

June, 1950 - Number 53

SOCIETY NEWS

The Society held its last meeting until September on May 19<sup>th</sup> with a good crowd in attendance. On June 17<sup>th</sup> the Society is cooperating in the all-day excursion of the Central Ontario Train Trip Committee to Coboconk, Lindsay, Port Hope and return to Toronto.

TORONTO'S HELPER AND PUSHER SERVICES By George W. Horner

Probably the best known helper service around Toronto is on the CNR's main line east of Toronto, where all freight trains carrying more than 40% of their tonnage rating require a helper engine between Don and Scarboro eastbound and between Port Union and Scarboro westbound. This service is maintained by 2-10-2 (Santa Fe) type engines, numbers 4100 to 4104, and is supplemented by an odd Mikado type engine when there is increased traffic or when one of the 4100 class is in the shops for repairs. Occasionally an 8200 or 8300 class eight-wheeler switcher is used for a helper, but these engines are not satisfactory as they are hand fired. Early in 1950 a smaller type of Santa Fe locomotive was added to the helper list, with engines 4019 and 4035 being used.

A 6200 class 57% locomotive with a 4100 class helper of 80% will haul a train of 4200 tons from Don to Scarboro, a distance of 7 miles, while the same engines will haul only 3700 tons between Port Union and Scarboro, a distance of 7½ miles. The rise from Port Union or Don to Scarboro is 300 feet; less tonnage can be handled westward because of the sharp curves on the stiffest part of the grade. Passenger trains of over 25 cars require an assisting engine, but this is a rare sight as they seldom have over 18 cars.

These helper locomotives are always headed east, and as there is no means of

turning them at Port Union, they make the trip from Port Union to Scarboro backing up on the front of the road engine. Mikados and other engines without backup sanders are not very satisfactory in this service.

On occasion when a westbound freight train is double headed with two Northern type engines and requires also a helper at Port Union, the helper engine is cut into the train about eight cars from the road engines. This is because of weight on the bridge over Highland Creek. This is the only instance in the vicinity of Toronto where a helper engine is cut into the train.

During the early 1930's, the 4100 class locomotives were also used to spray the roadbed to keep the dust down. An engine would leave Toronto thirty minutes ahead of No. 6 and wet the roadbed to Scarboro, and return to Toronto ahead of No. 5, wetting the westbound track. This was done when competition was on with the CPR to provide better service.

These same helper engines are used a most daily to assist the Belt Line switcher from Bathurst Street Yard to Dufferin Street on the Belt Line. The stiffest grade is from Fairbank Junction on the main line to Dufferin Street on the Belt Line. The switcher, usually an 8200 or 8300 class engine, will handle up to 15 cars alone, up the hill and just clear of the main line at Fairbank Junction. Then it will have to double the hill with the 15 car train. With 16 or more cars, a pusher is required, and in this case a 4100 class engine can be seen pushing the train behind the caboose. This method is used up to 26 cars. With 27 or more cars, the helper locomotive must be coupled on the front, as the train will have to double the hill. A 4100 and 8300 class engine have been known to stall with 22 or 23 cars on this hill and, when stalled, the pusher on the rear cannot assist in doubling the train. When the train exceeds 26 cars and both engines

are in front, they have to double the train up the hill from Fairbank Junction, taking the first half over the hill and down into the passing track at Bathurst Street. They then return to Fairbank Junction for the second half of the train and pull it to Bathurst Street where the train is coupled

Another service which these helper engines perform is assisting yard transfer engines from Bathurst Street Yard to West Toronto Yard. If the transfer has over 35 cars, a pusher is put behind the caboose at Bathurst Street, and it pushes as far as the CPR interchange tracks east of West Toronto. Here it cuts off on the fly and returns to Parkdale on the westward track. If the transfer has over 65 cars, the helper is coupled on the head end. As the transfer makes this run in the very early hours of the morning, the move is seldom seen by any of the fans.

The fifth service in which these engines are used is between Don and Oriole, where the Leaside transfer is assisted if it has over 26 cars. One may say that he has seen northbound freights go up this hill with 40 or more cars, a smaller engine and no helper. This is correct; the Leaside transfer needs a helper locomotive because the 8200 and 8300 class engines used on this transfer are not equipped with pony truck wheels, and for reason they stall on the rail-greasers, three of which are located on the curves between Don and Oriole. Helper engines seldom make this run as the transfer rarely has the car limit.

The CPR has to maintain an even greater fleet of helper engines than the CNR, as it requires helper engines in all three directions out of Toronto, on all freight trains and most of the passenger trains. On the eastbound main line a passenger train with a 3100 class Northern type engine handles 11 cars up the hill alone; with 12 or more cars, a helper is required from Don to Leaside, although the helper is usually coupled on at the Union Station. If the road engine is a Pacific or Hudson type, the single load is

together again. Then the helper goes through the passing track and couples on the rear of the train, to haul the entire train backwards up to the top of the hill at Dufferin Street, where the switcher commences to work, and the helper engine cuts off and returns to the city.

8 cars, with 9 or more requiring assistance.

If the train exceeds 16 cars the helper engine must go through to Agincourt. The engines used for this service are usually 3600 or 3700 class Consolidation locomotives, although practically any type is liable to be seen. All freight trains are assisted from Lambton Yard through to Agincourt with the same type helpers.

The only freight train operating over the line between Don and Leaside is No. 910, and this train has a helper engine from Parkdale Yard through to Agincourt, or two helpers if the train exceeds 2200 tons.

Northbound passenger trains of over 15 cars require a helper from Toronto to Bolton, a distance of 25 miles. Northbound freights also have assisting engines from Lambton Yard to Bolton. The Sudbury merchandise train leaving from Parkdale Yard will have a helper engine on the head end with another pusher on the rear end of the train.

The pusher on the rear goes only as far as West Toronto diamond, where it cuts off on the fly. This procedure takes place only on train No. 955 when there is sufficient tonnage to warrant the two helpers.

Westbound passenger trains of over 10 cars have assisting engines from Toronto to Orr's Lake, a distance of 60 miles. If the train consists of 15 or more cars, the helper locomotive goes through to London. Freight trains also have helper engines from Lambton Yard to Orr's Lake.

Transfers operating between Parkdale Yard and West Toronto have assisting engines if they have over 50 cars. Three or four such transfers operate in the early hours of the morning, but are seldom seen in the daylight hours.

For all these services the CPR uses

3600 and 3700 class Consolidation type engines, and when these are all in service and more helper locomotives are required, any type will be sent out. The most unusual helper engine that has been seen was 4-4-4 type No. 3000. Also, TH&B engine 502 has been used as a helper to Agincourt when it has been in Toronto for an all-night layover.

This completes the summary of helper service in the Toronto area.

SUBWAY CONSTRUCTION PROGRESS REPORT - JUNE  
1, 1950

By John M. Mills

On May 18, 1950, tenders on Sections S-3, S-4 and S-5 of the Yonge Street subway were opened.

These contracts cover the portion of the subway from Alexander Street to the Muir Memorial Gardens. On May 25, a contract for all three sections combined was awarded to Rayner Construction Limited, an all-Canadian

Concrete pouring has continued between Queen Street and Dundas Square and with the completion of all excavation here, the base slab is now continuous from Queen Street to Dundas Square, and the centre wall between the subway tracks is now being poured. Construction will begin north of Dundas Square about July 15 at which time the temporary car tracks on Maitland and Alexander Streets will be ready for operation.

Demolition of buildings on Sections S-3 to S-5 has continued, and the future path of the subway can be easily traced from the gaps left by the removal of buildings. About half the buildings will have been torn down when construction starts here, and the remainder will be demolished as rapidly as they become available.

MOTIVE POWER NEWS

A third Canadian diesel builder has entered the field with the announcement that Fairbanks-Morse has purchased a controlling interest in the Canadian Locomotive Company of Kingston, Ontario. Fairbanks-Morse, one of the big four diesel locomotive manufacturers in the United States, plans to

company with headquarters in Toronto. Construction is scheduled to begin at several points about July 1.

On the sections already in progress, work continued at the steady rate previously maintained. All surface work is being concentrated on Yonge Street between Richmond and Queen Streets, and on Queen Street itself, and two shifts covering 16 hours a day have been in operation to speed the work at this busy intersection. On Front Street, the 24 inch gas main and the low level interceptor sewer have been replaced by new lines outside the area affected by the subway.

Intermediate lift excavation is being done from the York Street ramp as well as from Colborne Street. Also under way is the difficult task of completing the excavation on the curve under the bank building at the corner of Yonge and Front Streets without disturbing the business of the bank. turn out its standard models at Kingston for sale to Canadian railroads.

The first two locomotives for CPR's Algoma Division dieselization have been received. They are MLW 1500 H.P. road switchers 8405 and 8406. Thus far they have been used in general tests on the CPR and have been loaned to the Algoma Central and Hudson Bay Railway to act as demonstrators on that company's property.

Currently being delivered by Montreal Locomotive Works to the Canadian National are the eight road freight "A" units 9400-9407.

These are being publicized as the first streamlined diesel-electric locomotives built in Canada. They are being tested in pairs on the main line between Montreal and Belleville and Belleville and Toronto before being sent on to the Lake St. John subdivision which will be their home.

By the time this is read, all of the Prince Edward Island locomotives 7802-7819 should have been delivered from Erie, Pennsylvania, to the CNR. These 18 locomotives, with 44 ton switchers 7751 and 7752, will comprise the CNR's motive power in the island province.

## HISTORICAL NOTES

By Robert Duncan

The first railway in the present Province of Ontario was a short portage road-around Niagara Falls from Queenston to Chippawa. This was the Erie and Ontario Railway, chartered in 1833 and built in 1839. Horses were the first motive power, the grade near Queenston being too steep for locomotives of the day. The road was rebuilt in 1854 (nearly adjacent) with better grades, was extended to Niagara-on-the-Lake at the north end later to Fort Erie at the south. Eventually it was absorbed by the Canada Southern Railway.

The Ontario, Simcoe and Huron Railway was chartered on August 29<sup>th</sup>, 1849, with capital of £500,000 sterling in five pound shares, to run from on the southern shore of Lake Huron (Georgian Bay) and to Barrie. The company was authorised to raise stock either by subscription or by lottery. The latter method was an ingenious idea of the project's principal promoter, Mr. F. C. Capreol, an Englishman living in Toronto, but was never made use of. The name was changed after the completion of construction to the Northern Railway of Canada.

The coaches of the Toronto and Nipissing Railway were painted a brilliant yellow with crimson upholstering inside. One of the coaches, possibly a baggage or mail car, had an open passage and railing on side in order to get from one car to another. When the track was being changed from narrow to standard gauge, it was not unusual to see a train of mixed gauge cars joined together with "goose neck" couplings. This sort of thing gave no end of trouble.

(To be continued)