

This additional power unit brings the total number up to five, operating on four transmission lines. The machinery of the new unit includes an electrical generator, made by the Dick Kerr Company, of Preston, England, and a water wheel, the largest of its kind ever made, designed by the Doble Company, of San Francisco, and manufactured by the John McDougall Caledonian Ironworks, of Montreal, Que. From the entrance in the dam, a stave pipe line seven feet diameter runs to the crest of the hill, and from there a steel pipe of about the same diametrical dimensions takes the water to the new wheel in the power house. Work has been proceeding on this addition all summer.

## FINANCING PUBLIC WORKS.

The following municipalities recently sold debentures:—  
Point Grey, B. C., \$28,000.  
Kipling, Sask., \$14,000, schools.  
Ottawa, Ont., \$160,000, schools.  
Winchester, Ont., \$12,249, cement sidewalks.  
Lucknow, Ont., \$3,500, civic buildings.

### Ontario.

**BELLEVILLE.**—By-laws for a bridge over the River Moira and to grant permission to the Seymour Power & Electric Company, to erect poles and string wires on certain county roads, have passed second reading in the Hastings County council.

**PENETANGUISHENE.**—This municipality will apply to the Legislature for permission to issue debentures amounting to \$24,220 for sewer extensions now under way, for completed works and for bonuses to the North Simcoe Railway and several factories.

**NEWMARKET.**—Debentures for cement walks, bridges, etc., amounting to \$20,000, are offered for sale by J. E. Hughes, town clerk.

**WATERLOO.**—The ratepayers will vote on the following by-laws:—\$3,000, gravel pit; \$8,000, new market building. Mr. F. S. Kumpf, town clerk.

**SARNIA.**—A water main by-law is at present before the council.

**OTTAWA.**—The ratepayers will vote on a \$45,000 garbage by-law.

**AMHERSTBURG.**—The council are considering a \$20,000 public school by-law.

**PETERBOROUGH.**—The ratepayers will vote on a \$19,000 isolation hospital by-law.

**ST. THOMAS.**—The ratepayers will vote on a \$25,000 street railway extension by-law.

**WELLAND.**—The ratepayers will vote on a \$13,500 by-law to meet the Methodist Church debt. A new paving by-law is before the council.

**NEW LISKEARD.**—The ratepayers will vote on the following by-laws; \$28,000 for macadamizing streets, and \$2,500 for the purchase of fire apparatus.

### Manitoba

**WINNIPEG.**—The following by-laws carried: \$150,000 for underground conduits for power wires, \$50,000 for municipal baths. The by-law for \$50,000 for a civic art gallery was defeated.

**CARBERRY.**—By-laws have been passed to issue \$1,561.75 5 per cent. 20-year, and \$1,418.75 5 per cent. 20-year local improvement debentures. Geo. Balfour is town treasurer.

**GRANDVIEW.**—Sewer debentures amounting to \$3,000 are offered for sale by William Dickie, secretary, of this town.

### Saskatchewan

**MAIDSTONE.**—J. L. Courtice, secretary-treasurer, offers for sale, \$2,000 permanent improvement debentures.

### Alberta

**CAMROSE.**—Applications will be received up to January 1st, for \$6,000 debentures. O. B. Olson, secretary-treasurer.

**LETHBRIDGE.**—The Parks by-law carried by a large majority, while the street railway and gas franchise by-laws were defeated.

### British Columbia

**POINT GREY.**—The ratepayers will vote on a \$250,000 street improvement by-law.

**VICTORIA.**—The ratepayers will vote at the forthcoming election on a \$52,000 cemetery extension by-law.

## MISCELLANEOUS.

### Quebec.

**MONTREAL.**—The Road Committee has made a list of requisitions to meet next year's administrative expenses, amounting to \$2,036,284, including:

For macadam .....	\$930,333.00
Wooden sidewalks .....	179,310.40
Repairs to pavements .....	262,050.00
Repairs to sidewalks .....	176,489.25
Crossings .....	43,714.20
Curbstone .....	15,924.20
Gullies .....	52,675.00

**QUEBEC.**—Preliminary work on the reconstruction of the Quebec Bridge was commenced on Wednesday, December 8th.

### Ontario.

**NORTH BAY.**—The town clerk has been authorized to write for prices and particulars of snow ploughs.

**OTTAWA.**—Hon. G. P. Graham recently stated that the contract for the sub-structure of the new Quebec Bridge had been awarded to M. P. Davis. The contract calls for two pneumatic caissons, two abutments, two anchor piers and one intermediate pier, at a total cost of \$2,448,475. The cost of the masonry work in the two pneumatic caissons will be \$2,800,000, and these will be required whatever type of superstructure is decided upon. Pending such decision, it was not considered wise to give an estimate of the cost of the superstructure. The total cost to date to the Government of the bridge has been \$6,905,852, which includes subsidies to the amount of \$374,353.

### Manitoba.

**WINNIPEG.**—At a recent meeting of the Board of Control, Mr. W. F. Fallman, city street commissioner, recommended the use of oil for street sprinkling.

**WINNIPEG.**—Col. Ruttan, city engineer, has prepared particulars of the proposed quay wall along the Red River. The area would be approximately ninety square yards and the bulk thirty cubic yards per lineal foot. Including concrete, excavation and foundation work, the cost would probably be \$400 per lineal foot, say, \$2,000,000 per mile. The first thing necessary would be to make a survey, which would give the necessary definite information by boring, etc., and would cost from \$3,000 to \$4,000 per mile.

### British Columbia.

**VANCOUVER.**—The Dominion Railway Commission have granted this city permission to erect a bridge on the C.P.R. tracks at Carrall Street.

**VICTORIA.**—Plans are said to be completed for a forty million dollar steel industry on the coast. The syndicate, which is known as the Western Steel Corporation, recently purchased large iron deposits on Vancouver Island. Herbert E. Law, of San Francisco, and James A. Moore, Seattle, are interested.

**VICTORIA.**—Mr. Bayfield, engineer of the Public Works Department, who was previously connected with the Montreal Harbor Works, has outlined plans for a new steel steamer for use as a dredge tender. The department is also considering the purchase, at a cost of \$350,000, an elevator dredge for use in improving the First Narrows at Vancouver, for which surveys and plans have been made. One and a half million yards of material will be taken away.

## PERSONAL NOTES.

**MR. HUGH C. BAKER**, manager of the Bell Telephone Company in Hamilton, Ont., one of the fathers of telephony in Canada, and a builder of the original Hamilton Street Railway, has resigned.

**MR. THOMAS LEOPOLD WILLSON**, of Ottawa, Ontario, receives the first award of the McCharles prize, which will be given from time to time, like the Nobel prizes in a small way, to any Canadian who invents or discovers any new and improved process for the treatment of Canadian ores and minerals, or for any important discovery that will lessen the dangers and loss of life in connection with the use of electricity in supplying power and light. Mr. Willson was born in Princeton, Oxford Co., Ontario, and is the inventor of the Willson Acetylene Flare Light, manufactured by the International Marine Signal Company, of Ottawa.