

**Moncton, N.B., St. Ry.**—It is said the Co. has plans prepared for considerable extensions of its system & the establishment of a park at the outskirts of the town.

**St. John's, Nfld.**—The contract for this line provides for its running from the cross-roads, Riverhead, through Water St., to a distance convenient for running up to Duckworth St., thence along past the railway station up Military Road around Prescott St. to Queen's Road, thence down Playhouse Hill, along Gower Street to Patrick St. It is probable that a track will also run along Le Marchant Road connecting with the main line, & thus practically bringing the whole city within a block or so of the cars.—Nfld. News.

**The New York, New Haven & Hartford Ry.** has put in service on the line from Braintree, Mass., to Cohasset a combination passenger & baggage car fitted with electric motors, with which it can propel itself & 4 or 5 other cars. The car has four motors of 160 h.p. each, & it is claimed it can draw 7 others at the rate of 50 miles an hour.

### General Telegraph Matters.

The cable rates between South Africa & England will be reduced to 4 shillings a word in Sep.

The following offices have been opened on the government line to Yukon: Bennett, Caribou Crossing, Tagish, Whitehorse, Lower Laberge, Hootalinqua.

It is said funds have been raised at Juneau, Alaska, for the construction of a telegraph line to Skagway, to connect with the line to Dawson, & that it is hoped to have the line in operation by October.

A London cablegram says, that on Aug. 16, Marconi, in his experiments with wireless telegraphy at Dover, made a complete success, the messages passing through several miles of cliffs, upon which Dover Castle stands and 12 miles across the sea.

A certificate of reduction of the capital stock of the Pacific Postal Telegraph Cable Co. of New York City from \$1,000,000 to \$100,000 has been filed. The amount of the company's capital actually paid in is \$1,000,000 & the liabilities are less than \$5,000. Among the directors are J. W. Mackay, the Bonanza millionaire, & C. R. Hosmer, of Montreal.

Telegraph & telephone matters in the Kootenay district of British Columbia continue to make progress. The Vernon & Nelson Telephone Co. now has telegraphic as well as telephonic communication between its Greenwood office & Rossland. It is stated though, that when the C.P.R. telegraph is extended to Boundary Creek, the V. & N. Co. will confine its operations to the telephone, leaving the telegraph to the C.P.R. Another report is that a branch of the Corbin telegraph system now connecting Nelson & Rossland with Spokane, Wash., is to be constructed from Marcus, via Cascade City, Grand Forks & Greenwood to Midway, & be afterwards extended thence back across the International Boundary line to Republic, Wash. The Columbia Telegraph & Telephone Company, which lately opened a telephone office at Midway, is completed to Camp McKinney, which camp has the advantage of telephone connection with all the Boundary towns & with Rossland & Spokane.

It is said in connection with the announcement that Marconi, the inventor of wireless telegraphy, will shortly visit the United States, that he will in all probability be asked to confer with officials of the Light-House Board with reference to the use of the invention in marine work generally. Experiments with wireless telegraphy have been carried on for

some time past at the U.S. light-house depot at Tompkinsville, Staten Island, by William F. Clarke, a New York electrician, under the direction of Col. D. P. Heap, engineer officer in charge of the third light-house district. These experiments have been made with a view to determining the availability of wireless telegraphy for purposes of communication between light-houses, light-ships, merchant vessels and light-house stations. The interest of the Light-House Board in the present efforts will be readily appreciated when it is understood that the board has sought for years for some method of establishing communication between the shore and moving ships. Some years ago a telephone system was tried but it proved impracticable.—Marine Review.

At a recent meeting of the Maritime Board of Trade, Mr. Hassard, of Charlottetown, introduced the question of improved telegraph communication between Prince Edward Island & the mainland. He said the Anglo-American Telegraph Co. was subsidized to the extent of \$2,000 a year. It is an old monopoly in existence since 1855. For some reason or other the Government seemed to have the opinion that P.E. Islanders would be satisfied with anything. One complaint was that there was no communication with the mainland after 8 p.m. It was also complained that rates from the Island were double that from other points of Canada. A telegram to Boston cost \$1, for instance. He moved a resolution to the effect that the Dominion Government be memorialized to either take over the service or insist on a readjustment of rates. The Government had a right to demand better service from the Co. The closing of the offices at 8 p.m. was a grievance to the newspapers of the Island and their readers. They wanted the offices open till midnight. There are 9 miles of cable. It was exceedingly inconvenient not to be able to send a message after 8 p.m., & visitors to the province wonder at the Island people putting up with such inconvenience. The papers could not get late press despatches & the public were prevented from getting the latest news in a reasonable time. The matter was referred to a committee for the purpose of communicating with the Dominion authorities.

### Wireless Telegraphy at Sea.

The Marconi system did marvels in the recent Imperial naval manoeuvres. Admiral Domville's fleet was hastening to a rendezvous, to pick up the convoy of food ships which Canada was supposed to have sent to the mother country, & was all on fire with eagerness to learn whether the opposing fleet, which simulated the predatory ships of France, had been beforehand. A flying squadron steamed ahead of the laboring battleships 17 knots an hour to the big ships' 11. It found the convoy, & then by means of 2 ships disposed between the squadrons the battle fleet was told the news. Eighty-six miles separated the two squadrons, & communication could have been established in storm, in darkness or in fog, as easily as in fine weather. The news anticipated by 4 hours the actual juncture of the two squadrons, which were approaching each other at a combined speed of 21 knots an hour.

The tactics of the fleets throw a strong light upon modern naval warfare. Sir Compton Domville had a strong but rather slow battle squadron of 10 battleships, which, when working together, could go at best 11 knots an hour. He also had a score of cruisers, some fast, some of medium speed, & 28 torpedo boat destroyers. A couple of slow ships, representing a food convoy from Canada, were approaching the British Isles. In theory the convoy had been sent from Halifax, our easternmost port & safely-guarded harbor, had presumably been escorted for part of the way

by the warships on our coast, & had then steered across the Atlantic, trusting to the immensity of the ocean to elude discovery by hostile warships of strength or numbers superior to the one big cruiser which escorted it. Approaching the narrow seas, where all ocean routes converge & where discovery would be easy, it was to be met at a previously arranged rendezvous by the big British fleet of Sir Compton Domville & escorted home. That is, no doubt, very much the way in which our wheat, our cattle, our bacon, our exports generally would be sent to Britain if the Empire were at war with an enterprising naval foe. Meanwhile a lighter but swifter fleet, under Admiral Rawson, 8 battleships, which could easily make 14 knots an hour in company & 19 cruisers, backed by 24 torpedo boats, disposed along what represented the French coast, was eagerly looking for this convoy, even as the high seas would in time of war swarm with squadrons & single cruisers bent on crippling Great Britain's huge foreign trade. The "French" fleet had the speed & the start; the British fleet had the strength to win any battle in which it might engage, & knew exactly where the convoy was. Moreover, it had the Marconi system to aid its search.

Admiral Domville steered for the rendezvous, arranging a series of other rendezvous so as to make it next to impossible to miss the convoy fleet. One of his 1st class cruisers, the Galatea, was already with it as escort. His other 1st class cruisers were sent on ahead at high speed to pick up the convoy at the earliest possible moment; the 2nd class cruisers were sent out in a cloud to search for the opposing fleet, so that, if it were getting near the convoy, it could be fended off. The Juno, on which was Signor Marconi, with the installation of his wireless telegraphy system, kept some 30 miles ahead of the battleships. In due time the big cruisers found the convoy, all safe. One, the Europa, immediately turned back, & soon was some 25 miles from the convoy & 30 from the Juno. Then the two ships got into communication. From the Europa to the Juno, from the Juno to the fleet went the news; & Sir Compton Domville, 86 miles from the convoy, was in definite touch with it & had won the game. Meanwhile, the opposing fleet was desperately searching an immense area of blue water & had for hours at a critical moment been paralyzed by a fog so dense that ships might have passed within a mile of it without detection.

To understand the full value of the feat performed when the fleet & the convoy, invisible to each other, practically conversed, we may assume France & Great Britain to be at war, & need to arise for a close watch upon, say, Brest. From Brest to the Lizard is 110 miles, & from the Lizard messages can be sent to British naval stations. A cruiser could remain outside the harbor mouth, 2 or 3 more could be disposed at equal distance intervals between there & the Lizard. Whatever the advanced cruiser might see would be known in Plymouth in an hour. With flag signalling a chain of 8 or 9 cruisers would be needed & they could communicate only in clear weather. With the Marconi system the news would go in fog or sunshine, storm or calm. If a French ship were to leave Brest, within an hour or two a British ship could be leaving Plymouth, 130 miles away, to look after her. Such a system of intelligence would greatly lessen the dim uncertainty as to the enemy's movements which someone has called "the fog of war."

Defects in the system there are as a matter of course. Two showed themselves during the manoeuvres. It is slow work transmitting the messages, & signals from other transmitters may disturb the process. For instance, the Juno was once taking a message from the flagship when suddenly a despatch began to come in which was being sent from Alum Bay in the Isle of Wight, 50 miles away, to Poole,