

## PART XI.—TELEPHONES.

The telephone is in part a Canadian invention, though its inventor, Alexander Graham Bell, a Scotchman by birth, was at the time of its invention a resident of the United States, having immigrated with his father to Brantford, Ontario, in 1870, and subsequently proceeded to Boston. According to his account, the discovery of the telephone, both as to its main principle and as to the first transmission of the human voice, was made at his father's residence at Tutela Heights, Brantford, in 1876, and the first telephone talk over any distance was conducted between Brantford and Paris, a distance of 8 miles, on Aug. 10, 1876.

Telephone development in Canada dates from the year 1880, when the Bell Telephone Co. was incorporated by Act of Parliament. Although at this time all patents and lines were owned by the Canadian Telephone Co., they were dependent on the Bell Co., to which they sold out in 1882. By 1883 the first submarine telephone cable had been laid between Windsor and Detroit, and during the year the Bell Co. operated in Canada 4,400 rental-earning telephones, 44 exchanges and 40 agencies, with 600 miles of long distance wire. It controlled development in all the provinces except British Columbia, where the greater part of the system has always been in the hands of the British Columbia Telephone Co., Ltd.

With the rapid growth of private companies in the Maritime Provinces, the lines of the Bell Co. were disposed of in 1888 to the Maritime Telegraph and Telephone Co. in Nova Scotia, and to the New Brunswick Telephone Co. in New Brunswick, an interest in these corporations being retained under the terms of sale. A development of a different kind is seen in the three Prairie Provinces, where well-organized systems were sold to the Governments of Manitoba and Alberta in 1908 and to Saskatchewan in 1909. The lines in Ontario and Quebec are still largely owned by the Bell Telephone Co.

**Telephone Systems.**—The 2,447 telephone systems existing in 1928 (Table 72) include the three large provincial systems in Manitoba, Saskatchewan and Alberta, and a smaller governmental system in Ontario, together with the system operated by the Parks Branch of the Dominion Department of the Interior. There were also 137 municipal systems, the largest operated by the cities of Edmonton, Fort William and Port Arthur. Out of the 1,557 co-operative telephone companies, no fewer than 1,186 are in Saskatchewan alone, and 208 in Nova Scotia. Besides the above, there were 494 stock companies, 93 partnership and 161 private systems.

The steady growth of the use of telephones from 1911 on is indicated in the summary statistics of Table 71, showing an increase from 302,759 in 1911 to 1,334,534 in 1928, or from 4·2 to 13·8 telephones per 100 of the population. By provinces, the numbers of telephones in 1928 were as follows:—Ontario 589,343, Quebec 276,292, British Columbia 121,241, Saskatchewan 112,237, Alberta 77,572, Manitoba 77,226, Nova Scotia 42,776, New Brunswick 32,740, Prince Edward Island 4,964, Yukon Territory 143. The number of instruments per 100 estimated population was as follows:—British Columbia 20·8, Ontario 18·3, Saskatchewan 13·2, Alberta 12·3, Manitoba 11·8, Quebec 10·4, New Brunswick 7·9, Nova Scotia 7·8 and Prince Edward Island 5·7. In the proportion of telephones to population Canada as a whole, with 13·8 telephones per 100 population, ranks second to the United States, which has 15·8 telephones per 100 population.