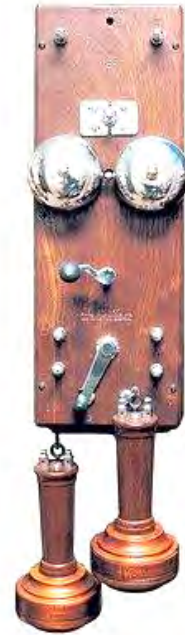


# HISTORICAL FACT SHEET Telephone Industry Related Companies



COMPANY Charles Williams, Jr. Mfg.

DATE ORGANIZED 1856

WHERE ORGANIZED 109 Court Street, Boston, MA

FOUNDER(S) Charles Williams, Jr.

NATURE OF BUSINESS Manufacturing

Subsequent names or significant changes resulting from acquisitions, consolidation, sales or bankruptcies:

Manufacturer of Telegraph and Electrical Instruments.

DATE  
1856

Authorized to manufacture Telephones for the Bell System.

1876

Business sold to Western Electric Company

1881

REMARKS Charles Williams Jr. made the first thousand Telephones for the Bell Company.

He sold his business in 1881 to Western Electric Company and became the General Manager.



Early Bell telephones made in the Williams ' shop at 109 Court St.

**THE AMERICAN BELL TELEPHONE COMPANY.**  
 W. H. FORBES, President. W. R. DRIVER, Treasurer. THEO. N. VAIL, General Manager.

This Company, owning the Original Patents of Alexander Graham Bell for the Electric Speaking Telephone, and other patents covering improvements upon the same, and controlling, except for certain limited territory, under an arrangement with the Western Union Telegraph Company, the Gold and Stock Telegraph Company, the American Speaking Telephone Company, and the Harscoite Telegraph Company, the patents owned by those companies, is now prepared to furnish, upon application, either directly or through any of its agents, Telephones of different styles, and applicable to a variety of uses.

This company desires to arrange with persons of responsibility for establishing **District or Exchange Systems**, in all unoccupied territory, similar to those now in operation in all the principal cities in this country.

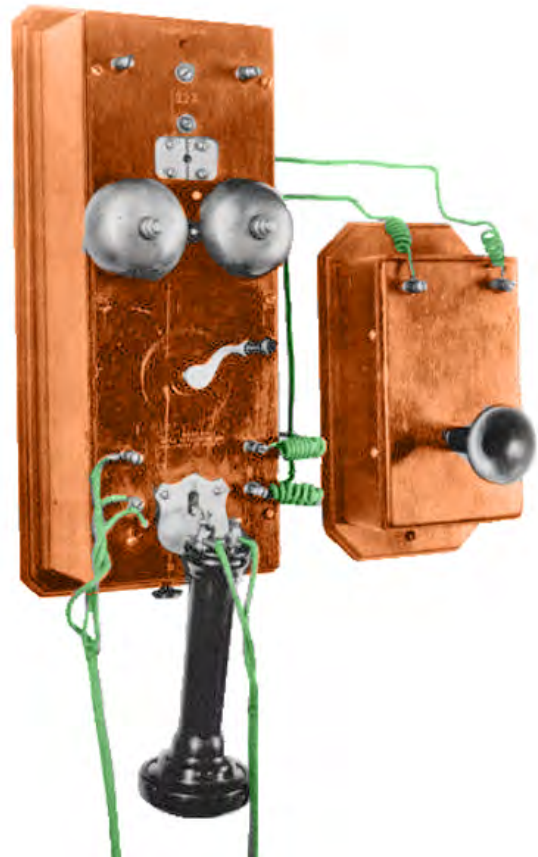
Responsible and energetic persons are required to act as licensees for the purpose of establishing **PRIVATE LINE AND CLUB LINE** systems, for business or social uses. Also to introduce the telephone for **SPEAKING TUBE** purposes, for which instruments will be leased for a term of years at a nominal rental.

This Company will arrange for telephone lines between cities and towns where Exchange systems already exist, in order to afford facilities for personal communication between subscribers or customers of such systems.

We respectfully invite attention to this matter, and any further information relating thereto can be obtained from the Company.

**No. 95 Milk Street, Boston, Mass.**

All persons using Telephones not licensed by this Company are hereby respectfully notified that they are liable to prosecution, and for damages for infringement, and will be prosecuted accordingly to the full extent of the law.





*The Telephone and Telephone Exchanges*  
*Call Bells* October 1905

J. E. Kingsbury U. S. patent No. 228,586, June 8, 1880 (applied for July 21, 1879), may be taken as an example. The patentee says:-

The second part of the invention consists in the combination, with the telephonic apparatus at each station of a magneto induction apparatus operated by the depression of a push knob for generating the current which operates the annunciator or signaling apparatus at the central office.

The illustration (fig. 41) shows the complete outfit and indicates its introduction followed the Blake transmitter, which is enclosed in the same case as the magneto inductor. Though put into practical use it was not reliable and its manufacture was discontinued after one or two years.

The magneto-induction apparatus for sending currents from each station to operate the signal-bell or annunciator at the central office consists of a permanent magnet, D, coils E upon the poles of this magnet, and an armature, F, attached to one end of the lever, G, which is operated by a rod attached to the push-button I.

The coils E are connected to the circuit, but when the lever G is in its normal position is short-circuited in any suitable manner. A convenient and effective manner of accomplishing this result is to have the armature insulated from the cores of the coils when the armature is separated from them, one terminal of the coils being connected to the armature and the other to the cores, so that when the armature and the cores are in contact with each other the coils are short-circuited.

On depressing the push-button I the coils E are included in the circuit and by the separation of the armature from the coils an electric current is induced, which is sufficient to operate the electro-magnet of the annunciator or signal-bell at the central office, which electro-magnet must be so constructed as to operate the annunciator by momentary and high-tension currents. The electro-magnets of the signal-bells at the different stations on the circuit are not affected by this induced current, owing to being of low resistance.

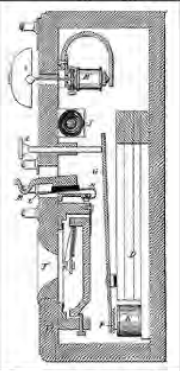



Fig. 41 - Anders' Push-button Magneto



Anders' Electric Call Apparatus U. S. Patent 218153

