real Tramways Company. These plans cover a gradual development designed to be spread over the next couple of years, and eventually the development will care for the population for the next ten or twenty years.

It is stated if the proposals of street extensions, etc., are carried out, the company will find it necessary to order 2 0 cars in addition to the 200 now on order. The total expenditure will amount to from \$8,000,000 to \$10,000,000, which the company is fully prepared to make.

Providence, R.I.—The Narragansett, the first of the Grand Trunk boats for Atlantic coastwise trade, from the shops of Harlan and Hollingsworth, Wilmington, Del., has been launched recently. The Manhattan, a sister ship, will be launched later. Both have been designed by Mr. Kirby, of New York and Detroit, a well-known marine architect, who has designed some of the largest steamers on the Great Lakes. These vessels have been built for the Central Vermont Transportation Co., and were financed a year ago by the sale of \$1,500,000 bonds. The Narragansett is of steel, and has a capacity for 700 passengers and 500 tons of express freight. The Narragansett and Manhattan will ply between Providence and New York.

Sarnia, Ont.-Wireless machinery is being installed in the wireless station at Point Edward by the Canadian Marconi Company, which will be in charge of the station and will operate it for the government on a percentage basis. The apparatus consists of two sets of dynamos connected engines, so that if one machine with two eight-horsepower gasoline breaks down, the operator will have a second generator to fall back on. The sending radius of the machines will be 300 miles and will enable the station to work with the Soo on the west, or Ottawa on the east. The receiving machines will be able to take a message from any of the high tension stations on the continent as long as the sending station is strong enough to send out the waves this far. The station will be used by the government as well as for sending telegrams for the public. The charges will be considerably lower than those of wire lines.

British Columbia.-Work has been begun by the Northern Construction Company on the Lulu Island branch of the Canadian Northern Pacific Railway. The first camp has been established six miles below New Westminster and a second will be located a mile further west. The latter will undertake the construction of the two miles of trestling across the muskeg which exists here and for which two million feet of lumber will be required. According to Mr. J. M. Mercer, general manager of the construction company, this line will be completed by the end of May. The line from Port Mann to Yale is now nearing completion but it is not expected that a train service will be operated until about midsummer. All the stations from Port Mann to Yale have been named and the contract for their construction will be let in a few days. These Stations will be Port Mann, Langley, Glen Valley, Mount Lehman, Matsqui, Sumas, Mountain, Chilliwack, Rosedale, Popkum, St. Elmo, Floodville, Hope, Trafalgar, Yale.

Washington, D.C.—The failure of Congress to enact legislation at the session just closed to extend the Burton Act which limits the amount of water diverted on the American side of Niagara Falls for power development to 15,600 feet, means that the Americans can increase the amount of water used for this purpose and that they may import more power generated on the Canadian side.

The treaty between the United States and Canada provides that 25,000 feet per second of water may be diverted for power purposes for each government. The Burton Act restriction, which was originally demanded by the American Civic Associations and other organizations, who feared unrestricted use of Niagara's waters would ruin the beauty of the Falls, has been extended twice.

Several American companies are preparing to import power from Canada and use the plants and machinery that have been idle since the enactment of the Burton law. Governor Sulzer states that in the absence of federal legislation the jurisdiction of the extra 4,450 feet of water permitted under the treaty with Canada, automatically passes to New York State.

Ottawa, Ont.—Mr. Clyde Leavitt, Chief Fire Inspector for the Railway Commission, and Forester for the Commission of Conservation, is now preparing a statement showing how the installation of the use of crude out for generating locomotive power in stead of coal, may prove more advantageous to railways from a financial standpoint.

The Canadian Pacific Railway is now using oil-burning engines on its main line between Kamloops and Field, B.C. The Grand Trunk Pacific and some of the Canadian coast steamships also burn oil, while the new system is now in use on many of the railroads in the United States. The greatly decreased smoke, the decrease in the number of firemen required, the economy particularly in intermittent service, and the fact that three boilers heated by oil will give the same amount of steam as the same number heated by coal, all tend to make this new system popular.

The oil is obtained from the oil fields of California, and if future discoveries in Alberta and British Columbia make this oil more plentiful its use will be largely extended on Canadian railroads.

The use of this new fuel would greatly lessen the necessity for forest protection from flying sparks and cinders, and greatly decrease the loss experienced annually by the country from this cause.

Vernon, B.C.—This city recently opened a splendid new power house with a demonstration in which several hundred citizens participated.

The chief point of interest was the new Diesel oil engine which has just been installed, and the operation of which will enable the city to give the citizens the lowest lighting rate in British Columbia, and power rates unequalled by any city of its size in Western Canada.

The oil plant will be used continuously, the steam plant being used for auxiliary during the hours when the load is heaviest, until another 50 h.p. engine is installed and which the increased demand for power necessitates.

## PERSONAL.

MR. F. N. NEWMAN, manager of The Canadian Fair-banks-Morse Co., Limited, of Toronto, is on a trip to England.

MR. F. J. ANDERSON, B.A.Sc., O.L.S., of the firm of Anderson and Berry, engineers, has been appointed city engineer of Niagara Falls, Ontario.

KESTER BARR has resigned his position with Manning, Maxwell and Moore, Inc., of New York, to take the position of manager of the Lumen Bearing Co., West Toronto, to succeed Mr. Fred Ganderton, resigned.

ARTHUR H. BLANCHARD, M.Can.Soc.C.E., Professor of Highway Engineering, Columbia University, has been appointed by Governor Sulzer a member of the Advisory Commission on Highways for the State of New York.

MR. H. M. MORROW, formerly assistant manager of the Asbestos Corporation of Canada is now in the employment of The Canadian Fairbanks-Morse Co., Limited, at Montreal, and will be associated with the motor truck department.

V. J. ELMONT, A.M. Can. Society C.E., read an interesting paper on "Trusses without Diagonals in Reinforced Concrete," before the Canadian Society of Civil Engineers on