

TELEGRAPH and TELEPHONE

WIRELESS TELEGRAPHY FOR MARINE PURPOSES.

Mr. F. A. Hamilton, M.L.E.E., M.Can.Soc.E.E., contributes to the Halifax Echo a long letter on the value of wireless telegraphy for naval, military and shipping purposes, and more particularly in connection with the marine interests of the world. Concerning its employment in the latter sphere he says:

"Without soaring in imaginative flight to the realms of speculation and rambling conjecture, let us at once proceed to consider, in a matter-of-fact way, the actual work which this young and promising ariel has accomplished, and what he is ready and eager to perform at the present moment. By means of this messenger a moving object can be kept in telegraphic communication with any other moving object or a fixed station. A ship fitted with the apparatus cannot only keep in telegraphic communication with the shore up to any reasonable distance—it has been long since thoroughly tested up to over 30 miles off the shore—but ships can also, if thoroughly equipped, be warned of approaching danger or their proximity to dangerous coasts where the signalling appliances are placed. Fog, rain, snow and wind in no way impair the efficiency of this system of telegraphy, and herein lies its especial value for marine signalling."

Mr. Hamilton then takes as an example the case of an ocean steamer bound from a home port to one on our own shores, and shows how, having put to sea under conditions of drizzly weather and freshening wind, she can, by means of the telegraph system, communicate with passing ships and, if need be, give to an incoming vessel the bearing of and distance of the lighthouse or headland she has left behind her.

As showing the field for the employment of wireless telegraphy off the Atlantic seaboard of Nova Scotia, Mr. Hamilton says: "Between Seal Island and Cape Race there are several important lighthouses including those on Sable Island which might, with very great advantage to shipping, be provided with the means of signalling to a distance of thirty miles, or a less distance if desirable; and likewise on the Labrador coast, in the Straits of Belle Isle and in the Gulf of St. Lawrence, where navigation is at times both difficult and dangerous. The establishment of such facilities would be a boon to commerce and a credit to the country, to say nothing of the possibility of its being made a source of revenue, or at any rate self-supporting. There are, of course, details to be considered in connection with such a scheme, such as making some stations signal stations only—that is to say, they would simply and automatically signal their number or designation whilst other stations would be equipped for telegraphic communication. Then, again, it might be necessary in some instances to project the signals over a prescribed number of degrees, as, for instance, near the approaches to a harbor, in which case two stations might emit signals over a certain arc, so as to render it possible for a vessel to get a cross-bearing and establish her position."

Then Mr. Hamilton concludes: "The system has been in practical use in the Italian navy for over two years, and for several months has been the means of communication between the South Goodwin lightship and the South Foreland lighthouse, in the Straits of Dover. Telegraphic messages have been exchanged between stations on the coasts of England and France, and communication with passing vessels established. An interesting feature in the experiments is the facility with which Mr. Marconi succeeds in cutting out a third station so that it cannot interfere with the other two. The advances made in the application of wireless telegraphy to practical work have been such as to justify the belief that it will become a *sine qua non* to every coast and to all classes of vessels, whether on the ocean or in the great lakes."

Mr. H. W. Kent, general superintendent of the New Westminster & Burrard Inlet Telephone Co., is at present on a visit to his home in Peterboro, Ont. It is Mr. Kent's intention to visit Chicago, Cleveland, Toronto, Montreal and other cities for the purpose of inspecting the latest telephone switch-boards and appliances in existence, with a view to adopting the most improved system in the Vancouver Exchange. At present there are on the Vancouver Exchange over 800 subscribers, and the business has grown to such an extent that a switch-board of increased capacity has become a necessity.

SHORT CIRCUITS.

Mr. B. H. Turner will probably introduce a local telephone system at Mantowaning, Ont.

The Hudson Bay Co. are about to establish telephone connection from Fort Smith to Smith Landing, a distance of 160 miles on the Great Slave river.

The Department of Public Works at Ottawa invites tenders up to October 5th for the supply of 165 tons of galvanized iron telegraph wire for the Lake Bennett-Dawson line.

Mr. E. A. Dempster, chief clerk in the Great North-Western Telegraph Company's office at Hamilton, has been moved to Fort William, to accept a responsible position with the Canadian Pacific Railway Company.

The Columbia Telephone & Telegraph Co. is about to construct 50 miles of private telephone lines, extending from Grand Forks, B. C., to the various mines in the vicinity. An order has been given by Mr. J. P. Graves.

Ora P. King, Fred Bonnell, D. H. McNuit and R. B. Harmer are seeking incorporation as the Sussex and Hammond Telephone Co. They purpose erecting a telephone line this fall from Sussex to Jeffries' Corner, N. B., and will extend it to other points later on.

The Bell Telephone Company are making a number of extensions and improvements to their lines along the south shore of the St. Lawrence. Underground conduits have been laid as far as the Victoria Bridge, Montreal, and it is expected to have the line to St. Lambert completed in a short time.

The Dominion government has just let the contract to X. Gendreau, of Quebec, for the extension of the telegraph system from Big Roumaine, Que., to Chateau Bay, Labrador, opposite Belle Isle. The length of line to be constructed is 315 miles. The poles will be supplied by C. J. Bickerdike, of Montreal.

The annual general meeting of the shareholders of the Great Northwestern Telegraph Company was held at the head office in Toronto on September 27th. The old Board of Directors and officers were re-elected, viz: President, H. P. Dwight, Toronto; vice-president, Adam Brown, Hamilton; directors, H. N. Baird, James Hedley, A. S. Irving, W. C. Matthews, Toronto; Richard Fuller, Hamilton; Hon. Wm. McDougall, Ottawa, and Chas. A. Tinker, New York; secretary and auditor, Geo. D. Perry; treasurer, Arthur Cox. The financial statements presented showed a marked improvement in the revenue of the company over the previous year, and it was stated that the outlook for the coming year was still more hopeful.

Mr. M. T. Quigley, manager of the C.P.R. telegraph office at Vancouver, B. C., is authority for the statement that his company has made arrangements with the Dominion government for connection with the line now being built in the Yukon district. The system to be adopted will be that of sending merchants' filing messages in the Vancouver offices of the companies doing business there, the latter to transmit them by special arrangements on all steamers going north. The idea is to have packages of messages go, say, every other day from Vancouver. At Skagway they will be placed upon the line to Bennett, and at the latter place will be transmitted to the line being built by the Dominion government and forwarded to Dawson.

Mr. Chas. Park has been engaged as teacher in Electricity and Steam Engineering at the Toronto Technical School. Mr. Park was one of the four students who took the electrical course at the School of Practical Science, Toronto, in the first year after its establishment. Under his direction it is expected that the electrical and steam engineering courses at the Technical School will become even more efficient than in the past.

Messrs. McManus & McManus, Sydney, C. B., are installing for the Nova Scotia Steel & Iron Company, a complete electric lighting plant, consisting of one 75 k. w. S.K.C. two phase generator and a complete equipment of 60 alternating current enclosed arc lamps. This, we believe, is the first installation in Canada where an alternating current generator has its capacity entirely taken up with arc lamps alone, and speaks well for the future of alternating current arc lamps and also of the progress being made along these lines. The entire plant was furnished by the Royal Electric Co., of Montreal.