J. C. COOMBS.

Mechanical Telephones.

No. 230,924. Patented Aug. 10, 1880.

Fig. 1.

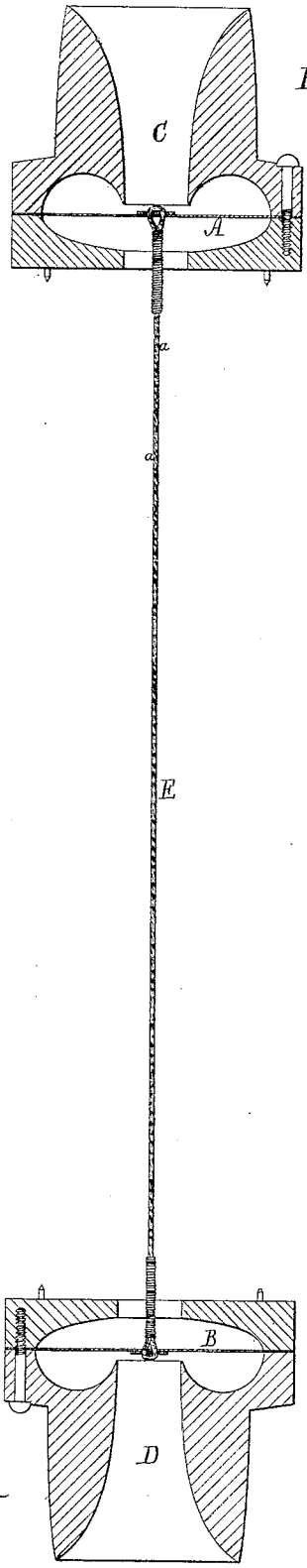


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOSEPH C. COOMBS, OF CAMPELLO, MASSACHUSETTS.

MECHANICAL TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 230,924, dated August 10, 1880.

Application filed February 9, 1880.

To all whom it may concern:

Be it known that I, JOSEPH C. COOMBS, of the village of Campello, of the town of Brockton, of the county of Plymouth, of the State of Massachusetts, have invented a new and useful Improvement in Telephones; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a longitudinal section of a telephone having my invention, while Fig. 2 is a side view on an enlarged scale of a part of the conductor connecting the transmitting and receiving vibratory disks.

My improvement relates particularly to the kind of telephone wherein the transmitting and receiving disks are connected by the conductor applied to them directly, without being extended around electro-magnets, and constituting a part of an electro-magnetic circuit.

My said improvement consists in the combination of the two disks or vibratory plates with a conductor composed of a series of metallic wires interlaid or braided together, by means of which I am enabled to overcome or avoid the disagreeable ringing sound or sounds incident to the use of a single wire as a conductor, and which interfere very materially with the proper operations of the apparatus, or render it at times practically useless.

Besides the above there are gained by means of such a conductor one or more other important advantages, the messages transmitted from one disk to the other being generally given in much clearer tones or with greater distinctness than is the case when a single wire only is used. Furthermore, the conductor, composed of the series of wires braided together, is stronger and more durable.

In the drawings, A represents the receiving-disk, and B the delivering or transmitting disk, of a common acoustic telephone, they being applied to and properly arranged within mouth-pieces C D, such as are commonly used. Extending from the center of one disk to that of the other is the conductor E, which is composed of a series of fine metallic wires, *a*, interlaid or braided together, the braiding of which may be accomplished by an ordinary braiding-machine.

I do not claim in an acoustic telephone a metallic conductor composed of a single wire; but

What I do claim therein is—

The combination of a series of metallic conducting-wires interlaid or braided together with the transmitting and receiving disks of an acoustic telephone, the said assemblage of wires being extended between the said disks, or from one to the other of them, and applied thereto by suitable means of connection.

JOSEPH C. COOMBS.

Witnesses:
R. H. EDDY,
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