winter months. Weeding & ditching can also be done. By the use of this car the work can not only be executed with perfect uniformity, but it can be done without the employment of large crews of laborers, & at a saving of 85% on what it costs to do the work by hand. The force required to operate it properly, in addition to the locomotive, consists of a train crew, a foreman & 4 men. As illustrating the difference in time & expense of work done by this car & the same kind of work done by hand, a 30-mile section of the B. & M. trimmed with the car in 4 days could not have been formed by hand in the same time with less than 375 men, as shown by following report of one of its roadmasters:

"I took the standard cross section which was given by the engineer's department at that time, & kept figures on the cost of putting the shoulder on, which was practically the same as put on by the shouldering car, & I found that it cost us about \$75 a mile. This would allow about 100 ft. a day per man. To cover the 30 miles, which we did in 4 days time with the levelling car, it would have taken 375 men 4 days at a cost of \$2,025. The total wages of men in the shouldering car outfit were \$114.20. To this expense should properly be added \$378, the wages of 70 men employed in levelling back material which the car could not reach, & clearing up material in cuts that the car could not dispose of, making the total expense \$492.20.

"This railroad has found that it costs not less than 4 times as much to do the work by hand as when this device is used. Then, again, the work when completed by hand, even under the best conditions, will be irregular, while that done by this machine will be absolutely uniform. The actual amount of track covered in a day's work will depend upon the kind of material & the amount moved; also the width of the bank over which the material is to be put & the frequency of trains. The B. & M. has moved 500 yards of fill, levelling it 6 ins. below the top of ties & 10 ft. from rail, for a distance of 1,000 ft. in 25 minutes."

The car will be in service on the B. & M. during the entire season. For other cuts see pg. 233.

The Department of Marine has issued a pamphlet, "The Currents in the Gulf St. Lawrence, including the Anticosti Region, Belle Isle, & Cabot Straits," the information contained in it being condensed from the reports of the surveys of tides & currents for the seasons of 1894, 1895 & 1896.

C.P.R. Construction, Betterments, Etc.

Atlantic Division.—The Co. has purchased property at Bay Shore, St. John, N.B., on which to place a big coal dump of from 20,000 to 30,000 tons. The coal will be taken to Carleton in barges & hauled to the dump, where it will be piled for winter use.

New steel rails, weighing 80 lbs., are being laid on 8 miles between St. John, N.B., & Vanceboro, Me., replacing 56 lbs. rails. This will complete the line of heavy rails throughout from St. John to Montreal.

McAdam Jct. Station,-On page 235 are illustrations showing the main track elevation & the ground floor plan of the station now being erected at McAdam Jct. It will be a handsome 2½ story structure of McAdam grey granite, with Welsford red granite corners, which will make a pretty contrast in color. It will be 133x36 ft., with a basement 60x36 ft., in which will be located the coal cellar, kitchen, larder, scullery, laundry, drying room & boiler room. On the ground floor will be the lunch room & dining room, which will form part of the hotel, & ladies' & general waiting rooms, toilet rooms, ticket office, baggage & express rooms. The first floor will be divided, half being taken up by the hotel accommodations, which will consist of 7 bedrooms, parlor, reading & writing room, bath room & closets. On the other end of this floor, & separated from the hotel, will be the offices of the Superintendent & staff, train despatchers, train master, conductors, agent, freight & customs. The attic will contain 4 bedrooms for the hotel servants. A verandah will surround the entire structure.

Montreal Terminals.—The Co. recently applied to the Montreal Harbor Commissioners for use of the space adjoining its elevators, which had been assigned to the Johnson Steamship Line, but which was not being used by any boats. The Co. wants this space for the extension of its terminal facilities.

Work is proceeding between Mountain st. & the city limits, providing additional yard space & shunting grounds.

Owen Sound.—A two-story office building & additional freight shed has been built here. (Feb., pg. 39.)

Guelph.—It is said that a connection will be made between the Co.'s line at Guelph & the Guelph electric street railway.

Ottawa Station.—The building which is being erected to replace the station burned a

few months ago will face on Broad st., & will be about 600 yards north of the site of the old building. It will be of stone & brick. The contractors are Lyons & White, of Ottawa, & the contract price is said to be \$35,000. The aqueduct is being bridged to make room for the additional tracks to reach the station. (June, pg. 173.)

Ottawa Connecting Line.—Although nothing definite is being done about the construction of the proposed line across the city to connect the Co.'s union station, near the Chaudiere Falls, with the central station near the canal basin, it is said that the matter is not being lost sight of, & that negotiations are going on with a view to acquiring land on the south side of Wellington st. & along Division st. For part of the way the line will run parallel with the Canada Atlantic tracks. It is said to be probable that a subway or an overhead crossing will be put in at Bank st. (June, pg. 173.)

Carleton Place Shops.—We are officially informed that there is no truth in the report which recently appeared in some of the daily papers, stating that the Co.'s shops are to be moved from Carleton Place to Ottawa.

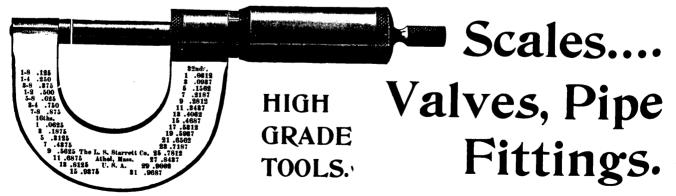
Spur at Webbwood.—The Spanish River Pulp Co. is said to have completed plans for building a spur from the Sault Ste. Marie branch to its mills at Webbwood.

Fort William.—Large additional coal unloading & storage facilities are being provided east of the old coal dumps, towards the lighthouse near the mouth of the Kaministiquia river. (Feb., pg. 39.)

Fort William to Winnipeg.—The question of double tracking the line between Fort William & Winnipeg appears to have been dropped for the present at least, & it is within the probabilities that it will be shelved for several years, as by increasing the number of crossing sidings & lengthening existing ones the necessity for the second track, which for some years to come would only be required during a very few months of the year, can be largely obviated. (Feb., pg. 39.)

The following is reproduced from the Port Arthur Herald:—"It is said that the survey made for the C.P.R.'s new line from Fort William to the height of land crosses the track of the Ontario & Rainy River Ry. three times. Another trial line will be run. We are told that it is altogether likely the O. & R.R. Ry. Co., will be approached by the C.P.R. with a view to having the tracks of the former Co.

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