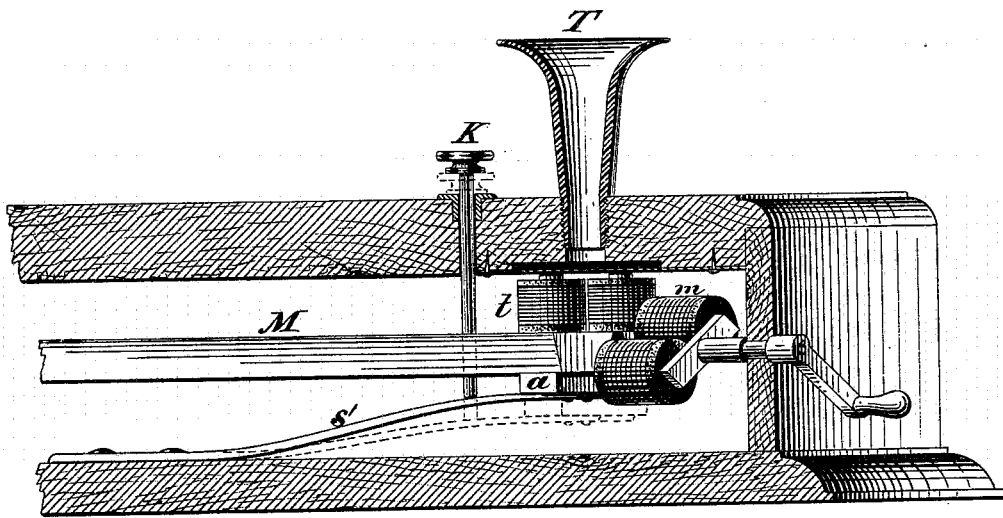


H. L. ROOSEVELT.
Electric Telephones.

No. 218,775.

Patented Aug. 19, 1879.



Witnesses:

Geo. W. Miatt
Geo. F. Evans

Inventor:

Hilborne L. Roosevelt
By his attorney
E. N. Dickerson

UNITED STATES PATENT OFFICE.

HILBORNE L. ROOSEVELT, OF NEW YORK, N. Y.

IMPROVEMENT IN ELECTRIC TELEPHONES.

Specification forming part of Letters Patent No. 218,775, dated August 19, 1879; application filed May 29, 1878.

To all whom it may concern:

Be it known that I, HILBORNE L. ROOSEVELT, of the city, county, and State of New York, have invented a new and useful Improvement in Combination-Telephones, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

The object of my invention is to make a combination-telephone, which shall consist of a telephone and a magneto-machine, and to use a single permanent magnet both for the telephone and the magneto-machine.

In the form shown a revolving coil is used to send the magneto-current to a stationary coil; or a movable magnet might be used, or both coil and magnet might be stationary, and an armature might be constructed to be broken away from it.

My invention is clearly shown in the figure.

M represents a permanent steel magnet. Upon this are placed the telephone-coils *t*, above which is the telephone plate and mouth-piece, as shown, and opposite the magnet M are the revolving coils *m*, revolved by means of a crank, as shown. By means of these

coils a magneto-current is sent out upon the line. These coils are, of course, properly connected by circuits, (not shown,) as are also the telephone-coils *t*.

a represents a keeper, elevated by a spring, *s'*, and depressed by push-button K, by means of which the magnetism of magnet M can be retained when not in use, and the rapid separation of keeper *a* from magnet M will also have the effect of sending a current through the coils *m*.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A speaking-telephone and a magneto-machine coil, provided with a single permanent magnet common to both, substantially as described.

2. In a combination-telephone, the combination of the single permanent magnet M with the stationary telephone-coils *t* and the revolving magneto-coils *m*, substantially as described.

HILBORNE L. ROOSEVELT.

Witnesses:

S. F. SULLIVAN,
WM. J. SAWYER.