

The new power company at Niagara Falls have now in successful operation their new power plant; consisting of four of the Lefel celebrated Niagara type of turbines, each of about 2,200 horse power capacity, or giving in all some 9,000 horse power. These turbines drive eight generators of something over 1,000 horse power each; two generators being connected directly to the shaft of each wheel, one being placed on each side. This comprises the most complete and perfect electric water power plant in the world. The same company have four other of the Lefel Niagara turbines, using in all eight of that style of wheel.

A home-made locomotive is owned by Bell's Asbestos Company, Limited, which is in use at the company's mines, at Thetford, in the province of Quebec. It is used to haul waste rock from the quarries to the dump. This locomotive was made at the works in Thetford, as a matter of economy, as the cost of a Porter or Baldwin locomotive of the same size with the tariff duty of thirty-five per cent., would have cost in the neighborhood of \$4,500, while this one was built at a cost of only about \$1,500, including \$400 for the boiler, and making an allowance of \$400 for the pair of engines. The engines are a pair of Copeland & Beacon's hoisting engines, the frame of which had been broken; the drum was removed and the en-

gines drawn closer together, forming a saddle for the boiler to rest on, where the drum-shaft passed through. The length over all is fourteen feet; the extreme height nine feet ten inches, and the weight about 15,000 pounds. The tank has a capacity of about 250 gallons. The hauling capacity, on a level, in tons of 2,000 pounds, is over 450 tons, and the engine runs at a speed of twelve miles an hour, hauling ten three-ton empty cars, and makes a total of over sixty miles a day. The locomotive has been in service for three years, during which time there have been practically no repairs.

The Consolidated Milling Co., of Peterboro', are having their large mills lighted by electricity. The Royal Electric Co. are furnishing the dynamo and materials, and Mr. J. H. Greer, of Peterboro' is installing the plant. The Consolidated Milling Co. expect to run about twenty-four hours per day, from which it would appear that they have plenty of business in view.

The waterworks and electric light systems of the corporation of Sudbury, Ont., were successfully started a few days ago. This is said to be the first municipal corporation in Canada which has installed a strictly up-to-date electric lighting system. They are operating from their alternating current two phase dynamo, furnished by the Royal Electric Co., of Montreal, over 1,000 sixteen c.p. incan-

descent lamps, sixteen street arc lamps of the Helios type of 2,000 c.p. each, and a number of small motors driving printing presses, meat choppers, etc. The power house in which are erected the pumps as well as the electric light and steam power is a solid brick structure, 2½ stories high in the main part, with a boiler room extension, solid stone basement, cement and hardwood floors, and situated close to the lake on property bought for the purpose. The plant consists of two boilers of sixty h.p. each, made by the Jencks Machine Co., of Sherbrooke, Que., two Northey duplex pumps, with a capacity of 30,000 gallons per hour, made by the Northey Mfg. Co., Toronto, one 125 h.p. Wheelock automatic engine with condenser, made by Goldie & McCulloch, Galt, Ont., and one seventy-five K. W. "S.K.C." generator, with station apparatus complete, by the Royal Electric Co., Montreal. The water is forced by the pumps into a steel tank built on a steel tower, which holds 70,000 gallons. The elevation of the tower gives eighty-two pounds pressure at the hydrants, which is ample to put a fire stream over the highest building in the town. The city fathers and the people in general are highly pleased with the entire plant, and much credit is due to the engineers, Messrs. J. R. Gordon, C.E., and L. V. Rorke, D.L.S., for the first-class manner in which this second plant was installed.

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