

## G.T.R. Betterments, Construction, Etc.

**Bonaventure Station Improvements.**—The proposals for the re-arrangement of the accommodation at this station, and for additional improvements there have not yet received final sanction.

**Montreal Terminals.**—We are advised that the proposals in reference to increased accommodation at the Montreal terminals have not yet been matured. Engineers are working on the plans, and it is expected that they will be ready for approval at an early date.

**Allandale Yards, Etc.**—A 25-stall roundhouse is being built at Allandale, Ont., by T. Hall, of London, Ont. It is also intended to erect modern coal chutes, and to increase the capacity of the yard by adding additional tracks, which are much needed to take care of the increased volume of traffic. The plans for the yard have not been finally adopted.

**Yonge St. Bridge, Toronto.**—The Railway Committee of the Privy Council has directed the construction of a bridge over the tracks at the foot of Yonge st., and that the cost of the same shall be borne by the G.T.R. and C.P.R. companies. (Oct., pg. 348.)

**Toronto Yards.**—The outward freight shed at the new yards in Toronto is almost completed, and rapid progress is being made with the office building at the corner of Front and Simcoe streets. Track laying in the yard is expected to be commenced early in Nov. (Oct., pg. 348.)

**Brantford-Paris Gradient Reduction.**—The improvements in progress between Brantford and Paris, Ont., in connection with the carrying of the main line through Brantford are still under way. The gradient of 1% is being reduced to 0.4%, with the exception of about a mile near Brantford, where the grade will remain at 1%.

**Fort Erie Roundhouse.**—A 25-stall roundhouse is nearly completed at Fort Erie, Ont., and the yards are in course of re-arrangement. T. Hall, of London, Ont., has the contract for the erection of the roundhouse.

**Dunnville Station.**—A new station building has been completed at Dunnville, Ont.

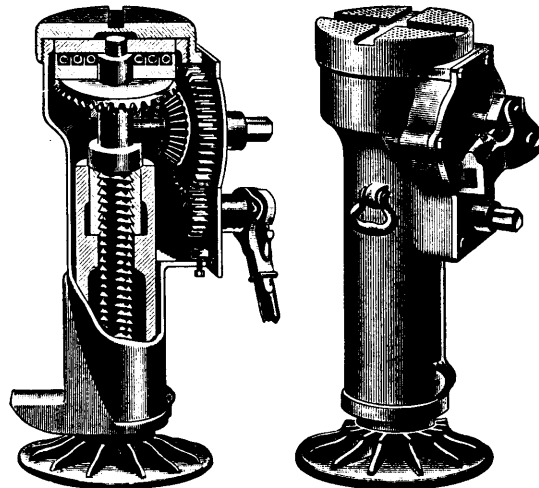
**Kingscourt-Sarnia Double Tracking.**—The work consists chiefly of the construction of a second track alongside the existing one. Grading is practically finished between Sarnia and Wyoming, Ont., and the greater part of the masonry structures are completed. Between Wyoming and Kingscourt about two miles of grading have been completed.

## Grand Trunk Pacific Railway.

The act incorporating the G.T. Pacific Ry. Co. has been passed by the Dominion Parliament, as also has the act confirming the agreement with the company, and providing for the construction of a national transcontinental railway. In the estimates \$500,000 has been provided for the purpose of making surveys, etc., for the Government section of the line between Moncton, N.B., and Winnipeg. The G.T. Pacific Ry. Co. has not been formally organized, but it has employed a large staff of engineers, which has been at work from the Quebec boundary to the Pacific coast at Port Simpson during the summer. The work is being done under the direction of J. R. Stephens, Assistant Chief Engineer of the G.T.R., who was formerly connected with railway work in the Southern States, and the staff under him is almost entirely composed of U.S. engineers. The headquarters of the staff is at Winnipeg, and divisional offices have been established at North Bay, Ont., Winnipeg and

Edmonton, Alta. From North Bay four survey parties are in the field, operating between the Quebec boundary and the north shore of Lake Nepigon; from that point westerly the surveys have been carried on by parties working from Rat Portage and Winnipeg; and parties have also been working east and west from Edmonton.

C. M. Hays, 2nd Vice-President and General Manager G.T.R., and who, it is reported, will be President of the G.T. Pacific Ry. Co., made the following statement before the prorogation of Parliament: "The G.T. Pacific incorporation act having been passed by the Senate, and the amendments offered therein concurred in by the Commons, the bill is now only waiting the Royal assent to place the matter in a position where the company can be organized, and take definite form to inaugurate the necessary action preparatory to undertaking the obligations entered into by the company with the Government. The reconnaissance survey is proceeding vigorously, and in fact has been ever since early last spring. We have between 15 and 20 parties in the field, some of whom have about completed the work on their district. Others will keep on all through the winter. Great care is being taken with a view of obtaining a line with a minimum grade not to exceed



NORTON BALL-BEARING JACK, WITH SECTIONAL VIEW.

0.4%, with no greater than 2 or 3 degree curves. On some portions of the road where the country is comparatively unknown, and owing to the lack of transportation facilities supplies are difficult to obtain, progress is not as rapid as would otherwise be the case. As to plans for construction and the points at which a beginning will be made, that is dependent upon the completion of surveys. We now have the territory well covered. The first parties sent out, which were started before the Government policy as to the eastern division was developed, located between Winnipeg and North Bay, the theory being that that was the section of country that was most in need of additional facilities. While it is undoubtedly true that for several years to come a large proportion of the grain crop of the Northwest will move out by water during the season of navigation, there is to-day a very considerable quantity moving during the winter months by rail north of Lake Superior, and this quantity will be increased in a constantly growing volume as rail facilities for the economical and expeditious movement of the traffic are provided. The new line, with its four-tenths per cent. grades, will have great advantage in this respect. Our surveying parties are also well distributed across the territory from Winnipeg west, and construction on that portion of the line will be

pushed as soon as the results of our surveys are known, as also the construction of the branches from a port on Lake Superior (which port is yet to be determined), to a junction with the eastern division, and a line from North Bay north, also intersecting the eastern division. As to the plans and intentions in connection with the work on the eastern division, I will have to refer to the Government, that portion of the undertaking being, as you are aware, in their control. You ask within what time the line would be completed, and, replying thereto, I will state that of course while this is dependent on conditions generally, the results of surveys, the situation as regards labor, movement of supplies, material, etc., it is not likely that the road will be completed short of five years."

It is stated unofficially that the western portion of the road will be built by the G. T. Pacific Ry. Co., and the work will be done by contract, tenders being asked from contractors. It is not yet announced where the Pacific terminus of the line will be. Port Simpson, B.C., has been most frequently spoken of, but Bute Inlet, and at least one other port in B.C. have been considered.

## A New Type of Ball-Bearing Jack.

A. O. Norton, of Coaticook, Que., has recently designed and brought out a new ball-bearing ratchet screw jack having a capacity of 60 tons, and which is intended for use under 80,000 lbs., and 100,000 lbs. loaded cars, as well as for wrecking equipment. This jack is similar in construction to the earlier type of Norton ball-bearing jack, in that the gears are cut from solid steel forgings, and it has ball bearings to reduce the friction. Mr. Norton advises us that all the working parts are protected from grit and rust; that, being a screw jack without filling, packing or valves, it is absolutely safe under all conditions; that it cannot slip or drop the load, and that it is always ready for instant use.

## Canadian Northern Ry. Construction.

**General.**—In a recent interview in Nova Scotia D. D. Mann, Vice-President, said there was no truth in the report that his firm had decided to abandon its project of a transcontinental line. It was intended to have a line from the Atlantic to the Pacific, and they hoped to connect the Nova Scotia system now under construction, a charter having been obtained for the connecting line. The C. N. Ry. would also be extended from Winnipeg to Hudson's Bay.

**Port Arthur Yards and Docks.**—During the past season a good deal of filling has been done at the yards at Port Arthur, to build them up to grade, and this work will be continued as necessity requires. A dock was erected early in the season specially for the unloading of steel rails, and has been of great assistance in the transferring of a large quantity of rails from the steamers to the cars for use in connection with the Company's western extensions.

**Port Arthur Elevator.**—An additional working house elevator and a series of tile tanks for the storage of grain are under construction. These will have a capacity of 3,500,000 bush., bringing the Company's total storage capacity at Port Arthur to 7,000,000 bush. (July, pg. 243.)

**Port Arthur to Winnipeg.**—Ballasting gangs were employed all summer on the track between Port Arthur and Winnipeg, and the roadbed is in excellent condition. Twenty miles of steel rails were changed between Port Arthur and Stanley junction, Ont. Section houses and station buildings have