

CANADIAN INDEPENDENT TELEPHONE ASSOCIATION OFFICERS FOR 1912-13 :

President: G. W. JONES, Clarke, Ont.

Sec.-Treas.: F. DAGGER, 21 Richmond St. W., Toronto.

Alberta Telephone System

That Government ownership of Telephones can be made to pay is proved by the report on the Provincial system of Alberta.

Last year the net profits were \$62,283, bringing the total profits for the 6 years of operation to \$407,582.

That the system is being run on popular, as well as paying lines, is proved by the wonderful growth last year when 2,494 miles of long distance lines and 4,729 miles of rural lines were built. The number of new subscribers was 3,840 in exchanges and 3,336 rural ones. In towns, 13 new exchanges were built, and 26 exchanges were rebuilt or enlarged.

The mileage at the end of 1912 was 6,689 miles of long distance and 9,761 miles of rural lines; these served 14,692 exchange subscribers, and 7,420 rural ones.

It is proposed to spend \$2,000,000 on extensions this year.

Independent Telephone Companies

According to the Provincial returns for 1910, 340 systems reported in Ontario alone but of this number less than 160 were Incorporated. This leads to the conclusion that the subject of Incorporation has not received due consideration by the owners of Rural Telephone Systems. Unincorporated Telephone Systems have no legal standing in the Courts of Law, and each Shareholder or Member is personally liable as an individual for debts or liabilities owed by the System. In case of action for damages each Member might be held personally liable and his private property levied against, while his less prosperous neighbor would escape all litigation.

In an Incorporated Company the stockholder is only liable for the full amount of stock that has been allotted to him, and when the Shareholder has paid for his stock in full his liability ceases, the Company alone then being responsible, no matter what happens financially to the undertaking. It is thus evident that the best interests of all Shareholders would be served by having their System Incorporated.

The World's Telephones

There were approximately 12,453,000 telephones and 29,566,000 miles of telephone wire in use in the world January 1, 1912. Compared with January 1, 1911, this is an increase of 10 per cent. in telephones and 19 per cent. in wire.

A careful estimate places the world's telephone investment January 1, 1912, at about \$1,729,000,000, which is very nearly the value of all the gold coin and bullion in the United States.

The annual number of telephone conversations is placed at 22,000,000,000 by the Telephone Review, which is about five times the annual number of passengers carried by all the railroads of the world.

The year 1911 was the thirty-fifth since the invention of the telephone by Prof. Alexander Graham Bell. During the past year the long distance telephone service of the world has received notable extensions.

In the United States commercial service was opened between New York and Denver, 2,160 miles, this being now the longest distance over which oral communication is given commercially.

In Europe long distance service has been greatly extended by utilizing both the new loaded cables between Great Britain and Belgium—by which telephone service is expected to be given between London and Berlin—and the new telephone cable, constructed also on the Pupin principle, between Dover and Calais.

The latter enables conversation to be carried on between Glasgow, Edinburgh and Paris, and also between Aberdeen and the French capital, a distance of 910 miles. Successful trials have also been made between London and Geneva, a distance of 560 miles, and from London to Basel, a distance of 600 miles.

Recent progress in the art of submarine telephone cable manufacture will have far reaching consequences. At the present time there are over 400 miles of submarine telephone cable in use in the world, and of this total about one-half is represented by the four cables between France and England and the two between Belgium and England. The longest submarine telephone cable lies between La Panne (Belgium) and St. Margaret's Bay (England), a distance of 55 miles.

The European international long distance line systems have likewise received important additions, due to the opening of the line between Paris and Madrid, 900 miles, and the direct line between Berlin and Rome, still under construction, a distance of over 1,000 miles. As regards the Continent, there is now scarcely any important city that cannot talk with any other important city. By far the largest interurban or toll telephone plant in Europe has been built by the German Government, which, according to the latest official statistics, had about one-half of the total interurban or toll telephone wire of Europe.

MILDEN, SASK.—A telephone system is now under construction.

LONDON, ONT.—The Bell Telephone Company is enlarging their building, and have decided to instal a new equipment, with an ultimate capacity of ten thousand subscribers' lines.

Telephone Exchange System. — The invention relates to telephone exchange systems, and has for its object the provision of improved means for signaling subscribers, and particularly for signaling a subscriber whose line terminates in a central office different or distant from that in which the call originated. In handling trunk calls, the best practice at present gives the supervision of all connections to the "A" operator. The ringing is usually done by the "B" or trunk operator, as directed by the "A" operator. Where selective ringing is practised, in party-line calls, the "B" operator also sets up the proper selective key or keys. It is the purpose of the present case to give the "A" operator absolute control of the ringing. — Ray H. Manson, Elyria, Ohio., Assignor to the Dean Electric Co., Elyria, Ohio. — 1,038,617.

Relay for Undulatory Currents. — This is an improvement in undulatory current relays, and the primary object is to reinforce current waves of the most varied frequency and form. The principal involved is that by means of varying the ionization and the space between two electrodes, as for instance by means of cathode rays, the resistance of the circuit connected to the electrodes is altered so that the current waves introduced will produce proportionate variations. The subject of the present invention is a further development wherein instead of being altered indirectly by means of an ionizer the resistance in the main circuit is altered directly by means of an auxiliary electrode, on which the currents to be reinforced act. — Robert von Lieben and Eugen Reisz, Vienna, Austria-Hungary, Assignors of one-third to Siegmund Strauss, Vienna, Austria-Hungary. — 1,038,910.