

## SPARKS.

The Montreal Cotton Co. have placed an order for additional induction motors for their Valleyfield plant with the Canadian General Electric Co.

The Toronto Electric Light Co will shortly be ready to start up the new vertical engine driving the 450 k w Canadian General generator in their new power house.

The City Council of Chatham, Ont., will shortly consider the question of submitting a by-law to the ratepayers providing for the purchase of an electric lighting plant.

The Amherstburg Electric Light and Power Co. have increased their plant by adding a 1,000 light single phase alternator of the Canadian General Electric Co.'s standard type.

The corporation of the city of Guelph has given notice of its intention to submit a by-law to the ratepayers to authorize the purchase of an electric lighting plant to be operated by the city.

Canadian patents Nos. 53-456, 53-457, 53-458, 53-550, 53-551 and 53-552, covering improvements on telephone switchboards, signalling apparatus, etc., have been granted to the Bell Telephone Co. of Canada.

The Keewatin Power Company, of which Mr. John Mathers, of Ottawa, is manager, propose to utilize the water power obtained from its dam at Keewatin by transmitting electric energy of 5,000 horse power to Winnipeg. The distance between the two points is 120 miles.

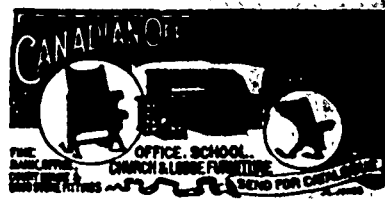
A Russian electrician is said to have perfected a telephone which practically disregards distance. At a recent test between Moscow and Rostoff, a distance of 890 miles, talking, singing and instrumental music at one end of the line were distinctly heard by listeners at the other. An experiment is to be made by land wires and Atlantic cable in talking between London and New York.

A plant for the manufacture of acetylene gas was recently put in operation at Niagara Falls, N. Y., by the Acetylene Heat, Light and Power Company. In the process of manufacture 75 lbs. of pure lime and 100 lbs. of pure coke are mixed together and put through a crusher, then through the rolling mill, the coke passing through what is termed a 50 mesh sieve. After being thoroughly crushed the mixture is dumped into a porcelain iron mixer with round pebbles in it, where the compound is shaken and mixed. It is then carried to the furnaces, where it is dumped into the crucibles on the furnace, of which there are four, each holding 800 pounds of the mixture. The crucibles are clamped by jaws, which are worked by wedges drawn in and out by endless screws. In each crucible is placed a few inches of ground coke, and then the carbon is let down on top of the mass, thus completing the connection; in short, circuiting the transformer. The carbon is afterwards gradually drawn up, all the while the mixture is being dumped in on each side. The chemical combination immediately begins to take place, and changes the coke and lime into calcium carbide. From two to two and one quarter tons of the mixture makes one ton of carbide.

ROBERT A. ROSS, E. E., (M. E. Grad. S. P. S.; B. E. Degree Toronto University; Member A. I. E. E.) Late Chief Electrical Engineer Royal Electric Co., Montreal, Works Engineer Canadian General Electric Co., and previously with Engine Companies.

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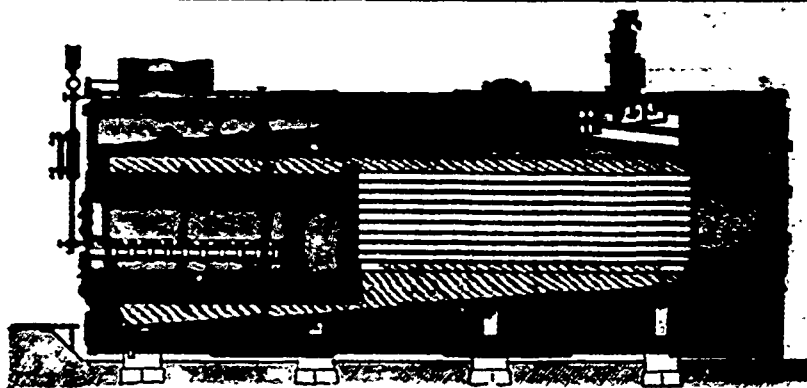
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