

waves which is the basic principle of wireless communication. Most people are now familiar with the crackling, blinding "spark" which, in nearly all wireless plants, can be seen and heard whenever messages are being sent. With the rotary spark-gap not only is the oscillatory discharge more efficient than in other types, but the noise and brilliancy of the spark are greatly minimized. The simple pressing of a key in the remaining room of the operating house, where the sending and receiving apparatus are installed, releases a vibrating emission of electricity which is carried by the antennae to the ariel at the top of the wireless mast from where it radiates through the ether in the form of waves.

The receiving apparatus used is of three types at present, these being known as the "Perikon," "Silicon" and the Marconi "Valve-tuner" detectors. The last-named is the latest invention of the great Italian and the Canadian government is one of its first users. The extreme sensitiveness of this instrument and the superior range of its adjustability have been proved by tests at Gonzales Hill and it is intended to shortly install it at all British Columbia stations.

This, in short, is the equipment. The conduct of the stations is on a similar high plane of efficiency as the apparatus employed. Since the British Columbia service was commenced communication has never once been interrupted between any of the stations, and the staff of operators has shown itself the equal of any similar body of men. On several occasions the Shipping Federation of Canada and other maritime interests have paid tribute, not only to the enterprise of the government, but also to the zeal and ability of its wireless operators in making the stations on both oceans real and reliable aids to navigation. Thrice daily the British Columbia stations, working in conjunction with that on Tatoosh Island, at the entrance to the strait of Juan de Fuca, furnish reports on weather and shipping which are printed in the Vancouver and Victoria newspapers and supplied to interested parties for the asking. In addition to this public service—from which no revenue accrues—the stations handle commercial business between ship and shore, often in connection with land wires; keep communica-



EDWARD J. HAUGHTON  
DISTRICT SUPERINTENDENT RADIO-  
TELEGRAPHS, B. C.

tion open when the latter are out of business; report casualties to shipping; keep tally on the government steamers and assist them in their work of maintaining the buoy, beacon and light service, and, in a thousand and one different ways, maintain a watch and ward over a vast area of inland and ocean waters.

How vast may be judged from the recent exchange of messages between Triangle Island and Honolulu, over 2,600 miles distant!

As indicative of the manner in which the business of the stations has grown it may be mentioned that in the last six months of 1909 a total of 8,444 messages were handled by the radio-telegraph service in this province, while last year no fewer than 50,113 were received and sent.

With the establishment of the Canadian navy the wireless, or radio-telegraph, service was transferred from the control of the marine and fisheries department to the naval service. The stations in this province are