

## Electrification of Montreal Harbor Terminal Railway.

The Montreal Harbor Commissioners' report for 1918, issued recently, contained the following:—

"The Montreal Harbor Railway Terminals consist of surface lines situated between Victoria Bridge and the end of the piers on the south side of the canal; and the marginal lines from McGill St. down to the Imperial Oil Co.'s wharf at Montreal East; having a total trackage of 55.35 miles. Regularly, during the summer the shunting amounts to from 1,000 to 1,800 cars a day. In case of a breakdown in this service, the economic loss would be severe, as the car unloaders, longshoremen, and the various organized staffs would be immediately thrown out of work, with a resulting general loss of dispatch. Much of the success in Montreal harbor is due to dispatch in loading vessels and unloading cars, and effort is made by direction of the commissioners for a prompt and efficient service. So successful has this service been, that there was not a single complaint, although many might have been expected, during the 200 consecutive working days in the Montreal harbor navigation season. In 1908, the commissioners operated the traffic on the harbor terminals with three steam locomotives. During 1918, nine locomotives were in service, and the limit of car handling was reached at many times during the summer, and prompt steps must be taken by the commissioners to avoid inevitable congestion in their terminals. For export alone, day after day, 30 trains of from 25 to 30 cars arrived for distribution and unloading in Montreal harbor.

"The commissioners, fully alive to the situation, visited the important electrified freight terminals in New York and Philadelphia in 1914. From information obtained, it was found that an electric locomotive could handle, summer or winter, at least 25% more than a steam locomotive, and the operation was much more under control and therefore safer. It was found that electrification was economical in freight yards and terminals, as well as much more satisfactory. The commissioners called in an electrical engineer in 1914, who, in conference with the commissioners' engineering department, made a study of the problem and finally a report was submitted by this engineer to the commissioners, but owing to the financial condition during the war, construction was deferred. The report, 'in view of the operating condition,' recommended the use of 2400 volt, direct current, for operation of electric locomotives, the same high voltage direct current system decided on and now being operated by the Canadian National Rys. in connection with the Montreal tunnel terminal.

"As the Superintendent of the commissioners railway terminals has pointed out, the urgent need for more locomotives for next year's operating work, the commissioners consider the immediate commencement of electrification is of very great importance. The commissioners have consulted with the electrical experts of the railways having their terminals in Montreal, and it is understood that the system now in operation in connection with the Canadian National Rys. and the proposed projects will all be interchangeable with the system proposed for the harbor.

"The extension of the commissioners'

marginal railway eastward along the river front of the harbor has already resulted in wonderful industrial activity from Hochelaga to Pointe-aux-Trembles. A few years ago the Montreal Cotton Co.'s mill was the limit of the industrial development along the water front in the eastern part of the city. With the development of the harbor and the extension of the high level railways and the active operation of the railway terminals, this valuable manufacturing district has entered upon a new era of prosperity."

The Commissioners received tenders up to July 14 for railway substation, switchboard and control equipment, overhead catenary line and bonding material, and wood and steel poles.

It is said that at present only the eastern section of the Harbor Terminal will be electrified, viz. from Beaudry east to the terminal at Pointe aux Trembles, and that steam locomotives will continue to be used on the western section for a time. A sub-station will be built at Beaudry St., where two units are to be installed, but at first only one will be put in, viz., a 1,500 h. p. synchronous motor, direct-connected to two 500 k. w. 1,200 volt generators, connected in series, and, of course, switchboard and control equipment. The overhead catenary will be of standard type. A transmission line, with wood and steel poles, will be erected to supply power to the substation. Provision will be made in the substation for a power supply for the cold storage warehouse to be erected at the east end of the harbor.

The commissioners are negotiating with Canadian National Rys. for renting two of the Mount Royal tunnel electric locomotives.

## Demountable Wooden Ships to Be Built in British Columbia.

Some particulars of this project were given in Canadian Railway and Marine World for July, pg. 400. The Trade and Commerce Department's Weekly Bulletin has published the following in the same connection:—Sir James Ball, British Timber Controller, has given an order for 2,000,000 ft. of cut lumber to be shipped from British Columbia to the United Kingdom in the form of a demountable ship propelled by its own steam. The scheme is to build the cut lumber into a ship and after arrival at destination to remove therefrom the machinery, which can be sent back for use over again. If the scheme works out as expected by its promoters, it is likely to revolutionize the whole system of off-shore lumber trade and will greatly increase the lumber possibilities for B.C. timber in foreign countries by reducing considerably transportation cost and by automatically solving the tonnage problem.

The method of construction is very simple. Blocks will first be laid for the keel, and fore-and-aft and cross timbers will then be placed in position. When sufficient material has been thus put together to ensure buoyancy enough to keep the bottom high out of the water, the vessel will be launched with donkey engines on board. These are to be used to lift the lumber out of the water and to place in the ship. The lumber will be clamped down securely with bolts and nuts for every 8 ft. of depth. On arrival at destination, the fastenings can be readily taken off so as to leave

the lumber and timber composing the ship immediately ready for distribution. The ship will be fitted with schooner rig and auxiliary engines, which will be taken out on arrival at destination and either sold, or shipped back for further use. The promoters believe they will be able to put B.C. lumber into the European markets at prices that will beat Norwegian and Swedish competition.

The ship was designed by John Arbutnot and J. H. Price, both of Victoria, B.C. This type of lumber ship will probably be known as an Arbutnot.

## Trade and Supply Notes.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers distinctly to understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

**Brown's Copper & Brass Rolling Mills Ltd.,** New Toronto, Ont.—Robert K. Newton, heretofore Assistant Manager of Sales, has been appointed General Sales Manager.

**Davis-Bournonville Co.,** Jersey City, N. J., has resumed the monthly publication of "Autogenous Welding," which was suspended during the war. The July number is devoted largely to the use of oxy-acetylene welding and cutting in the war.

**Whiting Foundry Equipment Co.,** Harvey, Ill., has issued catalogue 145, "Whiting Railroad Equipment," describing and illustrating various railway specialties.

**Wonham, Bates & Goode Inc.,** engineers, manufacturers, representatives and exporters, New York, N.Y., have opened a Canadian office at 145 St. James St., Montreal, in charge of A. G. Nutter, who prior to the war was with Mussels Limited, Montreal, and who, after having served at the front in Belgium and France, finally as Major of the 25th Battalion, was attached to the British Mission at Washington. Wonham, Bates and Goode, Inc., have sold to Canadian Rolling Mills a 15-ton, 8-ton wheel, Orton & Steinbrenner locomotive crane, with 40 in. electric magnet.

## Transportation Conventions in 1919

September.—Master Car and Locomotive Painters' Association of the United States and Canada, Chicago, Ill.  
 Sept. 16-19.—Traveling Engineers' Association, Chicago, Ill.  
 Sept. 16-18.—Roadmasters' and Maintenance of Way Association, Chicago, Ill.  
 Oct. 6-10.—American Electric Railway Association, Atlantic City, N.J.  
 Oct. 21-23.—American Railway Bridge and Building Association, Cleveland, Ohio.  
 Oct. 21-23.—Maintenance of Way and Master Painters' Association, St. Louis, Me.

## Transportation Associations, Clubs, Etc.

The names of persons given below are those of the secretaries unless otherwise stated:  
 Belleville Railway Men's Educational Club. Meets each Tuesday, 7.30 p.m. F. A. Pingston, Belleville, Ont.  
 Canadian Car Service Bureau—W. J. Collins, Manager, 401 St. Nicholas Building, Montreal.  
 Canadian Electric Railway Association—Acton Burrows, 70 Bond Street, Toronto.  
 Canadian Freight Association (Eastern lines)—G. C. Ransom, Canadian Express Building, Montreal.  
 Canadian Freight Association (Western lines)—W. E. Campbell, 305 Boyd Block, Winnipeg.