driving for bridges, the construction of concrete piers and pedestals for the Pembina River bridge, and some grading in rock cuttings and muskegs between mileage 65 west of Edmonton and Wolfe Creek. On the Mountain section the first 100 miles easterly from Prince Rupert was under contract and fair progress was being made with the grading, which is largely composed of solid rock. The quantities excavated were 633,396 cubic yards of solid rock, 94,470 cubic yards of loose rock, and 94,407 cubic yards of earth. There had been 32 culverts constructed on the 100 miles, and a capacious wharf and warehouse had been erected at Prince Rupert. There were 1,850 men and 90 horses and mules engaged on the work. This was the only work in progress on the mountain service, which is about 836 miles long.

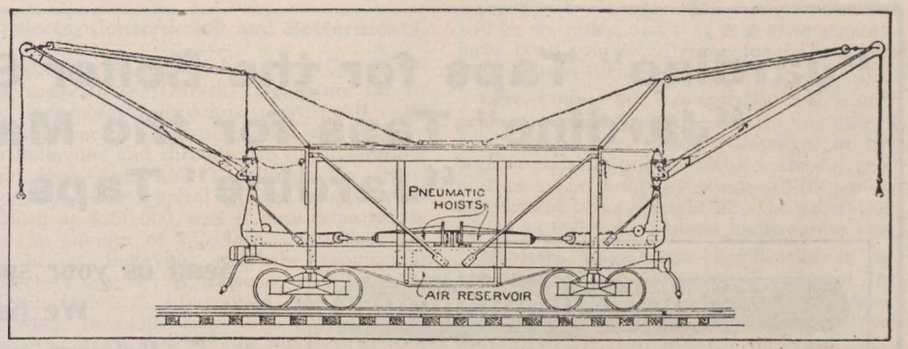
Replying to questions as to the financing of the line, the Minister of Railways said the Government had guaranteed bonds in respect of the construction of the Western Division N. T. Ry. to the amount of £3,200,000, all of which had been issued and sold at 92½, the net proceeds of the sale being $14,385,600. The sum of $10,335,482.92 had been paid on account of work done on the Prairie section; $2,150,852.30 on account of the Mountain section; and the balance, $1,899,264.78, was deposited in bank to the credit of the Receiver-General. The G.T.R. Co. had guaranteed series A bonds to the amount of £2,100,000, and series B bonds to the amount of £1,354,000. Certain debenture equipment stock of the G.T. Pacific Ry. had also been guaranteed by the G.T.R. The whole of series A bonds, which realized £1,975,705, had been used for construction on the Prairie division, and £128,000 of the series B bonds, which realized £1,228,755, had been expended on the Mountain section.

The final location of the G.T. Pacific Ry. between Wolfe Creek and Prince Rupert has been completed, and it is stated that surveys will be started during the summer for the branch from near Fort George to Vancouver. In connection with the construction going on in the vicinity of Prince Rupert tenders have been asked for the supply of 300,000 cross and switch ties, and 4,000 telegraph poles.

The British Columbia Legislature has before it a bill ratifying an agreement between the Government and the company extending the time within which the company must complete the survey and subdivision of the townsite of Port Rupert, and in some other respects varying the agreement previously made with respect to the same. It is announced that the first sale of lots at the townsite will be made May 1.

GRAND TRUNK PACIFIC BRANCH LINES.—The Alberta Legislature has passed the act authorizing the granting of aid, by way of guarantee of bonds, for the construction of 491 miles of branch lines in the province. The Legislature was informed that the company would construct the line from Wainwright to Calgary and Coutts this fall. (See Saskatchewan and Alberta Lines, Feb., pg. 125.)

PACIFIC NORTHERN AND OMINECA RY.—In the passing of this company's bill for an extension of time through the British Columbia Legislature, it was given permission to construct a branch from the Skeena River, by way of the Copper and the Telkwa Rivers, to a junction with the G.T.P. Ry. at the confluence of the Bulkley and Telkwa Rivers. This branch is to form part of the main line of the G.T.P.R. The company is given until 1911 to construct this branch, and to 1910 to construct 15 miles of its line between Kitimat and the Copper River. (Mar., pg. 185.)



Derrick Car for Handling Railway Rails.

The increase in the weight of railway rails in recent years makes the use of machinery for handling them a necessity. A number of railways have appliances for this purpose, but an unusual type is adopted by an eastern line. The machine consists of a flat car with a derrick at each end, which is worked by a pneumatic hoist, taking air from the brake system. The car carries an air reservoir connected directly with the train line, and when this tank is to be filled the locomotive engineer allows the air pump to run the pressure up to 80 lbs. When the train is moved a valve is closed, shutting off the connection between the train pipe and the reservoir. The reservoir will hold sufficient pressure to handle 20 rails after being shut off from the train line.

The accompanying illustration shows the construction of the derricks. Each cylinder operating a derrick has a piston with a travel of 7 ft., and a pulley is attached to the end of the piston rod. A full movement of the piston pulls the hoisting cable 14 ft. The hoisting cylinders for the two derricks are independent, each being worked by a separate air cock. Both derricks can be worked simultaneously in loading or unloading rails.

Railway Rolling Stock Statistics.

Returns for the year ended June 30, 1908, show that there were added to the rolling stock of the various Canadian lines 368 locomotives, 8,302 freight cars, and 384 passenger cars. On that date there were in service 1,122 passenger, 2,392 freight and 358 switching locomotives, a total of 3,872, against 964 passenger, 2,206 freight, and 334 switching locomotives at June 30, 1907. This motive power was equivalent to 169 locomotives for every 100 miles of line, against 156 for the preceding year. In the passenger service there was one locomotive for every 30,343 passengers carried, as against one for 33,337 in 1907. In the freight service there was one locomotive to every 26,368 tons of freight hauled, as compared with one to every 28,951 tons in 1906-07. The number of passenger miles per passenger locomotive was 1,855,580, and the number of ton miles per freight locomotive was 5,418,692, showing an increase of 270,509 in passenger miles, and 120,545 in ton miles, per locomotive as compared with 1906-07.

The number of passenger cars of all kinds in service June 30, 1908, was 4,026, an increase of 384 over June 30, 1907, the distribution among the various classes being: 1st class, 1,493; 2nd class, 487; combination, 422; emigrant, 303; dining, 114; parlor, 63; sleeping, 236; baggage, express and postal, 873; others, 35.

The cars available for freight service showed an increase of 8,302, the number available being 115,709, distributed as follows: box, 72,863; flat, 21,759; stock, 5,047; coal, 11,616; tank, 197; refrigerator, 2,423; others, 1,804. In addition there were 7,180 pay, gravel, derrick, caboose, and other cars in the various companies' service. Excluding the companies' cars the supply of freight cars represented an average of 5,039 cars per 1,000 miles of line, against 4,783 in 1907. The capacity of the cars was 3,277,394 tons, an average of 28.28 tons per car; the figures for 1907 were incomplete, but they showed a car capacity of 2,908,903 tons, or 27.56 tons per car. In regard to available car supply it must be borne in mind, says the report, that the normal number of cars undergoing repairs is about 5.02% (at one period during 1907-08 the percentage reached 9.5), so that it may be assumed that at least 5,808 cars are in the shops at all times.

Victorian State Railways, Australia.—A bill is being introduced into the local Parliament providing for the expenditure of £1,000,000 on improvements of the various lines, additions to rolling stock, additional telegraph and telephone lines, etc. The railways are controlled by a commission of which T. Tait, formerly Manager of Transport, C.P.R., is chairman.

Telephone Dispatching on the C.P.R.—In reference to the particulars which we gave in our last issue respecting the extensions of the system of telephone dispatching on the C.P.R., we are officially advised that appropriations have been made for the stringing of a telephone wire between Fort William and White River, Ont., and that the work of erection will be commenced as soon as weather permits. The dispatchers will be located at White River. Appropriations have also been made for a telephone circuit between Winnipeg and Brandon, Man., and Medicine Hat and Calgary, Alta., which will be put in operation during the summer.

The Eastern Canadian Passenger Association held a meeting at Toronto, Mar. 2, for the consideration of rates for the forthcoming Alaska-Yukon Exhibition at Seattle, Wash., and for other business.

A resolution was submitted to the House of Commons, Mar. 8, by Hon. H. R. Emmerson, asking the House to secure by lease or otherwise such branch lines now connecting with the I.C.R. as will serve as direct and profitable feeders to the traffic of the said railway. After some discussion the debate was adjourned.

A bill introduced into the House of Commons by J. Conmee, M.P., has for its object the insuring to every railway employe of the privilege of exercising his franchise wherever he may be. The voter will be required to present at the poll, where he may be on the date of the election, a certificate from his home constituency certifying his right to vote. He will then vote for the candidate of his choice, and his sealed vote will be forwarded to his home constituency, and counted along with the other votes cast.