

velopments at Fenelon Falls and Campbellford is also possible.

There are a number of privately-owned plants on the Trent division of the canal, including those of the Quaker Oat Co. at Peterborough, the Lakefield Portland Cement Co. at Lakefield, and the Canadian General Electric Co. at Peterborough.

On the Severn division of the canal, the Hydro-Electric Power Commission of Ontario operates a plant at Wasdell's Falls, 1,200 h.p. capacity, and a plant of 5,600 h.p. capacity at Big Chute, or a total of 6,800 h.p. in these two plants.

The total power generated by the commission on both divisions of the canal, after the completion of the Ranney's Falls plant, will, therefore, be approximately 53,000 h.p.

On the Severn division there is a site of about 1,400-h.p. capacity, at Port Severn, which is not yet developed. The largest of the plants on the Severn division not under the control of the Hydro-Electric Power Commission is the 4,800-h.p. plant at Swift Rapids, which is owned by the town of Orillia.

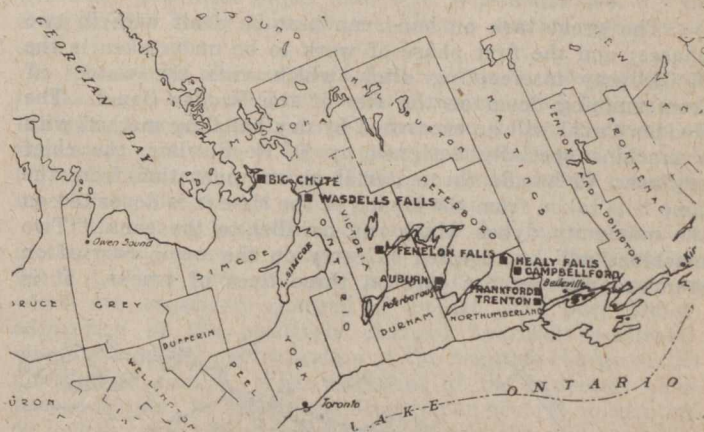
None of the six plants which the commission is now operating on the Trent division of the canal were built by the commission, but were all taken over from the Seymour Power Co. A new unit of 5,600-h.p. capacity has been installed at Healy Falls, however. This new unit has been in operation for about ten months.

The proposed Ranney's Falls plant, like all of the other plants on the Trent division of the canal, will feed the commission's "Central Ontario System." This system supplies power to about twenty-five municipalities in central Ontario, including Peterborough, Kingston, Belleville, Oshawa, Lindsay, Trenton, Cobourg, Port Hope, Bowmanville, Picton,

Penetang. The total population served by this system is approximately 42,000. Of the two H.E.P.C. plants on the Severn division, one—Wasdell's Falls generating station—was constructed by the commission, and the other—Big Chute—was taken over from the Simcoe R'y & Power Co.

The estimate of the cost of the Ranney's Falls plant was made several months ago, and as prices of material and labor have since increased considerably, the commission has asked its engineering department to prepare a new estimate before authorizing the construction of this plant. Tenders have already been called, however, for the required hydraulic and electrical machinery.

Hon. Sir Adam Beck is chairman of the Hydro-Electric Power Commission of Ontario; W. W. Pope is secretary; and Frederick A. Gaby is chief engineer. The design and con-



MAP SHOWING HYDRO-ELECTRIC POWER COMMISSION'S PRESENT DEVELOPMENTS ON THE TRENT CANAL

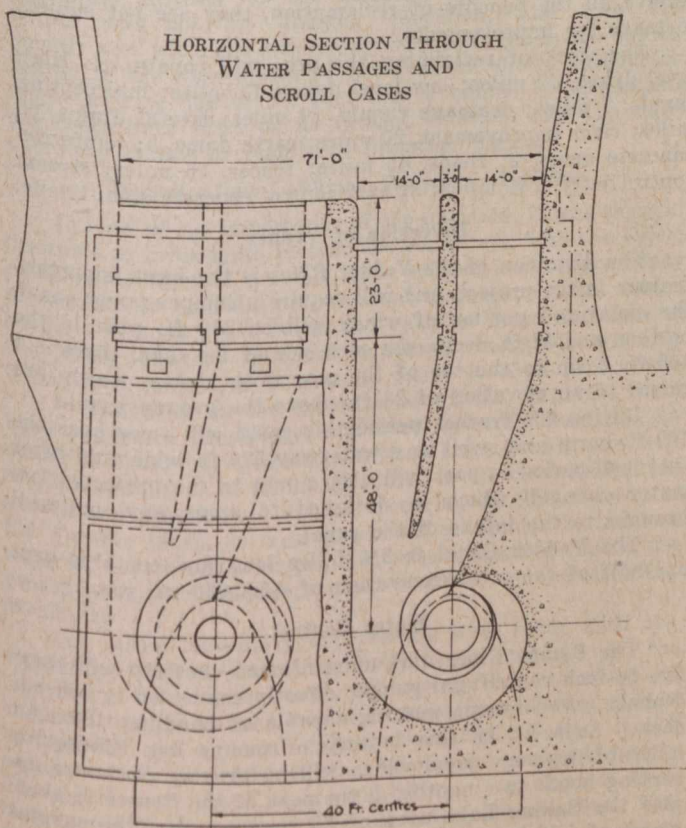
struction of the Ranney's Falls plant, with the exception of the electrical work, will be under the direction of the commission's hydraulic department, of which Henry G. Acres is chief hydraulic engineer; Thomas H. Hogg, assistant hydraulic engineer; and Maxwell V. Sauer, designing engineer. E. T. Brandon is the electrical engineer of the commission; and Arthur H. Hull, assistant electrical engineer. The construction will be carried out by the commission's own construction department, of which Arthur Trimble is general superintendent and Jas. McGraw, assistant superintendent.

The head office of the Beaver Board Co., Ltd., has been transferred to Thorold, Ont., where the company has been operating a large mill for the past ten years.

According to legislation recently introduced in the Ontario parliament, the operation of jitneys, buses and all passenger and freight vehicles other than steam and electric railways will be under the jurisdiction of the Ontario Department of Public Highways.

Hon. C. W. Robinson, of Moncton, N.B., is being frequently mentioned by the newspapers of that province as the probable representative of the provincial government on the New Brunswick Hydro-Electric Power Commission, which will be appointed at an early date. C. O. Foss, chief engineer of the St. John Valley Railroad, is said to be in line for appointment as chief engineer. Mr. Foss has been engaged for the past year in investigating the water powers of New Brunswick for a government committee. He is now engaged in an investigation of the Pokiok and Shogomoc Rivers, which may be developed for supplying power to Fredericton, Woodstock and the St. John River Valley district. Engineers are also completing surveys of Lepreaux Falls for the development for the St. John district. Mr. Foss has recommended that a report be secured from consulting engineers before proceeding with any other expense in connection with the project for harnessing the tides at the mouth of the Petitcodiac River, a project which would cost about \$5,000,000.

HORIZONTAL SECTION THROUGH WATER PASSAGES AND SCROLL CASES



Deseronto, Napanee and Whitby. The total population served by this system is approximately 120,000. The transmission voltage on this system is 44,000 volts. Although the current is 60 cycles, this system may in the future be connected to the Niagara 25-cycle system through frequency changers, and may also be connected to the commission's St. Lawrence system.

The two plants on the Severn division of the Trent canal feed the commission's "Severn System," which distributes power to nineteen municipalities in the Georgian Bay district, including Collingwood, Orillia, Midland, Barrie and