

Williams & Wilson, Montreal, Que., ordered from J. C. Wilson & Co., Glenora, Ont., a 38-inch vertical "Little Giant" turbine for the Ogilvie Milling Co.'s mill in that city.

It was reported in last issue that the Brant Milling Co., Brantford, Ont., had placed an order with J. C. Wilson & Co., Glenora, Ont., for a 10-inch "Little Giant" turbine. We now learn that the company has since ordered another, an 8-inch wheel with brass buckets, which will make the seventh "Little Giant" installed in these mills.

J. C. Wilson & Co., Glenora, Ont., have just received export orders for three "Little Giant" turbines, a 33-inch, 21-inch, and 10-inch for shipment to Great Britain. The manufacturers inform us that the demand from abroad for this particular wheel is constantly increasing, and their order book indicates shipments to various parts of the Old World.

The J. Stevens Arms & Tool Company, of Chicopee Falls, Mass., owing to the rapid growth of their fire-arms business, have sold their machinists' tools' patents and goodwill to the L. S. Starrett Co. of Athol, Mass. The additional space thus gained will enable the company to increase the output of their fire-arms and automobile departments, making them one of the largest manufacturers of these articles in the United States.

Chapman Double Ball Bearing Co., of Canada, Limited, are now installing machinery at 39 Pearl St., Toronto, for their new factory. They are preparing special tools necessary for turret work. The intention of the company is to manufacture a line of ball bearings for all classes of machinery. The head office of the firm will be at 39 Scott St., Toronto; W. J. Young is general manager, and E. R. Simpson, superintendent.

The International Steam Pump Co., of New York, is bringing out a new type of high-head pump, known as the "multi-stage," that is, the water from one impeller is passed through another impeller, and so on, up to four or five stages in the high-head pumps. These impellers are all placed upon one shaft and the water circulates in the casing of the pump, there being no outside pipe connections except the inlet and outlet. The impellers and the chambers into which the water is discharged from the impeller have been designed after a long series of experiments, and it is to the proper proportions of these parts that the pump owes its efficiency. The centrifugal pump is really the converse of the impulse turbine water-wheel.

Railway Matters.

The C.P.R. has absorbed the Ottawa, Northern, and Western Railway.

W. G. Trethewey is negotiating with the town of Edmonton, N.W.T., for a street railway franchise.

The C.P.R. has placed an order with a Vancouver mill for 2,000,000 feet of lumber to be used in the construction of its new shops at Winnipeg.

The Canada Atlantic Railway has handled on its upper lake boats and thence to Coteau Landing and Montreal this season more than 8,500,000 bushels of grain.

The C.P.R. is installing a water-softening plant at Moose Jaw, Assa., at a cost of \$30,000, owing to the presence of alkali in the water used by the locomotives.

The T., H. and B. Railway has placed an order with the Locomotive and Machine Company, of Montreal, for four locomotives, two of which are to be delivered in December.

The extension of the Orford Mountain Railway from Eastman to Potton, through the Missisquoi Valley of East Bolton, Que., has begun. The old roadbed will be utilized as far as possible.

The Midland Railway, running for sixty miles from Windsor to Truro, N.S., is to be extended thirty miles, to Brule, a harbor on the Strait of Northumberland. The directors include P. Lyall and W. Strachan, of Montreal. This road will, it is claimed, give a shorter route from Prince Edward Island.

It is proposed to build an electric belt line from Windsor to Tecumseh, Ont.

The C.P.R. has let a contract for an addition to its shops at Calgary. The cost will be \$30,000.

Plans are completed for the extension of the Toronto, Hamilton and Brantford line to Woodstock, twenty-five miles.

The Seattle-Tacoma Electric Railway Co. has decided to extend its line to Vancouver, B.C., next year, in competition with the Great Northern.

Kittamaat, 100 miles south-east of Port Simpson, may be the Grand Trunk Pacific terminus. It is at the head of a deep, well-sheltered inlet, and is in every way fitted for a railway terminus.

A device for carrying the smoke from the locomotive to the rear end of the train through a closed conduit running along the top of the carriages is to be tested on the Berlin-Zossen Railway, Germany.

The north and south ends of the Bay of Quinte Railway extension, connecting the villages of Bridgewater, Queensboro, and Allen Settlement with the Central Ontario Railway, at Bannockburn is completed.

As a result of Government's transcontinental policy, the Ontario Government will extend its line 80 miles north from New Liskeard, and the C.P.R. will probably build 100 miles north of Maniwaki, Ont., on the Gatineau branch.

The deal between the Southern Traction Company, London, Ont., and the English syndicate, which is financing the scheme to build an electric railway, has been closed and the money placed at the disposal of the local company.

The G.T.R. Co. is constructing a roundhouse and machine shop at Allandale. The cost will be \$60,000. The roundhouse will contain 25 stalls for locomotives. The machine shop is to be 50 x 114 feet. Both will be built on concrete blocks.

The Scarboro Electric Railway is to be extended to Highland Creek, a distance of five miles. The road already constructed will be overhauled and improved. The extension of the Metropolitan Railway from Newmarket to Jackson's Point will proceed forthwith.

Stratford, Ont., will give a 50-year franchise for a radial railway from that town to Mitchell and St. Mary's, with the option of purchase in twenty-five years. The company, which is represented by H. M. Sloan, of Chicago, and Dr. McKay, of Ingersoll, Ont., can also supply light and power.

The Mersey tunnel, in Liverpool, England, shows a 37 per cent. increase in traffic since steam was superseded by electricity. With steam there were 283 trains a day. Now there are 750. In the first week of service there was an increase of 37,619 over the number carried in the last week of steam service.

The new double track section of the Grand Trunk between Wyoming and Sarnia, was used for traffic purposes on November 22nd. By the end of the year it is expected that the Grand Trunk System from Chicago to Montreal will be double tracked, except between Kingscourt and London, and from Waubuno to Junction Cut, west of London, Ont.

The C.P.R. is in the market for 30,000 tons of steel rails, heavy sections. The requirements specified are rigid respecting analysis and tests, and few, if any of the American mills, can fully meet them unless modified. German mills can meet the specifications, and the order may go there. If specifications are revised, American mills will be keen competitors for the contract.

The annual report of the Montreal Street Railway for the year ending September 30th, 1903, shows gross earnings for the year of \$2,222,787, as compared with \$2,046,208 for 1902. The net earnings were \$905,939, as against \$911,032 for 1902. During the year the company paid to the city \$121,209, covering all taxes, and \$47,168 on account of snow clearing. The number of passengers carried was 54,592,014, as against 49,947,467 in 1902. In order to improve the condition of its employees, the company has assisted in the establishment of a mutual benefit association to provide life insurance, relief in case of sickness or accident, and to pension those who have served faithfully for a stated period.