

(No Model.)

W. J. MOORE.
TELEPHONE TRANSMITTER.

No. 579,003.

Patented Mar. 16, 1897.

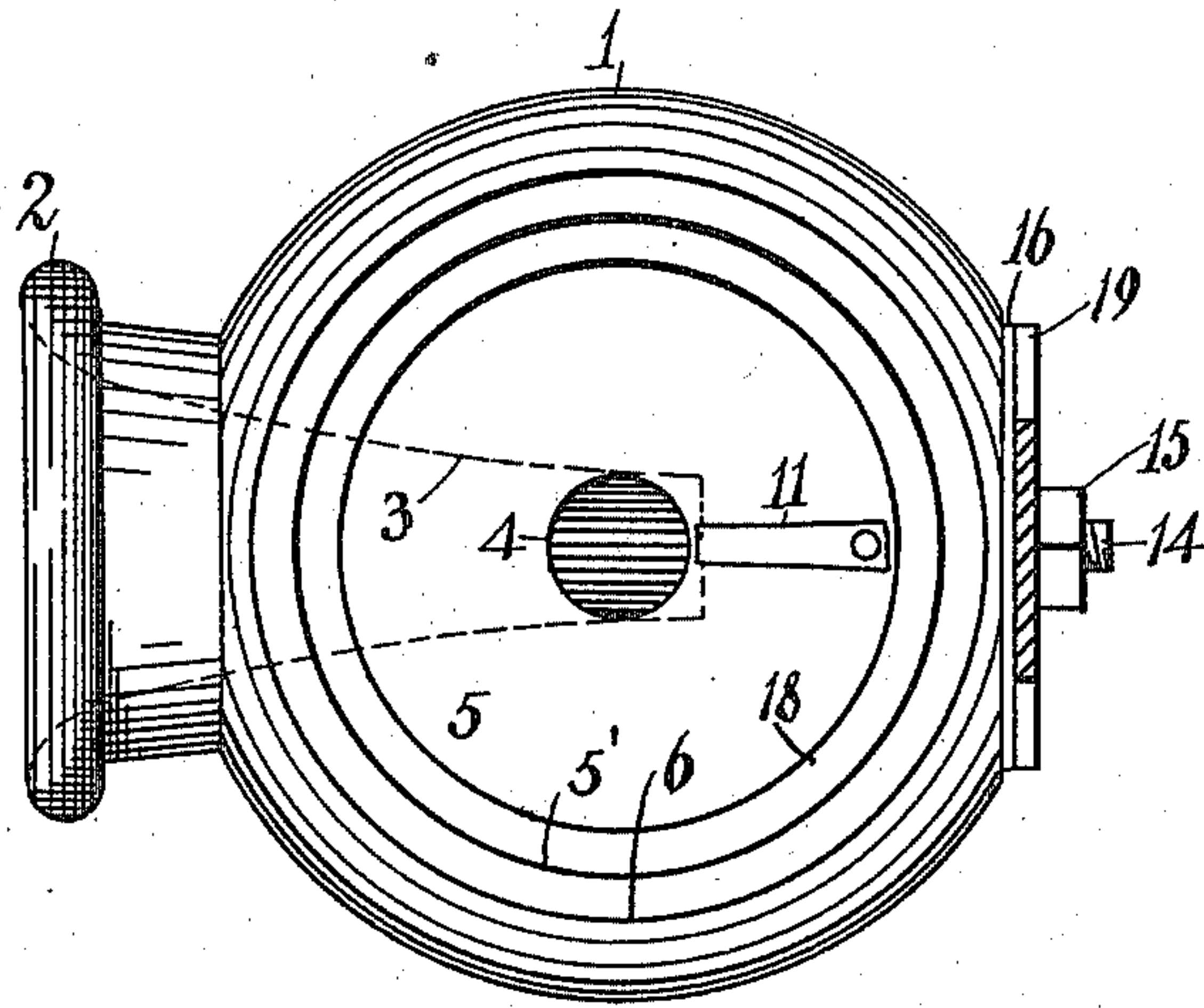


Fig. 1

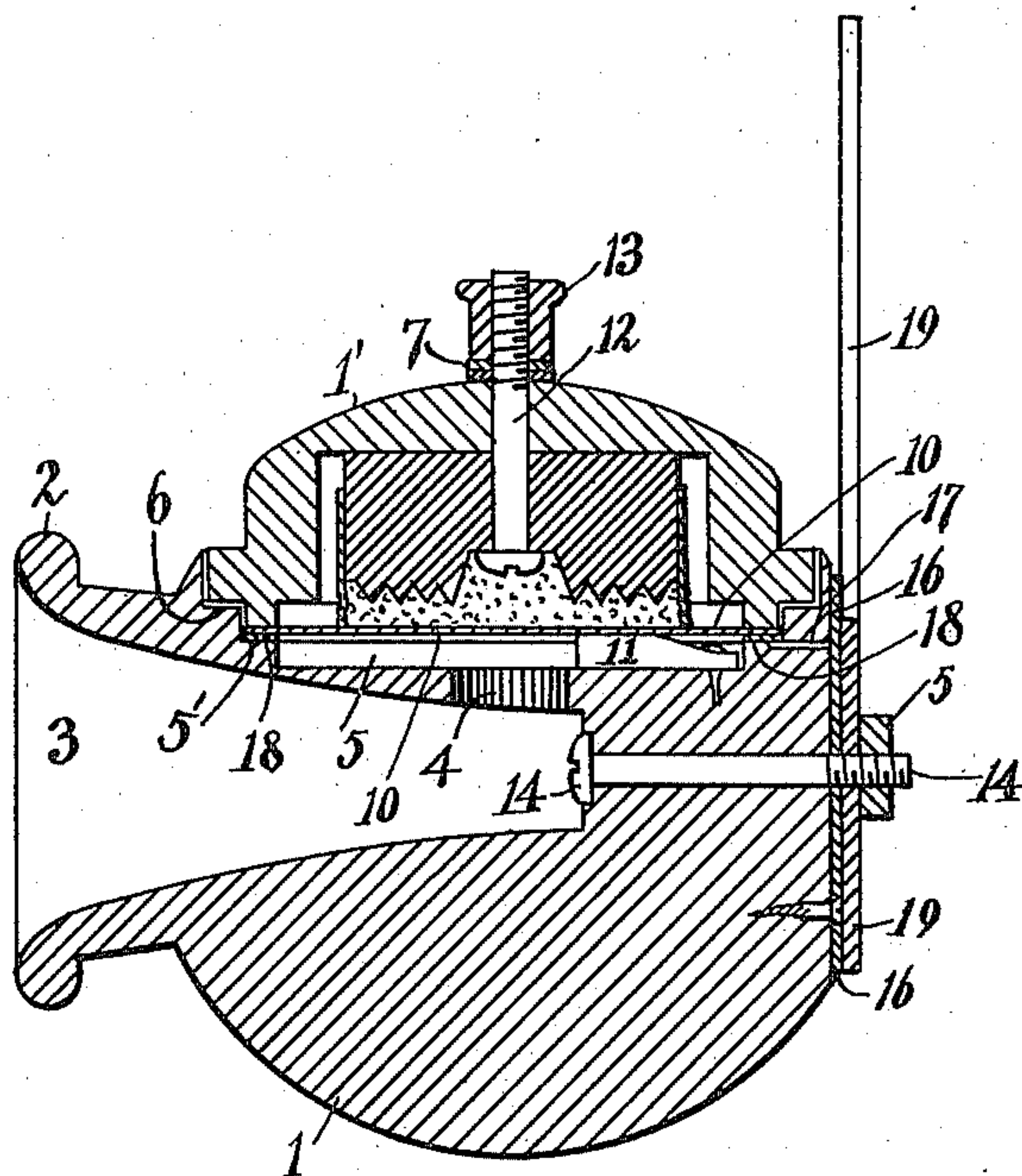


Fig. 2

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WILLIAM J. MOORE, OF ELMER, MICHIGAN.

TELEPHONE-TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 579,003, dated March 16, 1897.

Application filed May 25, 1896. Serial No. 592,956. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. MOORE, a citizen of the United States, residing at Elmer, in the county of Sanilac, State of Michigan, have invented certain new and useful Improvements in Telephone-Transmitters; and I do declare the following to be a full, exact, and clear description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to telephone-transmitters, and especially to that part of the transmitter known as the "cup" or device to which the parts comprising the transmitter are secured, and is especially adapted to those transmitters known as the "Hunning" transmitter.

Figure 1 is a top view of the device with cap removed. Fig. 2 is a vertical section through the middle of the transmitter.

It has been common to build a transmitter in several parts—viz., the mouthpiece or cup, a frame carrying the mouthpiece, and another frame containing the diaphragm and transmitting parts, &c.

In my device the mouthpiece or cup has a receptacle for the diaphragm and its connecting transmitting parts. It is the peculiar construction and arrangement of this cup that I desire to secure by Letters Patent.

1 is the cup, being shown somewhat globular in form, with a nib 2 upon its surface containing a funnel-shaped hole 3, entering into the center or beyond the cup 1, which is made of one piece of solid material. This hole 3 is the mouthpiece or part into which the person talks. Entering the hole 3 at the center of the cup and at right angles thereto is an annular hole 4, bored into the cup from a pocket 5, cut in the side of the cup for the reception of the transmitting parts. This pocket 5 is cut into the cup at right angles to the hole 3, and has one or more annular offsets or ledges, as 5' and 6. A copper ring 18 rests on the ledge 5', and is connected by wire 18 with a copper plate 16 on the back of the cup. Upon this ring 18 the carbon diaphragm 10 is placed, and against this diaphragm the granulated carbon, then the solid carbon, the

whole covered by a cap 1', fitting into and onto the ledges 5' and 6 and holding the parts to the cup. 55

The cap is secured to the cup by means of screws. The solid carbon of the transmitter is secured to the cap by means of the screw 12, which protrudes upon the outside and forms a binding-post, a wire being adapted to be placed between the washer 7 and the nut 13 on the end of the screw 12. 60

The cup 1 is secured to a hanger 19 by means of a screw 14, passing through the cup from the inside of the hole 3, through the plate 16 and the hanger, and has a nut 5 upon the outer end thereof. This screw 14 also serves as a binding-post by securing a wire between the nut 5 and the hanger, or the hanger itself may be electrically connected. 70

18 is a wire connecting the copper plate 16 in contact with the hanger with the ring 18, which is in contact with the diaphragm, thus making a complete contact through the diaphragm, granulated carbon, solid carbon, binding-post 12, &c. 75

By using a washer or another nut on screw 14 I can adjust the screw so that the cup 1 may be turned on it as a pivot. This enables me to move the transmitter, when necessary, to keep the granulated carbon from "packing" and to adjust the transmitter to the difference in the pitch of the voice. 80

The drawings show the transmitter on the top of the cup. This may be a desirable position for some voices. Others would give better results if the transmitter were tipped to an angle, which can be done by turning the cup on the pivot 14, while other voices may sound better with the transmitter vertical, &c., the difference being caused by the change of position of the granulated carbon loose behind the diaphragm, either promoting or checking the vibration of the diaphragm. 11 is a piece of rubber placed in front of and bearing upon the diaphragm to prevent too much vibration thereof. 85 90 95

I do not desire to confine myself to the outward appearance of the cup shown nor to the exact inward construction, and any change may be made suggested by mechanical skill without departing from the principle of my invention. 100

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

5 In a telephone-transmitter, the combination with a solid part having an annular funnel-shaped hole extending inwardly into the solid material, and having an annular hole intersecting said funnel-shaped hole and extending to a diaphragm, of a diaphragm resting on a ring of metal on a ledge of an annular
10 enlargement of the intersecting hole, and the ring of metal, granular carbon, on said diaphragm, solid carbon resting against the granular carbon, a cap covering and securing

the diaphragm, granular carbon and solid carbon to the solid part, a binding-post on the 15 cap connecting the solid carbon to a source of electricity, and means for electrically connecting the metal ring, and means for pivoting the transmitter thus formed, as described.

In testimony whereof I affix my signature 20 in presence of two witnesses.

WILLIAM J. MOORE.

Witnesses:

A. H. SWARTHOUT,
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