, 2703, 2707, 2714.

G5: Nos. 1232, 1241.

M4: Nos. 3408, 3415, 3426, 3427, 3438, 3472, 3475, 3484, 3489, 3505, 3519, 3528, 3558.

N2: Nos. 3602, 3614, 3636, 3637, 3647, 3649, 3660, 3666, 3675, 3678, 3690, 3695, 3686, 3688, 3713, 3714, 3724, 3734, 3740, 3747.

P1: Nos. 5108, 5112, 5113, 5116, 5125, 5130, 5132, 5138, 5148, 5153, 5208, 5209, 5212, 5218, 5219, 5224, 5226, 5237, 5243, 5246, 5247, 5251, 5252, 5257, 5250, 5261, 5262, 5264, 5250.

P2: Nos. 5349, 5354, 5357, 5364, 5365, 5366, 5369, 5390, 5397, 5403, 5404, 5409, 5407, 5414, 5415, 5416, 5421, 5422, 5423, 5430, 5448, 5454, 5455, 5456, 5459, 5461, 5462, 5463, 5464, 5465, 5466.

R3: Nos. 5761, 5785, 5788.

S2: No. 5808.

T1: Nos. 5930, 5931, 5932, 5933. No.5934 to City of Calgary, August 1959.

U3: No. 6275 to Goderich, Ont., May 1959.

V4: Nos. 6944, 6947.

V5: Nos. 6963, 6966, 6967.

Shop Locomotive (0-6-0): SL-6.

\*\*NOTE: We hope to carry Canadian National figures for 1959, shortly.

OBSERVATIONS --- A column of notes and news, by Anthony Clegg....

\* The end of Canadian Pacific Railway steam locomotive operation in the Toronto area took place December 31st last, when CP #5411 operated for the final run at Lambton yard. Canadian Pacific officials have since announced that all future train operation in that district will be performed by diesel power.

\* Following this, Toronto joined the growing ranks of cities and towns desiring to preserve a memento of a fast-disappearing era in the form of a steam locomotive. Controller William Dennison, who is sponsoring the Toronto bid, feels that one of Canada's major railway companies would be willing to donate an outdated steam locomotive for preservation and display in the city's waterfront park.

\* During the month of January, the Chicago & North Western Railroad ordered \$21 million worth of new suburban railway equipment, including 116 double-deck coaches.

\* It has been reported that CNR electric locomotives, formerly used on the Quebec Railway, have been sent to London, Ontario, for scrapping. Numbers 227 and 228 were dismantled November 6th, 1959, while numbers 225 and 230 met the same fate a week later.

\* Peterborough, Ontario, became the ninth Ontario city to make use of the CNR's "piggyback" service late in December, when that municipality was placed on the railways' network of lines served by highway-trailers-on-flat-cars.

\* Effective January 1st, 1960, new reduced rates were put into effect on the former Northwest Communications System, now part of the Canadian National Telegraph System. The former N.C.S., built during the war for military purposes, consists of modern communication facilities serving the Alaska Highway and contiguous territory.

\* Which is the oldest passenger-carrying railway in the world? There is a new holder of that title now, for January 5th saw the end of service on the Swansea & Mumbles Railway, operating 5½ miles of line between Oystermouth, Mumbles and Swansea in the southern part of Wales, formerly the world's oldest passenger rail service. Some 200 passengers bought special last-run tickets, and many hundreds more turned out to witness the last trip on the line, which was opened by horse power in 1806. Passenger traffic began on March 25th, 1807. It is said that sails were tried in the early 1870s, but they proved unsuccessful and steam power was used from 1877 until 1929. Since that time, service has been provided by a fleet of large, red, double-deck passenger trams, picking up current by small pantographs mounted on the roof.

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FROM THE CRHA "News Report" of Ten Years Ago:

\*\*\* The Delaware & Hudson RR inaugurated the use of diesel-electric locomotives on its trains numbers 7 and 8 between Montreal and Albany, when train No. 7 arrived in Windsor Station on January 9th (1950) pulled by 1500 hp road switcher No.4019.

\*\*\* Canadian National's locomotive No. 6184 is undergoing tests with Poppet Valve Gear supplied by Dominion Engineering Limited.

\*\*\* The MTC has placed one-man cars of the 1525 and 1600 series on route No.25 (Notre Dame-Cote St.Paul). One-man cars are also replacing two-man cars on route 7 (Mount Royal) in the evenings and on Sundays.

\* "All-steel, 60-ton multiple unit cars will be used, establishing a very frequent ten-minute service between the Model City and Montreal". Thus was described the rail service through Mount Royal Tunnel that the Canadian Northern Railway planned to establish as part of the development, by the railway company, of its new Town of Mount Royal. But that was 1914. As is known, the planned rapid transit services did not materialize and the tunnel has not been used to its capacity.

Now, however, interest in rapid transit in Montreal generally has been aroused, and Mayor Romuald Bourque of Outremont is forming a committee to study the possibilities of greater use of the three-mile bore under Mount Royal.

An ambitious project has been advanced by two Outremont citizens, John W. Long and Sidney Denman, consisting essentially of replacing the present train services through the tunnel by rapid-transit-type operation with more frequent stations and new electric rolling stock. This would involve the purchase of "subway-type" rapid transit vehicles, high level platforms, a new fare-collection procedure and bi-directional CTC signalling, with remote-controlled crossovers, etc., to increase the tunnel lines' capacity from 6,000 to 40,000 passengers per peak hour.

Canadian National Railways' spokesmen have declared the scheme practicable but not economically attractive--but the fact that railway representatives have dealt seriously with the subject lends weight to the rumour that some such alteration in service is not beyond consideration. A further indication that the railway is progressing towards the rapid-transit plan in principle, is the announcement in late December that the CNR would not increase the commuters' fares by 10% as authorized by the Board of Transport Commissioners last November 6th (and as put into effect by the CPR on January 1st) until a modern method of fare-collection has been inaugurated, some time in the spring. A further incentive to the railway in cooperating in this scheme could, of course, be the project of eventually turning the whole operation over to the MTC or a Metropolitan Rapid Transit Agency---thus climbing out of the unwelcome commuter business gracefully and completely.

\* It has been reported that the former CNR Newfoundland steamer, S.S. "Kyle", has been sold to the Arctic Shipping Company for use as a sealer. The 230-foot long, 1,055-ton vessel has been operated in Newfoundland and coastal waters as a passenger and freight carrier for the past 45 years.

\* From Fredericton, NB, comes word that plans are being worked out for the joint rail-highway use of the CNR bridge across the Saint John River at that point. It is pointed out that the railway uses the span for only a few minutes each day, while the present highway bridge is overtaxed.

\* The Mayor of Haileybury, Ontario, is looking for an old Toronto streetcar, one of 100 sent north in 1922 to replace homes and offices burned out after a disastrous fire. This action is being taken at the request of Mr. John R. Stevens of the Branford Electric Railway's trolley museum at East Haven, Connecticut, who feels that a few of the car bodies may have survived as tool sheds or chicken coops. Mr. Stevens is engaged in the restoration of Toronto Railway car No. 1710, a former convertible car, and his request to Haileybury has in view the possibility that a similar car may have survived from which certain parts peculiar to convertible cars might be salvaged.

\* A new type snowmelter has been developed by the New York Central Railroad, which consists of a surplus aircraft jet engine mounted on a caboose. Pushed ahead of a train, the jet blasts yard tracks and switches free of snow for 100 feet. What happens to the resulting water is not explained.

\* Effective March 1st, a new system of zones, fares and ticketing will be inaugurated on the CNR lines through Mount Royal Tunnel, Montreal. Under the new plan, which features "flash cards" good for unlimited rides within the time limit -- stations on the Cartierville, Montreal Nord and St.Eustache lines will be grouped into seven zones with a uniform rate between Montreal and all stations within each zone.

Zone I, which includes all stations on the Val Royal-Cartierville line, and up to Pie IX on the Montreal Nord line, will use strip tickets similar to those used on the MTC. Tickets will be collected before trains are boarded at these points, thus eliminating many of the peak-hour delays. Fencing and other necessary equipment is being installed at stations where this is necessary.

For commuter travel, between Montreal and Zones II to VII, monthly and weekly pass-type cars will be sold, valid for an unlimited number of rides within the area and time limit shown thereon. There will be a different colour for each period. Following are a few sample fares at the new rates, which incorporate the ten percent increase awarded recently by the Board of Transport Commissioners for Canada:

Zone No.	Montreal to:	Unlimited		Remarks
		Monthly Pass	Not available	
I	Mount Royal, Pie IX & Cartierville			25¢ per trip \$9.20 for 40-trip.
II	A Ma Baie & Montreal Nord	\$11.10		
III	Roxboro	13.10		
IV	Ile Bigras & Ste.Dorothee	15.05		
V	Laval and St.Eustache	17.10		
VI	Pine Beach and Roger Beach	20.20		Summer serv.only
VII	St.Joseph du Lac & Pte.Calumet	23.15		" " "

Weekly pass-type cards will cost approximately 30% of the monthly rate, while a uniform rate of \$5.95 per month will be charged those qualifying for travel on students' tickets.

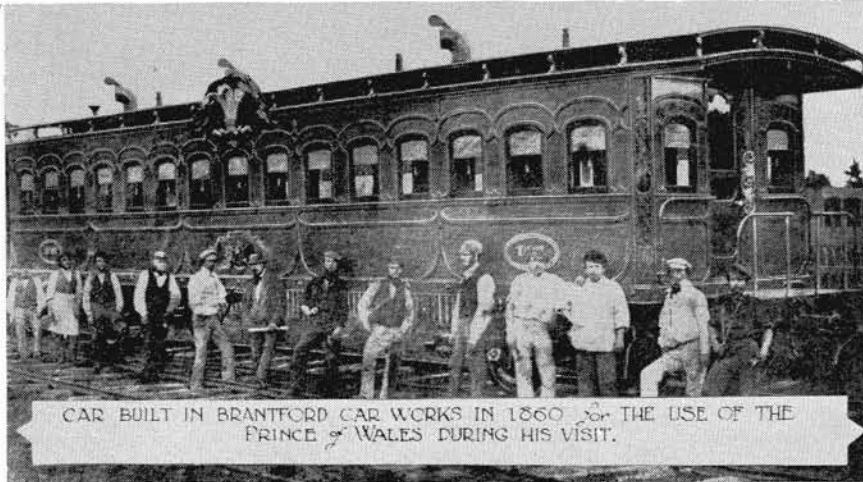
\* The Canadian Pacific announced early in January that their new ship, now being built at Vickers-Armstrongs Limited, Newcastle-on-Tyne, will be named "Empress of Canada" by Mrs.J.G. Diefenbaker, wife of Canada's Prime Minister, on May 10th when the new vessel is launched. The new Empress of Canada, flagship of the fleet, at 27,500 gross tons, will be the largest liner to sail into Montreal and will join the sister ships, Empress of Britain and Empress of England in the St.Lawrence service between Montreal and the United Kingdom in April, 1961. Smartly streamlined, fully air-conditioned and equipped with stabilizers, radar and other modern navigational aids, the Empress of Canada, 650 feet long, with breadth of 86.6 feet, will carry 1060 passengers, 200 first and 860 tourist, at a service speed of 20 knots.

Sheltered decks and other appointments have been designed with an eye to regular service on the North Atlantic but air-conditioning and two swimming pools make the new Empress easily adaptable to cruising conditions in the tropics during the winter season. The Canadian theme will be carried out in decorations and art treatment in a number of the public rooms of the new ship.

\* During the next four years or so, the CNR proposes to spend some \$40 million for CTC or similar pushbutton dispatching systems on 4,000 miles of main line from Vancouver to Halifax and Sydney, NS. The company says that the programme, started last year, is the biggest installation of its kind ever undertaken by a railroad.

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This magnificent coach stunned the populace with its elegance. It carried His Royal Highness, Edward, Prince of Wales, on his Canadian tour.



In 1960, the passenger is king. This modern air-conditioned coach was built to CNR specifications by the Canadian Car Company Limited, Montreal, Quebec.



**CANADIAN DESIGN is always changing!**



### ***railroad equipment is their business***

The designing of railroad equipment is highly departmentalized, embracing everything from metallurgy to electronics—from motive power to track-laying and track maintenance equipment—from wheel journals and automatic couplings to the esthetics of dining-car décor.

Although procedures differ from department to department within the railways, in most cases the project engineer designs details and writes specifications, for components, materials and finishes, then supervises construction of a prototype either in the Company's shops or by a supplier. After building and testing of the prototype, contracts are issued for supply, usually by an independent manufacturer.

In the case of passenger equipment, it's the responsibility of the design team to make sure that every passenger mile is travelled in quiet, smooth, air-conditioned comfort, regardless of weather. Since the life of passenger equipment is measured in millions of miles of trouble-free travel, every design detail must be carefully analyzed before manufacturing begins. The CNR's team responsible for passenger car equipment are (left to right), J. J. Harris, B.Sc.(M.E.), Mechanical Engineer, Car Department; E. P. Stemshorn, Assistant Chief of Car Equipment, and M. B. Turnbull, Assistant Mechanical Engineer, Car Department.

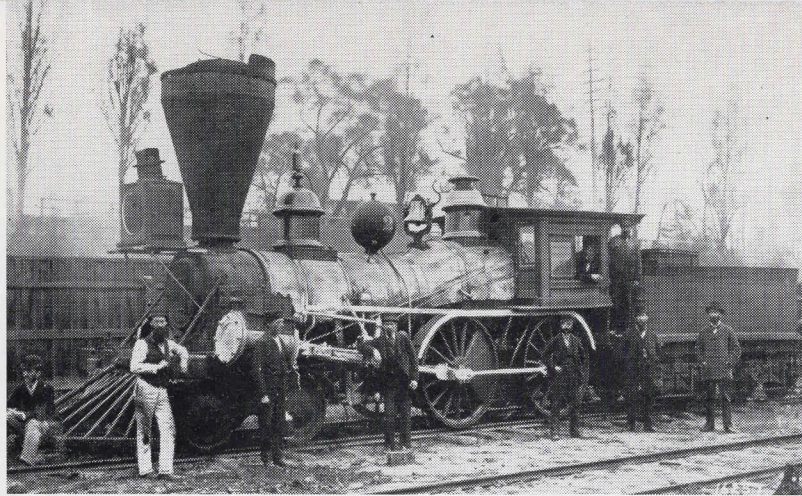
### ***the railroads depend on the design engineer***

The railroad's post-war story is probably Canada's most graphic example of the impact of creative design engineering on an entire industry. Five years' wartime operation far beyond normal capacity, under conditions of minimum maintenance, brought Canadian railroads in 1945 face to face with a grim prospect—a badly-deteriorated complex of neglected roadbeds—over-age rolling stock—out-of-date communications and maintenance facilities.

To complicate the problem, new competitive elements endangered revenues. Airlines, highways and pipelines were striving for larger shares of transportation volume. The prospect of building the St. Lawrence Seaway posed an additional problem.

To meet the situation, Canada's railroads went into a crash program to modernize their entire transportation empire.

**Quickly, the design engineer emerged as the key figure,** putting his skills, experience, and knowledge to work on every engineering aspect of the problem. One by one the various facets were completed and put into service—dieselsation of power units—electronic controls and communications for more efficient train movements, yard operations, car sorting, tracing and freight handling—automated signalling systems to improve scheduling—the development of special equipment for piggyback—mechanized track maintenance—quieter, safer, more comfortable passenger equipment—heated box-cars—custom-designed rolling stock for automobiles; bulk handling of sugar, salt, chemicals, pulpwood. These are only a few of the improvements the design engineer contributed to the gigantic modernization program. Other items are in the development stage—designed to make Canadian railroads second to none in world standards of efficiency, economy, and safety for passenger and freight movements.



Even as sentiment dictates that we deplore the passing of "the iron horse", the design engineer takes the attitude that "the past is dead". His interest lies in performance data—economy—power—operating efficiency—economy of maintenance. How many Canadians know that the first application of the diesel engine to railroad motive power was made by Canadian design engineers? In 1929, the CNR's No. 9000 turned the tide of railway modernization away from electrification and toward dieselization—a trend that is evident today in railroads all over the world. Above is Canada's first "native" locomotive—built in Toronto in 1853. Below, a CNR giant diesel, built by the Montreal Locomotive Works, beside Old No. 40, which ran between Montreal and Portland, Me., on the Grand Trunk Western.



**No country on earth can point to a more dramatic period of growth than Canada's since 1939. In 20 years, gross national product increased 476.8%—from \$5.7 billion to \$34.5 billion. Population has increased 55.3%.**

Canada's railroads have found this staggering expansion a mixed blessing. To keep pace, they put their entire industrial empire under the design engineer's close scrutiny—an enquiring, uninhibited curiosity probing every engineering and mechanical detail.

Around the skills of the design engineer revolve decisions involving finance — marketing — production—expansion—activities that build sound and profitable enterprise. His wide knowledge of materials — components — production processes and finishes give him a vital influence over purchasing. His specifications cover power and transmission components — controls — in many cases the production methods to be used.

But he has an ever-present need to keep up with the increasing flow of information about new materials—new finishes — new components — new ways of using old products. Because of this, he takes a keen interest in his technical reading. Through the pages of Design Engineering he finds the information he needs. He reads carefully and methodically—because he's **interested** in knowing about your products and what they can do for him.

**You can reach him every month — hold his attention — through the pages of Design Engineering.** He'll read your advertising thoroughly — thoughtfully. To get your products specified in Canadian-designed original equipment, get into Design Engineering!

## ***the design engineer is market-conscious***

There's no ivory tower atmosphere in the design engineer's office. His approach to any problem is—"the customer is king"—and as a consequence, he spends a good deal of time considering the needs of the market-place. While basic laboratory research and experiment play an important role in the world of industry, the design engineer's task is relating technical developments to the needs and wants of the consumer. The vital fibre of engineering design is woven around the practical, down-to-earth problems of filling the needs of the market with new products to do the job better—faster—more efficiently—more economically—automatically.

Naturally, he's constantly looking for something that will help him fulfill this function. New ways of using common-place materials—new components and controls—new finishes—new production techniques—these are the elements of his job. He reads Design Engineering regularly to find out about YOUR products—and studies your advertising carefully and thoughtfully.

*A full schedule in black and white in DE will reach design engineers across Canada at a cost of less than 2c per impression. We consider this to be Canada's most effective advertising value.*

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An outline of show in New York, May 23-26.
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481 University Avenue, Toronto 2, Ont.