

The car ferry, Detroit, for use by the Michigan Central Railway, between Windsor and Detroit, was recently launched by the Great Lakes Engineering Co. She is a screw steamer, with two propellers at each end. She is 308 feet long, and can accommodate 28 standard-size cars. It is expected that she will be in commission before the river freezes over.



## LIGHT, HEAT, POWER, ETC.

The wheelpit of the Electrical Development Co., at Niagara Falls, is completely excavated and work on the brick lining will soon commence. Work will be continued all winter.

The Canadian Niagara Power Co. has let water into their forebay, and expect to have one of the 10,000-h.p. turbines working early this month.

The Hamilton Cataract Light, Power and Traction Co. last month put into commission two new generators in their power house at Decew Falls, thus adding 13,000-h.p. to Hamilton's supply.

The work of remodelling the electric light and power plant of the Alexandra Palace, University Ave., Toronto, has been placed in the hands of the Electrical Supervision Society. A new generator will be installed and other material changes made. Manufacturers of switch board supplies, lamps, etc., are requested to communicate with the engineer.

The water-power on the Wahnapiatae river, which is being developed by Messrs. Cochrane & McBittie, will be available next spring. The dam has been completed, and the machinery is now being installed. Arrangements have been made to supply the town of Sudbury with electrical power for light and water-works, and it is probable that power will also be supplied to the Mond Nickel Company, who are preparing to resume operations at Victoria Mines, west of Sudbury.

In Kane County, Ill., farmers are installing electric motors to do the work of the farms, such as sawing, pumping, threshing, separating, etc. Feed wires are run in from a contiguous trolley or third rail line, and a motor is installed in the barn. It is found that a 15-h.p. motor does the work of a man and a team of horses, and costs about 50 per cent. as much for maintenance. Land in that section is reported to be going up in value since the introduction of electric power.

Arrangements have been concluded whereby the marketing of the products of the Packard Electric Company, Limited, the Crocker-Wheeler Company, and Brown, Boveri & Cie, in Canada, will be looked after by the selling organization of the Packard Electric Co., Limited, of St. Catharines, Montreal and Winnipeg. The Crocker-Wheeler Company are manufacturers and electrical engineers with their works and main offices located at Ampere, N.J. Their line of manufacture includes electrical generators and motors for every industrial, lighting and power purpose. They are American licensees of Brown, Boveri & Cie, of Baden, Switzerland, celebrated designers and manufacturers of alternating current apparatus, whose efforts in this field have brought the alternating current machine to a point of standardization. The reputation

for excellence earned by the Crocker-Wheeler apparatus during the past fifteen years, has spread beyond the United States, and it is to better serve their increasing trade in Canada that this arrangement has been made.

On Saturday evening, November 19th, the International Correspondence Schools gave their monthly lecture and entertainment in the Temple Building, Toronto, for the benefit of

their students and friends. It has, therefore, been the policy of make these evenings "smokers," but for this occasion the smoke was omitted, and ladies were invited. The large hall was completely filled with ladies and gentlemen. The principal feature on the programme was an illustrated talk on "The Toronto-Niagara Power and Development," given by K. L. Aitken, chief engineer of the Electrical Supervision Society, Toronto.

Results of experiments conducted by William Grunow, Jr.; W. T. Oviatt and R. B. Davis of the Connecticut Railway and Lighting Company, at Bridgeport, last winter to determine the amount of current required to heat a third rail for the removal of sleet have been published and show that with the air at 15 deg. F., the temperature of the rail was raised 19 degrees in 15 minutes; and with the air 21 deg. F., the temperature of the rail was raised 19 degrees in 12 minutes. The energy consumption during these 15 minutes was equivalent to 90 kilowatts, if the heating had been applied to a one-mile length of the same section of rail. A 70-pound T-rail 30 feet long was used and was heated by means of a steel wire carried under the head of the rail and insulated from it by porcelain bushings. Wood protections were employed to shield the rail from wind and to maintain its temperature.



## TELEPHONE AND TELEGRAPH.

Toronto is petitioning the Dominion Government to take over the long-distance telephone lines.

The Canadian Machine Telephone Co. will have their service in Peterboro in operation by January 1st.

Brantford City Council has passed a resolution asking the Government to acquire the long distance telephone lines.

Gregorio Pansa, of Naples, claims to have invented a wireless apparatus combining the telegraph, telephone, and telantograph.

The case of Price vs. City of Hamilton to quash the Bell Telephone Co.'s franchise in that city, is to be carried to the Court of Appeal.

The Marconi station at Cape Race, Nfld., has been completed, and works satisfactorily, its efficiency having been tested from a point 100 miles to seaward.

Wendel Shantz, a farmer living near Waterloo, Ont., is agitating the organization of a rural telephone company. It has been suggested that the proposed system might be operated by the county.

It is expected that at the coming session of Parliament, legislation will be introduced to bring wireless telegraphy under Government control. The Imperial Government is asking that this be done in all the self-governing dependencies.

Toronto asked the Stark Telephone Co., the Canadian Machine Telephone Co., and the Canadian Telephone and Telegraph Co. to tender on their own specifications for a telephone franchise. November 30th was the date for receiving tenders.

Brantford City Council has defeated the by-law ratifying a fifteen-year agreement with the Stark Telephone Co., of Toronto. This was due to a feeling on the part of some of the aldermen that the Canadian Machine Telephone Co. should have a chance to tender for a franchise after the completion of their installation in Peterboro.



## PERSONAL.

Homer S. Johnson, vice-president and manager of the Penberthy Injector Co., Windsor, visited Toronto last month.

J. W. Platten, who is a native of Port Perry, Ont., has been elected second vice-president of the Lehigh Valley Railroad Co.

The superintendent of construction of the new ship being built at Bucksport, Me., for Lieut. Peary's Arctic explorations, is Herbert S. Newcombe, a native of Hopewell, N.B.

Joseph Sutherland, ex-councillor of Bilston, Staffordshire, England, who recently completed a trip through Canada, remarked: "The resources of Canada are such as to make her a Britain, France, Spain and Russia, all in one. She possesses the iron of Britain, the fruit and salubrious climate of France, the rich minerals of Spain and wheat fields that rival the best in Russia."

