

completely in one motion of the machine. An interesting process accomplished by one of these machines of the heavy type is that of pressing hubs for automobiles or other vehicles. A hub is pressed, in about 20 different motions of the machine, from a steel disc 15 inches in diameter, and $\frac{3}{8}$ of an inch thick. This pressing is done with cold metal, only occasionally is the steel heated to redness to anneal it and keep it from cracking, but it is cooled again before further pressing.

The cutting and shaping of metals is so remarkable that such machines as these, that will be exhibited at the Exposition, will be highly instructive.

NOVA SCOTIA STEEL AND COAL, ANNUAL REPORT.

The annual report for 1913 of the Nova Scotia Steel and Coal Company, recently published at Montreal, stated that the demand for the company's products during the early months of the year had been good. During this period a large tonnage was booked at fair prices sufficient to keep the mills fully employed until the closing weeks of the year, the result being that the outputs of iron ore, pig iron, steel ingots, billets, bars and forgings all showed substantial increases over previous years. Referring to the Wabana iron ore property, the report stated that the company's holdings under title from the Crown now covered 91 square miles; that the submarine development had been further extended by the opening up of levels, cross-cuts, headways and rooms; and that the ore won from this section of the property was over 40 per cent. greater than that of the previous year. It was also reported that good progress had been made in the sinking of the new Jubilee shaft, which would be equipped by 1915 for an output of 1,500 tons per day. A new open-hearth steel furnace was completed during the summer, and a number of improvements to plant and equipment had been carried out.

Investigation of water power development facilities in Nova Scotia has shown that that province has many rivers with capacious lakes for storing purposes, and with a fall from 15 to 100 feet, where from 100 to 30,000-h.p. could be developed at a very reasonable cost. The River Mersey is one of the largest rivers in Nova Scotia. It has a fall of 248 feet from First Lake to tide water, a distance of 17 miles. For power developments already exist on the river, occupying nearly 6 miles of its lower reaches. The whole river has lately been surveyed. It is proposed to raise the level by 20 feet to provide for storage for future developments. Three additional dams are to be built. These dams will transform the river into a series of mill ponds. The total amount of continuous 24-hour shaft horsepower available on the Mersey is estimated at 29,830. The development of this river means the establishment of various new industries in Queen's County.

BACK COPIES WANTED.

One of our subscribers, anxious to bind his copies of *The Canadian Engineer*, lacks the following issues: Aug. 13th, 1909; Sept. 17th, 1909; Dec. 10th, 1909; Jan. 25th, 1912, and would be glad to pay 25 cents per copy for any of them. Will subscribers who happen to have these numbers, and who do not care to keep them, kindly send them in to this office in order that they are put into the hands of the party interested?

Coast to Coast

Winnipeg, Man.—Before proroguing, the Manitoba Legislature passed a bill to grant \$2,500,000 for good roads in Manitoba.

Port Arthur, Ont.—The annual report of the city engineer of Port Arthur for 1913 shows a total expenditure on civic works of \$889,749.70.

Brantford, Ont.—At the inaugural meeting of the Brantford Board of Trade for 1914, the purchase of the street railway was strongly recommended.

Saskatoon, Sask.—1913 commenced with a civic deficit of \$36,280, and finished with a surplus of \$15,130. This is shown by the city auditor's final figures recently presented to the city council.

Toronto, Ont.—Toronto received from this February's street railway earnings \$72,057.90, compared with \$65,156.95 for February, 1913. The total receipts were \$461,274.45; and in 1913, \$434,380.17.

Sydney, N.S.—It is reported from Pittsburg, Pa., that within the past several weeks, the Dominion Iron and Steel Corporation of Sydney, N.S., has made sales aggregating nearly 20,000 tons to Philadelphia and New England buyers.

Ottawa, Ont.—The report of the eighth year of operation of the Ottawa Light, Heat and Power Company showed a total net revenue for 1913 as \$297,766; while the gross revenue was \$834,662, an increase of \$54,688 over 1912. During the year \$808,331 was expended on new equipment.

Edmonton, Alta.—As soon as the Edmonton city council passes the estimates for the civic works proposed for 1914, it is planned to commence immediately the new system of scavenging. It is believed that greater efficiency will be gained and that also a saving of about \$25,000 per year will be effected.

Edmonton, Alta.—The monthly report of the Edmonton power house for December, 1913, which was recently received by the city commissioners, shows a surplus of \$9,404; also that the revenue derived from the electric light department was \$48,872; street railway, \$15,124; and from the water-works department, \$10,480.

Ottawa, Ont.—That portion of the main line from Ottawa to the West on the C.N.R., joining with the Toronto-Winnipeg line at Capreol, is expected to be completed before the end of 1914. Some 150 miles of steel have now been laid; and it is expected that within four months the grading of the line will be entirely completed.

Brandon, Man.—The estimates of the city of Brandon for 1914 allow to the finance committee \$52,000 in contrast to \$81,000 granted in 1913; to the health department \$21,297, as against \$22,600; to the board of works department, about \$36,000, an increase of about \$5,000 over last year; and to the fire and light departments, \$65,000, whereas in 1913 an expenditure of \$61,500 was allowed.

Moncton, N.B.—The report of the Minister of Public Works for New Brunswick shows an expenditure on ordinary bridges of \$173,910.36 out of an appropriation of \$272,500; on permanent bridges, \$525,123.20; on roads, \$138,236.12 out of an appropriation of \$272,500; on buildings, \$27,101.58 out of an appropriation of \$30,500; and on wharves, \$16,985.91, out of an appropriation of \$17,000.

Saskatoon, Sask.—The city council will make formal application to the local government in the very near future to pass upon new by-laws to the extent of \$553,586.95, made up