

of water supply, should a break occur in the pumps or mains. It forms an integral portion of the improvements at present being carried out at the St. Thomas plant at a total cost of \$100,000. The tower itself has been erected at a cost of \$25,916, has a capacity of 500,000 gallons, a height of 144 feet, and is not only the largest in Canada, but the second largest in America.

Fredericton, N.B.—The adoption of the Fredericton Gas-light Company's proposition to supply electric power for the lighting of the city streets is likely to be accepted by the civic authorities. The company's proposal is to supply power at 3½ cents per kilowatt hour. The latest figures available show the consumption of current for running the street lighting service to be 105,000 kilowatts per annum, which at the quotation named would make the cost of power about \$3,500 per annum. This would mean a considerable saving on the present expense of maintaining a civic plant; and would admit, it is considered, of extending the street lighting service, an improvement urgently needed.

Hamilton, Ont.—The entire plant of the Canada Steel Company, which was partly destroyed by fire in August, 1913, has been reconstructed and is ready for operation. The additions and parts rebuilt, including new machinery, have cost approximately \$100,000. The company has erected a new brick and reinforced concrete roll and machine shop, 60 x 120 feet, completely equipped with all necessary tools for doing its own repair work; and a new shipping end to the plant, 60 x 250 feet, with crane runway the entire length, which handles all the finished material directly from the shears into the cars. It has also rebuilt the main mill building, has erected a new power house, installing a new 500 horse-power motor; and also an 8-inch mill.

Victoria, B.C.—Mr. H. E. Beasley, general superintendent of the E. and N. Railway Company, has reported that the Canada Bridge Company has completed the Big Qualicum steel span on the East Coast extension of the railway, and has removed its plant and men to Arbutus Canyon, which overlooks the Saanich Inlet. Since the concrete foundations have been ready for months, and some weeks ago the steel for this bridge was placed in readiness for putting together, it is expected that this structure will soon be erected. The E. and N. line will then have replaced all its timber trestles of any importance between Victoria and Wellington, with steel structures of splendid type.

Port Coquitlam, B.C.—The first ocean-going vessel built on the Fraser or Pitt rivers was successfully launched from the ways of the Coquitlam Shipbuilding and Marine Railway Company at the confluence of those rivers on January 31st. The schooner cost \$70,000; and all the lumber which was used, except that of the keel and the spars, was logged off St. Mary's Heights, Coquitlam. She is 216 feet in length over all, with 41 feet beam, 14 feet depth of hold, 17 feet draught of water, 900 tons registered tonnage; and she has a lumber capacity of about 1,000,000 feet. She is iron-kneed and copper-fastened throughout, and all her iron work is galvanized. A shaft tunnel and engine-bed have been provided in case auxiliary engines are installed in the vessel.

Regina, Sask.—While other estimates still remain to be considered, up to date the Utilities and Works Committee of the Regina city council has authorized an expenditure of over \$2,000,000 for civic works in 1914. An undertaking of great importance is the construction of a 5,000,000-gallon water storage basin at a cost of \$140,000. This will be supplemented by two new pumps which are to be purchased, and together these will insure a water supply of 10,000,000 gallons for ordinary purposes and 10,000,000 gallons for fire purposes. Also this year, 12 miles of water mains and a similar mileage of domestic sewer mains will be laid; while the program of works and estimates also provides for sew-

age disposal, street railway extensions, construction of pavements and sidewalks, and electric light and power extension.

Fredericton, N.B.—A report has been furnished to the provincial government by Messrs. A. R. Gould and Ross Thompson, of the St. John and Quebec Railway Company, upon the progress made during the winter on the railway's bridge construction. Bridges have been completed at Centreville and Shogomoc; and at present a trestle is being erected at Eel River. From Centreville to Gagetown, all the bridges will have been built before spring, with the exception of one at Pokiok, which is in a small zone where steel is not laid. Material for all the structures is in process of manufacture and will be available as soon as required. The trestles still to be built are three below Fredericton, at Hartt Lake, Swan Creek, and Oromocto; and five above Fredericton, at Kelly's Creek, Long's Creek, Garden Creek, the Meduxuekeag, and the C.P.R. crossing at Woodstock.

New Westminster, B.C.—Mr. J. R. Freeman, consulting engineer for the Dominion Government, furnished recently a report to Mr. J. B. Challis, superintendent of the water power department, upon the Coquitlam dam, which has been built by the Vancouver Power Company, and especially upon the water supply of New Westminster, which is taken from above the dam. Mr. Freeman states that the present and prospective needs of New Westminster for water supply are amply provided for by the new intake tower and by the conduit leading from the tower to a point safely down stream from the limits of the dam; and that the work of the Vancouver Power Company has been of such a nature and scope as to tend to improve the quality of the water conveyed from Coquitlam lake to the city, as a result of the removal of stumps and decaying logs from the swampy margins at the lower end of Coquitlam lake, and also the very thorough work of felling, removing and burning the timber and brush within the range of the increased height of flowage by the new dam. Mr. Freeman concludes his observations on the purity of the water supply in the following words: "I know of no natural surface supply of water in the world that is superior to Coquitlam lake as a source for domestic supply, and I find that the company's work in dam-building has been so carried out as to conserve and improve this excellent quality."

Granby Bay, B.C.—One of the largest smelting plants in the Pacific northwest has been completed by the Granby Smelting Company, which has its headquarters at Grand Forks, B.C. The entire construction includes the smelter hydro-electric power plant, machine shops, and an electric railway system. It is located at Hidden Creek in the wilds of northern British Columbia, and has been erected at an approximate cost of \$2,500,000. The purpose of the company, primarily, is to handle the output of its Hidden Creek copper mines, which have at present about 8,000,000 tons of ore in reserve, containing from 3 to 5 per cent. copper; but ores from properties owned by other companies and individuals will also be handled. The Granby Company has recently taken over the Midas group of claims and several other copper properties; but the plant, which will have a daily capacity of 2,000 tons, is expected to handle ore from all of these with facility. Operating expenses, also, will be greatly reduced by the proximity of the mines to the smelter. A connection afforded by 1½ miles of electric railway reduces transportation costs on the ore almost to a minimum. The report on the construction which has been furnished by Superintendent Williams, who is in charge of the construction states that there are 16 inches of snow at Hidden Creek, but that the buildings were all enclosed and roofed before the storms came, making possible completion of the work on schedule, the original estimate providing for blowing in the smelter furnaces between January 1 and February 1, 1914.