

Town.	Year installed.	Lines.
Altenburg, Saxony (first installation)	1910	800
Hildersheim (first installation)	1910	1,200
Dresden, Saxony (ordered 1911)	17,000
Posen, Prussia (ordered 1911)	3,000
Dallmin (first installation)	1909	30

Durkheim, New Dietendorff, Dornap, and Haeren ordered about thirty to forty each.

Automatic private branch exchanges ordered or installed :—

Name of Firm.	Number of Instruments.
Lauchhammer	50
Rote Erde	120
Breslauer	120
Berliner Bank	170
Zeuss (Jena)	300
Laverkusen	400
Krupp (Essen)	800

Siemens and Halske have in their works, Berlin, 500, and will extend this to 1,000 lines.

Now that the Western Electric Company has come forward with a semi-automatic system its attitude towards automatics generally may be gauged when it is noted that it has quite recently purchased the Lorimer automatic patents for £135,400.

It can be considered that henceforth the use of automatic equipment will increase. It will be some time before manual common-battery equipment will be considered obsolete, but surveying the whole situation one is driven to the conclusion that its decline has begun, and that in a few years its use will be but little entertained for new work.

There are some considerations in connection with the installation of telephone exchanges in our cities and throughout the country to which it seems appropriate to refer here.

It is generally said that a Government Department cannot or does not run any particular business in which it is engaged in the same businesslike way and with the same regard for and success in attaining economy that attends private enterprise in corresponding undertakings. It is not my intention to discuss whether this is so or not. There does not appear to be any reason why a Government Department should not conduct undertakings as satisfactorily as private enterprise. The development of the telephone system in this Dominion is, however, small as compared with what obtains where it is carried on by companies and where there is competition. If the Government has a monopoly of the telephone system whereby competition is not operating to bring about the development that its exercise in other countries brings about, it seems reasonable to assume that the possession of the monopoly carries with it the duty to leave nothing undone to secure that the use of the telephone shall be as widespread as it is where the freedom to engage in telephone business by private companies promotes not only the growth of the use of the telephone, but, as a consequence, the very highest development in methods of service.

We are about a million of people and have about forty thousand telephones in operation. To compare that with the following will be interesting—

	Population.	Telephones.	Inhabitants per Telephone.
Dayton, Ohio	123,000	10,500	11·8
Salt Lake City	101,000	13,350	7·5
Des Moines, U.S.A.	87,000	14,000	6·2
Houston, Texas	90,000	12,600	7·1
Los Angeles	330,000	82,000	4·0
Chicago	2,500,000	300,000	8·3
Kansas City	350,000	55,000	6·3
Stockholm	350,000	73,000	4·9

Several of these cities are of about the same population as our principal cities, but observe the difference in development. Even in comparatively small towns there is high development.

Champaign, Illinois, with 20,000 population, has 4,000 telephones, mostly automatic; Decatur, 35,000, has about 6,500 telephones. These small places may be said to be typical of others, and charge about £6 10s. to £7 for business and £5 for residence. The medium-sized places have a higher rate for business, but usually a moderate rate for residence. The large places have usually measured rate, and also give a flat rate, which is high. Most places provide for party lines at intermediate rates. Party lines range from quite small percentages up to 60 per cent. of the total telephone development.

It is a characteristic of telephone service that as the number of telephones increases the cost of operation and of installation increases. This is due to the greater complication that is necessary to arrange for prompt connection of one subscriber with another. This feature is less marked where service is effected by automatics than it is in manual methods.

It must also be borne in mind that a telephone service covering a large area is more costly per telephone than service in smaller areas, and that the larger the number of subscribers that are available and the area over which they extend the greater is the value of telephone service to each subscriber. Thus it is that in comparing rates, and also in determining them, consideration has to be given to these matters and to the question of special difficulties or expense that may be involved in reaching particular localities in any telephone-area.