

Prince Albert, Sask., is advertising for tenders for the construction of an electric light plant.

A new copper long distance telephone wire was strung by a gang of men from Cornwall to Brockville in exactly one week.

Kemptville is to be lighted, and the Milling Company's mill driven by electricity generated at the flats on the Rideau near Merrickville.

The Canada Corundum Co. will erect electric works at Bell's rapids dam, foot of Bark Lake, with a wire to the mines at the mouth of York River, where the new mining works will be operated by electricity.

The suit of the city of Toronto against the Gas Co., which has been hanging fire so long, is being pushed to a conclusion. The evidence is all in, the argument heard and judgment was reserved.

Three new independent telephone lines are being organized, to connect Pickering village with other villages in the township, to run from Mount Forest to a number of places in the neighborhood and to build from Dundalk to Hopeville and in other directions.

The first daily paper with telegraphic news on shipboard, was published on the Cunard steamer Etruria on her last voyage between Liverpool and New York, with Marconi on board. The first mid-ocean newspaper contained items of news, in all one hundred and sixteen words.

Sir Sandford Fleming points out that so far not a single press message has been sent over the new Pacific cable, not even between England and Australia, and suggests that the Government open the cable free to press messages for, say 500 words daily, for a period of three months, in order to build up a constituency.

Power from the Shawinigan Falls was turned on at Montreal for the first time on February 6. The transmission line is 84 miles long, carried on cedar poles 25 feet high, 100 feet apart. The electricity is carried on three aluminum cables, held five feet away from each other by cross-arms, and each consisting of seven wires, No. 6 gauge. Each cable is half an inch thick, and weighs almost three ounces per foot. The line is working satisfactorily.

Peter Cooper Hewitt, of New York, is said to have made an important discovery in wireless telegraphy. The device, which is a development of the Cooper Hewitt Mercury Vapor Lamp, takes the place of the usual spark gap for discharging in the antenna or sending mast. It consists of a glass globe eight to ten inches in diameter, with two mercury electrodes contained in tubes sealed in the lower part of the globe. The device is very effective, and will enable a much more powerful electrical wave to be set up than is possible with the methods at present in use, and will also make secrecy in transmission easily possible.

The power house switch-board, recently constructed by the Lachine Rapids Hydraulic & Land Company, is spoken of as the best in Canada. It is absolutely fire-proof, is four stories high, and is so arranged that the operator only handles 110 volts, so that there is an absolute impossibility for anyone to get killed in operating the board. The operator stands or sits on the fourth story in front of a small table, on which a miniature switch-board, so to speak, is constructed, and by means of these switches and motors, he is able to regulate the whole power house, starting, stopping and regulating, not only the various circuits, and dividing up the power between the various generators, but he can start and stop any or all of the wheels and can divide or change the load from one wheel to the other, without assistance. The bus bars of the 12 generators can be all connected together or divided in accordance with the power or load requirements. The circuit breakers and overload relay switches are in fire-proof compartments, as are also the cable heads. The current is led from this switch-board to the tower of the building in vitrified tile and concrete ducts, carried in steel tubes, which makes it impossible for this power house to be burned down by electric fire.

Athens, Ont., is considering a proposition made by a Toronto company represented by A. E. Donovan, to light the village with acetylene gas.

Prof. W. J. Loudon, of Toronto University, has invented a new photometer for measuring the illuminating power of gas or electric light. It can be used for commercial purposes and can be made of any degree of sensitiveness. Its advantages consist chiefly in the comparative freedom from color, the absence of the error due to the use of both eyes, and in a special reversing arrangement for overcoming the error of inequality of the two surfaces illuminated.

The Stromberg-Carlson Telephone Manufacturing Company, of Chicago, Illinois and Rochester, New York, recently gave a banquet to enable their men to meet each other, and to explain to the salesmen the use of a book of Standard Switchboard Specifications, which the company has recently prepared, and which has been pronounced by many prominent telephone men as one of the most complete treatises on telephone switchboards that they have ever seen. The gathering was the largest of telephone manufacturers' representatives ever held.

One of the most complete and up-to-date electric power plants recently installed in Japan is that at the Osaka Military Arsenal. This installation was made for the purpose of operating the electric cranes and blowers for the cupolas in the new foundry just completed. The design of the power house and foundry, together with the lay-out of all machines in the latter, came directly under the supervision of G. Kuwada, the mechanical engineer of the arsenal. The foundry is a model of completeness, and reflects great credit upon Mr. Kuwada, who is one of the most clever engineers in Japan. All of the electrical apparatus, as well as the cranes, blowers and two cupolas were supplied by the Westinghouse Electric & Mfg. Co.

A rival company to those at Niagara Falls proposes to generate power $5\frac{1}{2}$ miles back of Jordan, where a fall can be obtained almost 100 feet higher than Niagara, with water drawn from the Welland River. The flow of the Welland would have to be changed so that the waters of the Niagara would flow up to the point where the power canal begins. The capacity of the Welland is such that 100,000-h.p. could be developed at the bluff. The company offers to deliver to the city of Toronto 30,000-h.p. at \$20 per horsepower, or 20,000-h.p. at \$22.50, or 10,000-h.p. at \$25, should the city not desire to take more than that, the power to be available for the whole 24 hours. The company desires simply to generate electricity, and would prefer that the city itself should build the pole line. In that case they will supply 30,000-h.p. at \$10 at Jordan, 20,000-h.p. at \$12.50, or 10,000-h.p. at \$15. The transmission line from Jordan would cost considerably less than from Niagara, and experts believe that it can be built for less than \$1,000,000. The company is known as the Hamilton & Lake Erie Power Company, and Pierson Judson, of Oswego, is chief engineer.

The Ohio Brass Company has decided to substitute alternating-current power distribution for the direct-current system at present in use in its shops at Mansfield, Ohio, on account of the superior economy of the former. A recent purchase from the Westinghouse Electric and Mfg. Co. comprises a 180-kilowatt, 7,200-alternation, two-phase alternator, a direct-current exciter, switchboard equipment and the following induction motors: Two of 40-h.p., four of 30-h.p., one of 20-h.p., one of 15-h.p., and one of 2-h.p. This apparatus is to provide increased capacity and to replace the following direct-current machinery: One 75-kilowatt, 125-volt generator, one 35-kilowatt generator, three 40-h.p. motors, two 25-h.p. motors, and two 5-h.p. motors, also a three-panel, direct-current switchboard. This action has been taken after a careful and thorough examination into the relative merits of direct current and alternating current motors for power distribution in this company's factory. The alternating-current motors have been chosen on account of their low cost of maintenance and freedom from breakdown.