Thewsletter

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UPPER CANADA RAILWAY SOCIETY
BOX 122 TERMINAL "A" TORONTO, ONTARIO

THE Canadian Pacific WESTERN DIESEL

A Photo Story by Peter Cox:

So great is the distance separating the two coasts of Canada that few citizens of this country have travelled across it. Our two railway systems, while transcontinental in nature, can often present strange sights to the railway enthusiast who thinks he is quite familiar with all of his favourite system's peculiarities. Here are just a few such scenes, captured by Peter Cox of Vancouver, especially for the edification of Easterners.

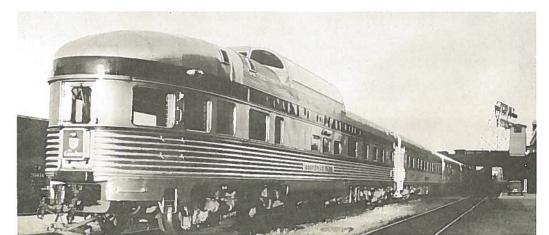
The Cover:

Extra 4042 east picks its way over the Laggan Subdivision of the Canadian Pacific near Yoho, B.C. The train has just emerged from the lower of the two spiral tunnels, and, crossing the Kicking Horse River, heads on up the 2.2% grade to the upper tunnel.



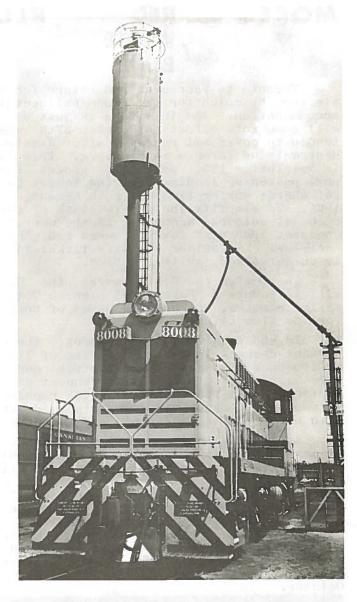
ABOVE: Passenger units are serviced in the open air at the Drake Street Yard right in downtown Vancouver. 4031 will power no. 8, while 1400 will go out on

BELOW: "The Canadian", which leaves for the east at dusk. One week and 5762 miles later, it will again be at this station.



Canadian Pacific





ABOVE: Transfer unit 8008 takes on a fresh supply of sand after

arriving from Coquitlam Yard

BELOW: then it is turned and prepared for another transfer assignment, or perhaps just an afternoon yard job.



MORE — RED WHITE and BLUE

PLUS —— Canadian Gacific FARESAVER PLAN

Toronto to Vancouver and return for \$83! That is the C.N.'s new Red or Bargain fare by coach for the transcontinental trip that now costs \$130 for the same accommodation. And this fare is just one example of the general reductions that will come into effect on October 27th when the "Red, White and Blue" plan is extended to cover all routes west of Winnipeg and the transcontinental routes from Montreal and Toronto to Winnipeg. This fare plan, which was completely described in Newsletter 195, page 48, grades fares by the day of the week, depending on past passenger loadings, giving lowest fares on days of slack travel and the highest charge during times of peak demand, such as summer week-ends and holiday periods. To simplify the agents' task of charging the right fare, a calendar, with each day coloured according to the correct fare level, has been issued with the cheapest "Bargain" days coloured red, "Economy" days are white while standard days are blue. To further simplify ticket issuing, the tickets themselves are similarly coloured red, white and blue.

To counter the C.N.'s move, the Canadian Pacific has also announced that it will introduce a "Faresaver" plan on October 27th, but as yet, will not reveal any definite rates, perhaps in hopes of undercutting the National's fares, at least for the time being.

In addition to lowering fares, the Canadian National will also make some important changes in the timetabling of its trains, ranging from the introduction of two-hour timings between Montreal and Ottawa to the complete rescheduling of "The Scotian" so that it will connect with trains to and from southern Ontario at Montreal. At the same time, the running time of the "Super Continental" will be trimmed by two hours in each direction and retimed to provide better connections with other trains at Toronto and Montreal.

As if these changes were not enough, improvements in rolling stock are aimed at making rail travel even more comfortable, for both coach and sleeping car passenger alike. Coaches on the "Super" will be equipped with new low level luggage racks, thus doing away with the lifting of heavy luggage onto the racks above the seats, and one coach of each train will have a refreshment lounge built into one end of it. Coach attendants (stewardesses, perhaps) will be on hand to see to the needs of coach passengers, and all seats will be reserved (at no cost) on both the "Super" and the "Ocean Limited". For sleeping car passengers, a number of the "Fort" series of cars have been converted to "living room on wheels" lounge cars, with new furniture, decor and a refreshment lounge taking the place of the former bedrooms in the cars. Further changes will probably be announced at the end of October.



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R. F. CORLEY ON:

Schools Class on the

SOUTHERN

IN THE BEGINNING

By the 1930's, the 4-4-0, or "American Standard", type locomotive was rapidly becoming a museum piece in North America. Since soon after the turn of the century, its dominant role in the history of American and Canadian railroading, primarily as a passenger engine, had been usurped by larger and more powerful motive power.

Yet, in this same period, there emerged in Great Britain one of the most outstanding examples of this locomotive type, which, except for some civil engineering problems of over 75 years previous, might never have been designed; in this respect, the original negligences of some railway contractors were a blessing in disguise to motive power devotees.

THE "RAISON D'ETRE"

On February 13th, 1851, the South Eastern Railway had reached the seacoast town of Hastings from Ashford, but wanted a more direct route from London to this community. In the same year, the railway extended its 5 3/4 mile "branch" from Tonbridge to Tunbridge Wells (opened in 1845-46, midway between London and Hastings), opening to Robertsbridge (15 1/4 miles) on September 1st, 1851, 6 miles thence to Battle on January 1st, 1852, and the final 6 miles to Bopeep Jct. (connecting with the earlier line slightly west of Hastings) on February 1st, 1852.

While a shorter route, this "main line" to Hastings required arduous gradients to cross the High Weald. There is an almost continuous climb from Tonbridge to Wadhurst (10 miles), followed by a descent of 8 1/4 miles at 1 in 97, and finally a smaller gable summit at Crowhurst, near the end of the line. Four tunnels are on this section, one at Wadhurst, and another at Mountfield being the most restrictive.

After the Mountfield tunnel had been in use only 11 years, it was found to be in danger of caving in and the contractors' faults were "covered up", at minimum expense, by putting the required depth of lining inside the originally "skimped" lining. The consequences of this, plus a double track section in the tunnel, restricted the loading gauge to 8' 6½".

This was the situation facing the Southern Railway (which had absorbed the S.E. & C.R. in the 1923 grouping). By then trains were longer and heavier, and competitively scheduled service could not be maintained by the original engines designed for this route. To Mr. R.E.L. Maunsell, Chief Mechanical Engineer of the Southern, fell the problem of motive power. The answer was a new class of 4-4-0 locomotive - the "Schools" class, so designated since they were named after famous English schools.

THE DESIGN

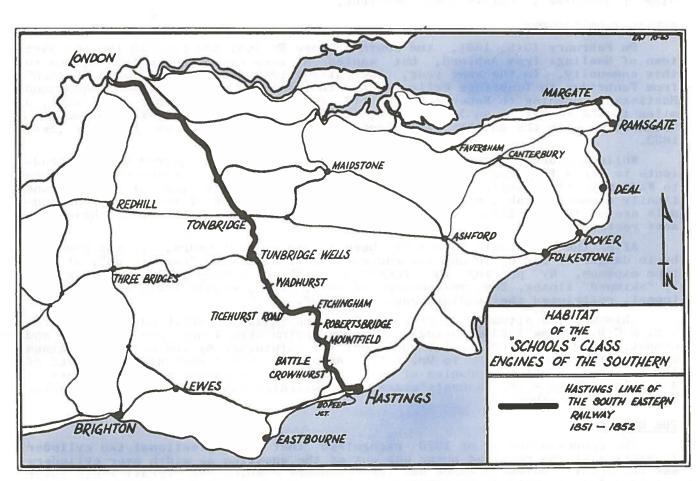
The proposed design of 1928 recognised that a conventional two cylinder locomotive of the required power was out of the question as width over cylinders was too great. Rather, three smaller cylinders enabled the overall width (over cylinders) to be held to 8' 5 7/16".

Higher boiler pressure was required and smaller coupled wheels to secure the required tractive effort. Axle loading considerations also dictated requirements as to size of the boiler and adhesive weight. While a 2-6-0 and 4-6-0 designs were considered, the 4-4-0 was favoured on account of the ability to negotiate sharp curvatures, cheapness to build and maintain, less internal resistance (i.e. freer running), and suitability to existing turntables.

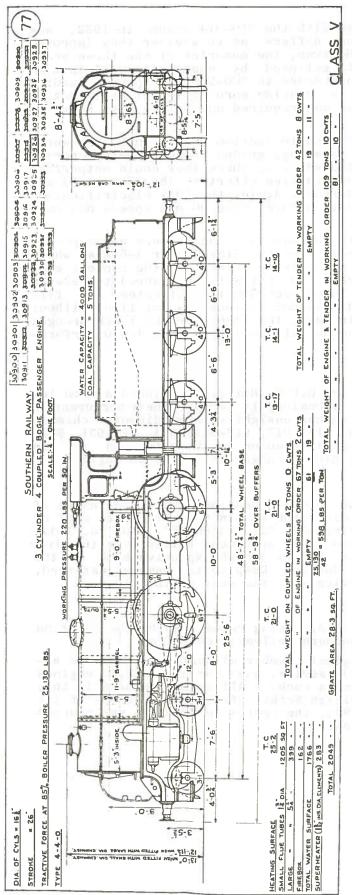
THE FIRST TEN

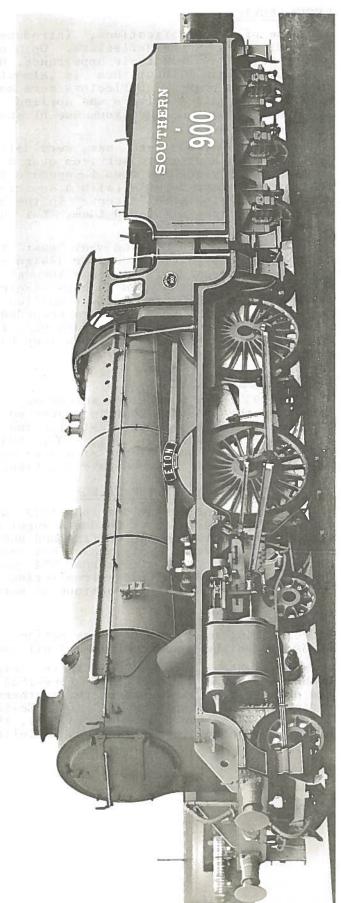
The initial order comprised ten engines, nos. E900-E909, specifications and dimensions of which are shown on page 153. The first engine, named "ETON", was outshopped from Eastleigh Works, and the order completed by July, 1930. 30 more soon followed: nos. 910-914 in 1932, 915-924 in 1933, 925-930 in 1934 (completed 8/34), 931-939 in 1935 (completed 8/35). Designated Class V, these engines were the most powerful 4-4-0's in the British Isles, and outrank all but a few heavier designs on this continent (e.g. Reading's Class D-11-S with 27,580 lbs. T.E.). They were immediately popular and proved more than a match for their assignments. For initial trials, they operated from Nine Elms depot (in London) to make their debut on Western Section main line trains to Bournemouth and Salsbury and even to Exeter. No alterations in the design were required and the engines were handed over to the Eastern Section for regular duties.

In May and June, 1930, the "Schools" started to work on the Folkestone, Dover and Deal services, stationed at Ramsgate. Here was an almost straight and level main line, and they were soon putting in some astonishing performances, with 19 minute timings (point to point) over the 26.4 mile, 21 minute "carded" Ashford to Tonbridge section. In August, 1930, they were also assigned to Eastbourne shed, handling London - Eastbourne services up to the time of the 1933 electrification. Usually four engines were at Eastbourne with 6 at Ramsgate.



900, Eton ______PHOTO & DIAGRAM





Finally, from July 6th, 1931, they were allowed on the Tonbridge-Hastings section, which had been undergoing engineering work when they were first built. The Eastbourne engines were reassigned to St. Leonards shed.

LATER SERVICE

One of the modifications, introduced with the 910-914 group in 1932, was the addition of smoke deflectors. Opinion differs as to whether they improved on, or detracted from their appearance. However, the memories of the three years that 900-909 ran without them is almost eclipsed by one's memory of them in their last 30 years. Deflectors were soon added to 900-909. Improved sanding apparatus for all 4 drivers was applied to provide more efficient distribution and avoid wastage. Judicious use of sand was required due to the high power to adhesion weight.

Engines 924-933, when new, were delivered to Fratton (Portsmouth) for working London to Portsmouth services over a twisting, graded route. Their superior boiler capacity enabled them to upgrade the service, where they could outperform their predecessor 2-6-0's (with a superior tractive effort to the "Schools") and maintain a comfortable "reserve" in the bargain. Again, the 1937 electrification of these services displaced them, but not before some 90 mph speeds had been clocked in this section.

These same ten engines went "west" to Bournemouth, and there was a possibility that they could take over assignments from the King Arthur 4-6-0's, which were needed elsewhere. They came through with flying colours in the contest even with the load limit of ten coaches stretched (under traffic pressure) to eleven or twelve. These 67 ton engines handled loads over 500 tons (fourteen and fifteen coaches - 525 tons was once recorded) without serious loss of time, without double-heading, or without "thrashing". In fact, the light careful touch brought out their best, and with 365 tons they had no difficulty matching 4-6-0 performances.

FURTHER MODIFICATIONS

In 1937, Mr. Maunsell's successor, Mr. O.V.S. Bulleid, evinced a keen interest in the Schools, applying advanced technology to improve their performance. The Lemaitre multiple-jet blast pipe and rather unsightly large diameter chimney was adopted on nos. 900, 901, 907, 909, 914, 915, 917-921, 924, 929-931, 933, 934 and 937-939. No. 937 had also been experimented on by the provision of an extended smokebox to accomodate the blast pipe arrangement set on an angle.

THE ENGINE THAT SAVED THE BRIDGE

One incident during the 1939-1945 war deserves mention. During the night of May 10-11th, 1941, one of London's worst air raids was in progress. The roof of Cannon Street station was on fire and engine 934, "ST. LAWRENCE", plus no. 1541, were used to move an empty train out onto the approach bridge over the River Thames. Immediately afterwards, 934 was hit by a high explosive bomb in the boiler, but saved the bridge from serious damage. Despite the damage sustained, the engine was rebuilt to continue in service with the rest of the class.

NATIONALISATION

In 1948, the "Schools" were nationalised, being renumbered by the addition of 30,000 to their numbers (as did all Southern Railway locomotives).

It might be remarked that their original number allocation was in the ex-London & South Western Railway (pre-1923) series, used for ex-L.S.W.R. engines and new designs introduced by the Southern as such. All engine numbers in this series were prefixed by an "E" (for Eastleigh Works, the original shops of the L.S.W.R., later the Southern). In July, 1931, the prefix designation was dropped and all Southern power renumbered as follows:

	Previous	New
ex-L.S.W.R. & new designs	"E" prefix above number (Eastleigh Works)	Drop prefix
ex-S.E.C.R.	"A" prefix above number (Ashford Works)	Add 1000 to number
ex-L.B.& S.C.R.	"B" prefix above number (Brighton Works)	Add 2000 to number
Duplicate numbers from above	O before number	Add 3000 to number

Thus only nos. 900-909 bore "E" prefixes for a short period, the remainder being built after the 1931 renumbering.

THEIR FINAL HOUR

In October, 1960, the first withdrawal of a "Schools" was drawing closer as no. 30909 spent most of the month at Ashford awaiting a decision on major repairs to its boiler, but in November it received repairs and returned to service.

By December, the progenitor of the class, no. 30900 "ETON" was stored unserviceable at Brighton Works in a dilapidated condition. It was expected it would be the representative of the class preserved by the British Transport Commission, but since it had a multiple-jet blastpipe and was in such poor condition, eventually another "unmodified" engine secured the honour.

In January, 1961, nos. 30919 and 30932 were withdrawn and sent to Ashford for scrapping in February of that year. By the end of 1961, fifteen of the class had been withdrawn, five more followed by March, 1962, five more in October and November, and on December 31st, 1962, the last twenty "Schools" were officially retired from service, making extinct the regular use of 4-4-0 type locomotives on British Railways.

In their declining months, the "Schools" added to their service laurels, and put in some outstanding performances in areas for which they were not designed.

Commencing in August, 1961, tenders from scrapped "Lord Nelson" 4-6-0 engines were applied to the "Schools" to increase their braking power in freight service. First so equipped was no. 30912, with tender from no. 30865, the first "Lord Nelson" to be withdrawn (in May, 1961). In addition to freight assignments the "Schools" continued to handle passenger assignments in the South Eastern Section. In fact, the last regular main line steam run on the Division, on the 5:45 a.m. from London Bridge, was handled by a "Schools" until it was withdrawn in December, 1961.

By late summer, 1961, the "Schools" were travelling west, handling relief trains in place of Class N15 "King Arthur" 4-6-0 and "West Country" 4-6-2's (the heaviest power on the Southern!). In August, a "Schools" (no. 30937) took over a west of England train when a 4-6-2 failed; others handled Waterloo to Lymington Pier Expresses, and worked West of England reliefs to Salisbury or through to Exeter, handling ten cars on the average. In January, 1963, the severe winter weather resulted in a few "Schools" being returned to service for emergencies (despite an injunction that these, and other classes, were to remain retired under all circumstances).

It might be noted that when no. 30900 "ETON" was retired on February 10, 1962 (to be broken up on March 17, 1962), it was almost 32 years to the day it first emerged from Eastleigh to herald a new chapter in British steam annals and it had officially logged 1,032,969 miles of service in that period.

EPILOGUE

Amongst enginemen, the popularity of these engines never waned. Whatever the odds, on the road the "Schools" displayed a response to handling and a degree of stamina which found favour with the man on the footplate.

Throughout their career these engines seem to have come on the scene at the closing stages of "an era"; to Eastbourne before 1933, to Portsmouth before 1937 and to the Kent Coast before 1959; they handled services prior to electrification. Diesel M.U. trains replaced them to Hastings. Yet, they were on hand for steam's final hour on the Southern, handling both new and old services as they had always, without complaint and with excellent performance.

Superlatives have often been used in describing new locomotives. The true worth of a design must be judged by long term results and on this basis, the "Schools", last of Mr. Maunsell's designs and last of the 4-4-0's built by British railways, pass into locomotive history as the last and the best of them.

Numerical Listing of "Schools" Class Withdrawals:

900 901 902	3/5/62 12/30/62 12/30/62	910 911 912	12/8/61 12/30/62 12/17/62	920 921 922	12/8/61 12/30/62 12/8/61	930 931 932	12/30/62 10/10/61 12/8/61
						933	2/10/61
903	12/30/62	913	2/1/62	923	12/30/62		
904	8/23/61	914	8/23/61	924	2/1/62	934	12/30/62
905	1/4/62	915	12/30/62	925	12/30/62	935	12/30/62
906	12/30/62	916	12/30/62	926	12/30/62	936	12/30/62
907	10/10/61	917	12/17/62	927	2/1/62	937	12/17/62
908	10/10/61	918	11/9/61	928	11/19/62	938	8/23/61
909	3/5/62	919	2/10/61	929	12/17/62	939	8/23/61

Note - No. 925 stored for preservation by British Transport Commission. No. 926 stored for preservation in the United States (Empire State Railway Museum, Middletown, N.Y.)

A listing of all locomotive numbers and names follows:

900	ETON	914	EASTBOURNE	928	STOWE
901	WINCHESTER	915	BRIGHTON	929	MALVERN
902	WELLINGTON	916	WHITGIFT	930	RADLEY
903	CHARTERHOUSE	917	ARDINGLY	931	KING'S WIMBLEDON
904	LANCING	918	HURSTPIERPOINT	932	BLUNDELLS
905	TONBRIDGE	919	HARROW	933	KING'S CANTERBURY
906	SHERBORNE	920	RUGBY	934	ST. LAWRENCE
907	DULWICH	921	SHREWSBURY	935	SEVENOAKS
908	WESTMINSTER	922	MARLBOROUGH	936	CRANLEIGH
909	ST. PAUL'S	923	BRADFIELD*	937	EPSOM
910	MERCHANT TAYLORS	924	HAILEYBURY	938	ST. OLAVES
911	DOVER	925	CHELTENHAM	939	LEATHERHEAD
912	DOWNSIDE	926	REPTON		the second of Paris
913	CHRIST'S HOSPITAL	927	CLIFTON	* or	iginally UPPINGHAM

An Appeal

Above is a biography of the "Schools" class locomotives of the Southern Railway. Many of our readers will be familiar with these engines since they are well known to motive power students the world over, as well as to any former residents or visitors to England.

A project has been announced to bring one of the "Schools" to the U.S.A. It is sponsored by the Empire State Railway Museum of Middletown, N.Y. (who presently operate steam on their M. & U. trackage) but is being personally headed by Mr. Edgar T. Mead of that group. As a result of prior negotiations, British Railways executives have carefully selected the best example of this class for the purpose and set it aside for emigration. The engine selected is no. 30926,

"REPTON", which not only has the lowest accrued mileage since a recent overhaul, but also is an "unrebuilt" version as close as possible to the design as originally built.

In addition to "REPTON", the group hopes to bring out two coaches, and in addition to operating this lightweight, economic consist on the Museum's own trackage, there are indications that the idea of running it on other lines will be favourably received.

Our member Mr. Ray Corley, (whose association with the "Schools" goes back many years) is a member of the Advisory Committee for this project, and is anxious to solicit support from Canadian fans to bring one of these fine engines closer to home. Any contributions would be most welcome, as promptly as possible, addressed to

Mr. Edgar T. Mead, Empire State Railway Museum, 1158 Fifth Avenue, NEW YORK 29, N.Y., U.S.A.

Please identify contributions (1) for preservation of no. 30926 "REPTON" and (2) indicate your Society membership in Canada as evidence of our support.

Mr. Corley would be happy to furnish additional information, or accept contributions for Mr. Mead, at 490 Albertus Avenue, Peterborough, Ontario.

MISCELLANY

- If you should see a tank car marked "UTLX 84899" you are looking at a strange car with a strange lading. The car has been designed by Procor, Ltd., Oakville, for hauling loads of refrigerated liquid fruit juices under a minimum of supervision and with little chance for spoilage. The 8,500 gallon car carries no cooling equipment, but depends on the insulation surrounding its stainless steel inner tank to maintain the low temperatures. Even on days of 100°F. temperatures, the contents of the tank will heat up only 3°F. over a ten-day period. The insulation between the inner and outer tank walls is of expanded plastic foam. Dimensions of the car are: length 53' 9½", height 14' 5", light weight 68,100 lbs.
- Following their development by the Canadian National and several independent manufacturers, the Canadian Pacific has placed orders for 250 aluminum tank-type hopper cars of 70 ton capacity. National Steel Car Corporation at Hamilton, Ontario will build 150 of the cars while Marine Industries of Sorel, Quebec will build the balance of the order. The cars will be assigned primarily to the haulage of potash in western Canada, although they will likely see other service, including the carriage of other dry, bulk commodities, such as sugar or cement.
- The Canadian Pacific has placed an order with General Motors Diesel, Ltd., London, Ontario for 12 model GP-35, 2500 horsepower road-switcher type locomotives similar to the two units numbered 8200-01, delivered this spring. The new units, however, will develop 250 horsepower more than the two GP-30's, and will probably be numbered 8202 to 8213, class DRS-25a.
- The Board of Transport Commissioners, in a judgement made public at Ottawa, has given the Canadian Pacific Railway permission to withdraw passenger services between McAdam and Edmunston, New Brunswick. The 161-mile line was served by a daily except Sunday Dayliner run in each direction, train nos. 123 and 124.
- Despite the use of three cars to form trains 601-02 between Truro and Halifax, the C.N.R. is often forced to hire local buses to handle the overflow crowds that present themselves for these trains. To make matters worse, taxis have had to be hired at times to handle the bus overflow! No doubt the popularity of the "Red White and Blue" fare plan has had much to do attracting such patronage for these trains.
- Recent sales of grain and flour to overseas countries will mean greatly increased traffic on both of Canada's major railways. The \$500 million Russian sale alone represents 114,000 carloads, to be moved from the Prairies to the Lakehead, and, after the winter freeze-up, to Atlantic coast ports such as St. John, New Brunswick. Another sale to Japan will mean a similar increase in westward traffic to Vancouver, for a period of 8 to 12 months.

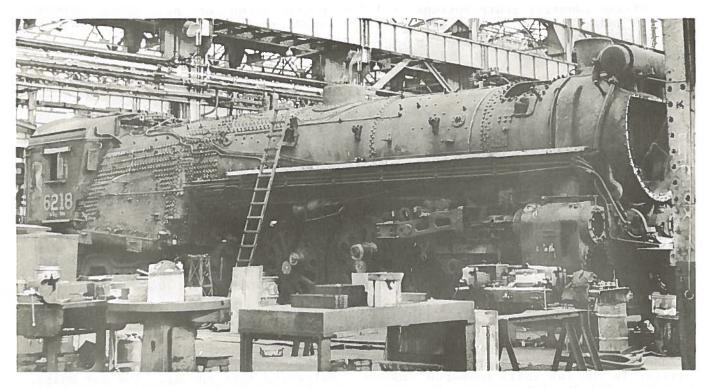
NEWS: LWay Raphotos

While at first glance the recently discovered body of T.T.C.
"Harvey" trailer no. 2897 (1.3 miles north of Ennismore, Ontario) might appear to be just another of dozens of decrepit car bodies located around the province, closer inspection reveals that the owner has an appreciation for the historic.

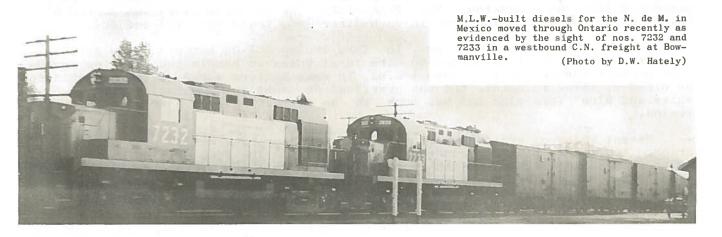
Not only is the car number carefully preserved on the front end (see photo), but the entire interior has been left in its exact original condition, with all seats and the conductor's stand intact, and no paint has been applied to any interior surfaces.

(Photo by R.F. Corley)





Photographic proof of the rejuvenation of C.N.'s 6218 is presented here, in this photograph by Geo. W. Roth. Besides a complete boiler retubing, the engine is receiving a thorough overhaul of its running gear and auxiliaries and should be fit for service until 1971.



C.N.'s passenger business booms in the Maritimes (see C.N.R. News) as shown by this crowd at Truro. The Ocean Limited, with 6700 as power is on the left, while the Halifax Railiner waits on the right.

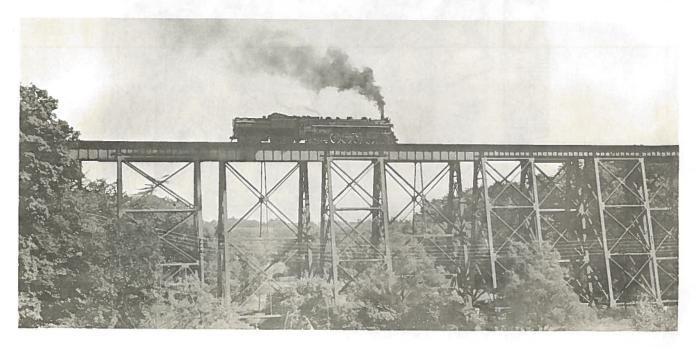
(Photo by K.S. MacDonald)



On September 13th, Northern 6167 was on display in the C.N.'s freight yard in Leaside on the occasion of the town's 50th Anniversary celebrations.

These two photos by J. Wm. Hood show the engine at Oriole station on its way to the yard, and then picking its way gingerly across the Canadian Pacific's high trestle at Eglinton Ave.





U.C.R.S. Announcements.

OCTOBER MEETING

The October meeting of the Society will be held on Friday, October 18th, 1963 in Room 64 of the Royal Ontario Museum, Bloor Street and Queens Park, commencing at 8:15 p.m.

IMPORTANT NOTICE REGARDING MEETING PLACE

ARRANGEMENTS HAVE BEEN MADE FOR THE SOCIETY TO HOLD ALL OF THE REMAINING REGULAR MEETINGS OF THE 1963-1964 SEASON AT THE ROYAL ONTARIO MUSEUM IN ROOM 64. MEMBERS ARE NOW ASSURED OF A STANDARD LOCATION AND TIME FOR THIRD FRIDAY MEETINGS, FROM NOW TILL JUNE, 1964.

HAMILTON CHAPTER MEETINGS

The October meeting of the Hamilton Chapter will be held on Friday, October 25th, 1963, in the Board Room of the C.N.R. Hamilton station.

NOVEMBER OUTDOOR MEETING

There will be no outdoor meeting on the first Friday of November due to the Society's Annual Banquet being held on that date.

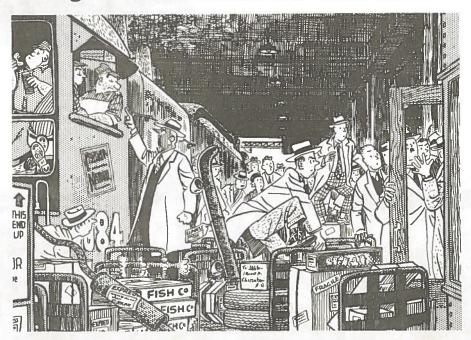
ANNUAL BANQUET

The Annual Banquet of the Society will be held on Friday, November 1st, 1963, at the Ship's Inn in the Marine Museum of Upper Canada, Exhibition Park, Toronto, commencing at 7:15 p.m. sharp. Price will be \$2.50 per person. The guest speaker for the evening will be Mr. Basil M. Headford, who can always be counted on to give a very interesting and informative "railfan type" talk.

EXCURSIONS

The Society will operate a tour of the Toronto Transit Commission's lines on Sunday, October 27th, 1963. The trip will be of six hours duration and will use a Witt car. Fare will be \$2.00 per person, and will leave from Bay and Wellington St. at 10:00 a.m. Ample time has been allowed for a lunch stop, and for many photo stops.

Worth a Laugh _____ Courtesy Doug. Wright and the Montreal Star.



"If we drive in, there's nowhere to park . . . you and the tramways keep raising the fare and reducing the service . . . in fact, nobody likes us and IT'S MUTUAL!".