

T. A. WATSON.
Speaking-Telephones.

No. 217,561.

Patented July 15, 1879.

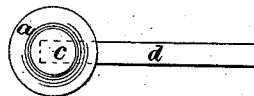


Fig. 1.

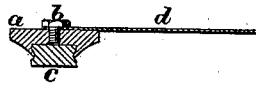


Fig. 2.

Witnesses:

W. W. Swan
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THOMAS A. WATSON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SPEAKING-TELEPHONES.

Specification forming part of Letters Patent No. **217,561**, dated July 15, 1879; application filed May 21, 1879.

To all whom it may concern:

Be it known that I, THOMAS A. WATSON, of Boston, in the State of Massachusetts, have invented an Improvement in Speaking-Telephones, of which the following is a specification.

It is common to use a piece of carbon as one of the electrodes of a speaking-telephone, and hitherto considerable trouble has arisen from the imperfect electrical attachment of the carbon to the metal by which it is supported.

To remedy this evil is the object of this invention; and the invention consists in spinning a brass socket upon the carbon.

I have applied this invention to an instrument known as "Blake's Telephone," or "Blake's Transmitter," in which one of the electrodes consists of a piece of carbon attached to a heavy brass knob or button, in turn attached to one end of a watch-spring.

The drawings represent my improved construction, Figure 1 being an inverted plan, and Fig. 2 a sectional elevation, of the said carbon, brass button, and spring.

The button is marked *a*, the carbon *c*, the spring *d*, and *b* is the bolt by which the brass button is secured to the spring.

The method of construction is as follows: The carbon is pressed or cut to a cylindrical shape, and a slight groove made around it, as shown in Fig. 2. A hole is then bored a little way into a brass button of a diameter equal to that of the carbon cylinder, and the carbon having been placed in the hole the brass is spun up into the groove, as shown. The spring and brass button are then bolted together, as shown.

This invention is applicable to any electrical apparatus in which carbon is used for an electrode.

I claim—

The carbon electrode *c*, in combination with the brass button *b*, the latter being spun upon the former, substantially as described.

THOMAS A. WATSON.

Witnesses:

W. W. SWAN,
H. G. OLMSTED.