

H. F. ALBRIGHT.
TELEPHONE TRANSMITTER.
APPLICATION FILED OCT. 28, 1907.

898,544.

Patented Sept. 15, 1908.

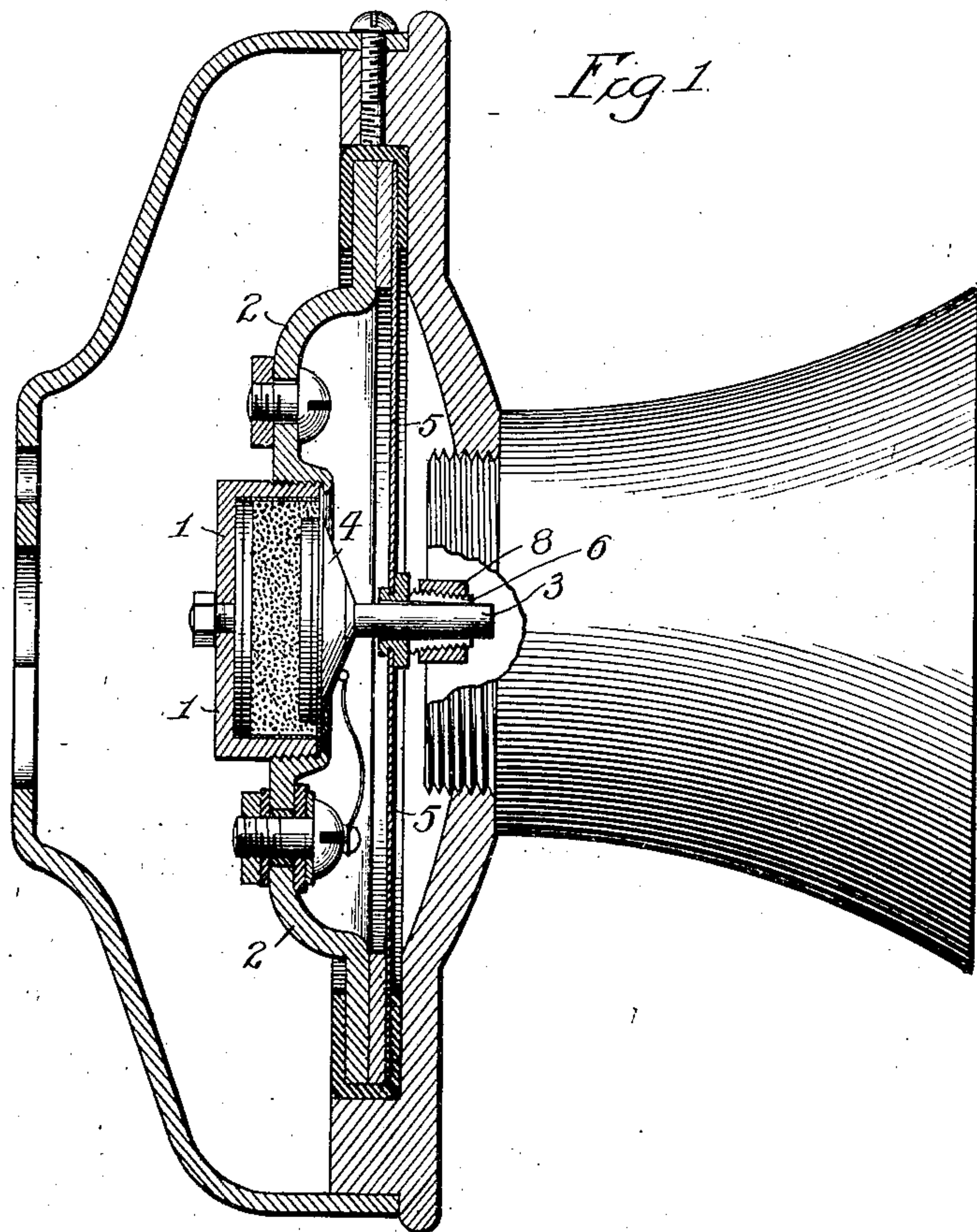


Fig. 2.

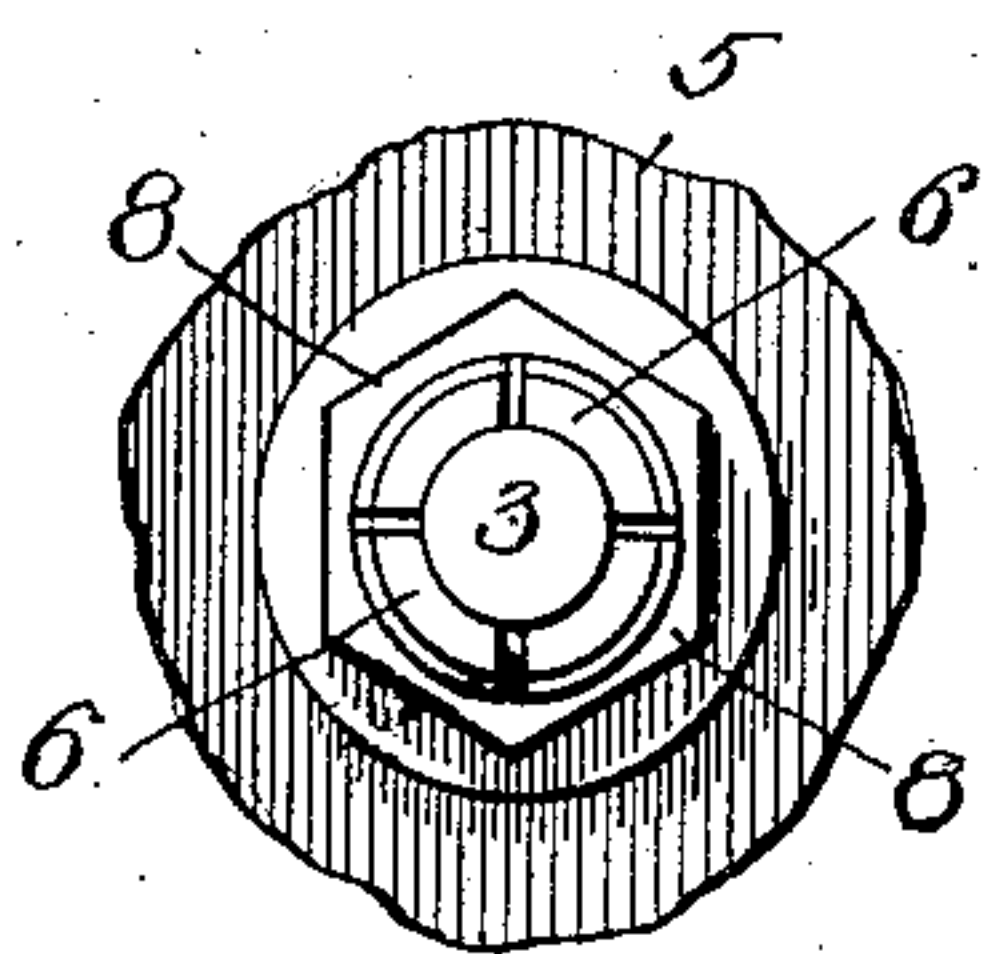


Fig. 3.

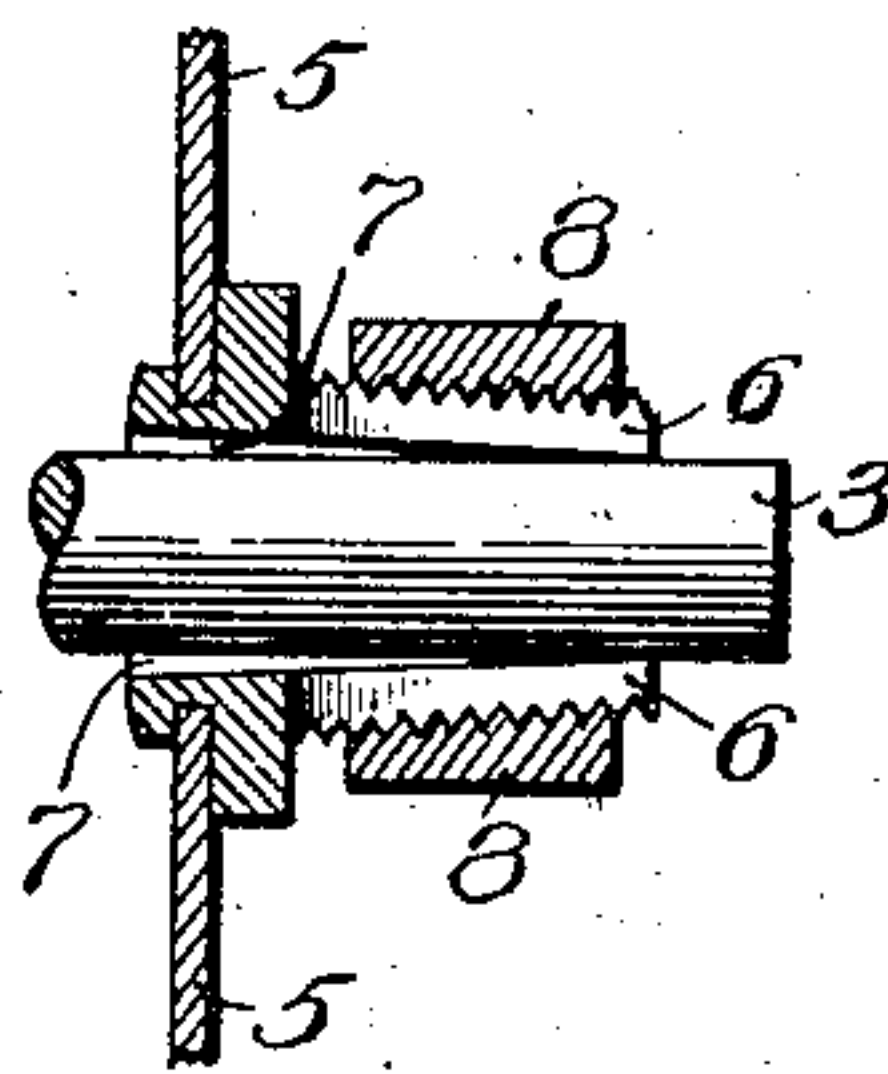
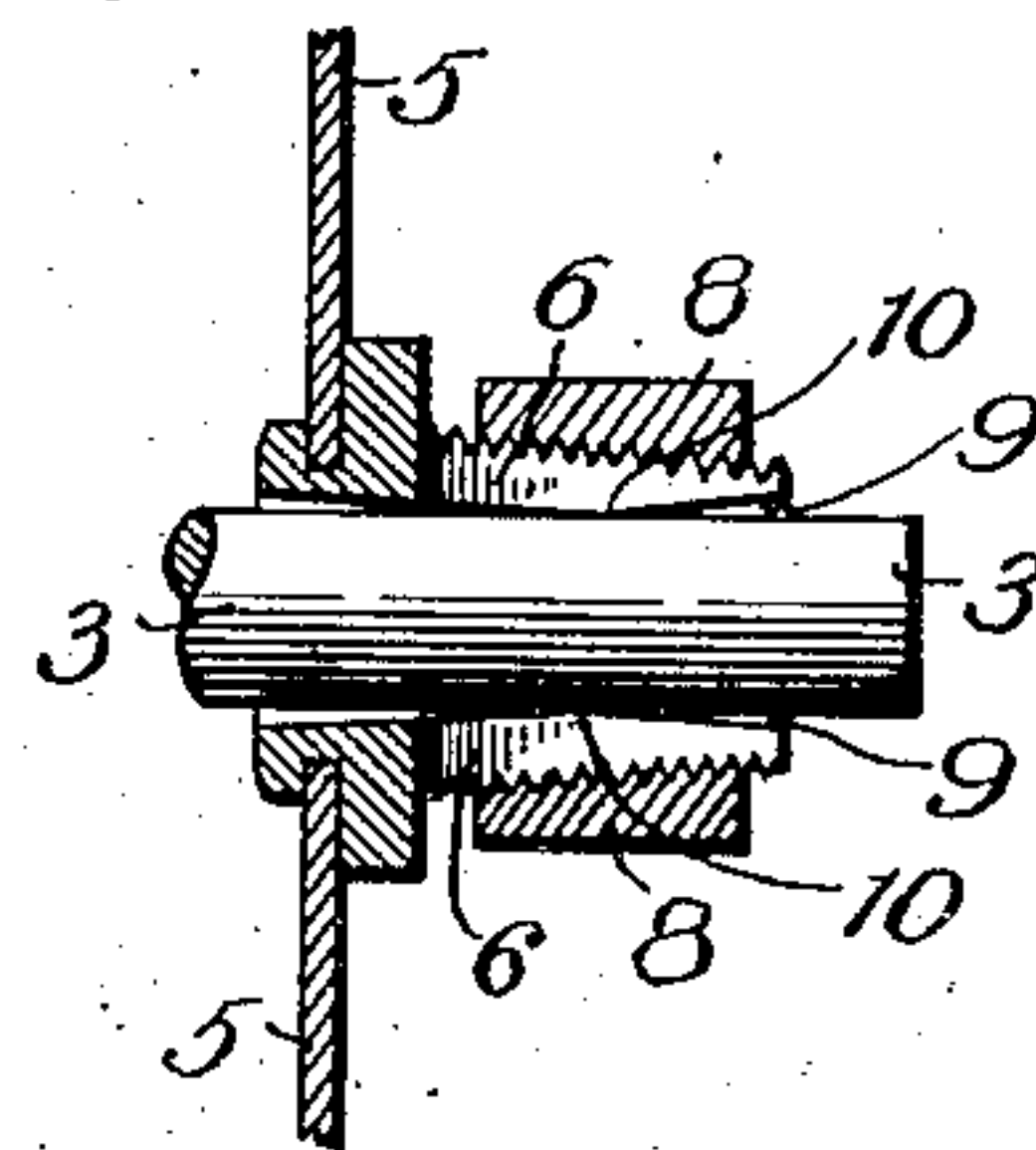


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY F. ALBRIGHT, OF ELIZABETH, NEW JERSEY, ASSIGNOR TO WESTERN ELECTRIC COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

TELEPHONE-TRANSMITTER.

No. 898,544.

Specification of Letters Patent.

Patented Sept. 15, 1908.

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To all whom it may concern:

Be it known that I, HENRY F. ALBRIGHT, citizen of the United States, residing at Elizabeth, in the county of Union and State of New Jersey, have invented a certain new and useful Improvement in Telephone-Transmitters, of which the following is a full, clear, concise, and exact description.

My invention relates to a telephone transmitter, and more particularly to a "unit" type of transmitter in which the button is non-adjustably mounted upon its supporting bridge, and in which, therefore, the movable electrode must be adjustably connected to the diaphragm.

The object of my invention is to provide improved means for connecting the stem of the movable electrode to the diaphragm.

In practice it has been found difficult to make the stem of the electrode meet the diaphragm exactly perpendicularly, and, unless such be the case, the ordinary means of securing the diaphragm to the stem is likely to introduce a strain on the parts which will impair the efficiency of the transmitter. By my invention I have provided a securing means by which the parts can be adjustably connected whether or not they are held exactly perpendicularly.

My invention consists of a bushing mounted on the transmitter diaphragm, said bushing having a tapered or conical opening through which the stem of the electrode projects, and a nut for clamping the bushing about the stud. Since the opening in the bushing is tapered, the stem will be engaged by the bushing along a single circumferential line, and will not, therefore, interfere with the assembling of the stem and the diaphragm at the angle at which they naturally meet.

My invention may be more readily understood by reference to the accompanying drawings, in which

Figure 1 is a central sectional view of the transmitter; Fig. 2 is an enlarged fragmentary view, showing the stud and bushing in end elevation; Fig. 3 is an enlarged fragmentary view showing the clamping bushing in central longitudinal section; and Fig. 4 is a view similar to Fig. 3 of the preferred modification of my invention.

Similar letters of reference are used to designate similar parts wherever shown.

The button 1 may be of the usual well-

known form, and is mounted upon the bridge 2 in the usual manner, with the stem 3 of the movable electrode 4 projecting through the diaphragm 5.

Secured to the diaphragm 5, about the opening through which the stem 3 projects, is a slotted collar or bushing 6 having a conical opening 7 tapering toward the outer end of the bushing. The bushing 6 has the exterior surface of the frustum of a cone, and is threaded to receive a nut 8. After the stem 3 is adjusted with respect to the diaphragm 5, the bushing 6 is clamped to said stem by the nut 8. In the form shown in Figs. 1 and 3 the outer end of the bushing 6 is the only portion thereof which engages the stem, and hence there is no tendency to alter the direction in which the stem projects as might be the case if the hole 7 were not tapered.

In Fig. 4, I have shown a modified form of my invention in which the opening 9 in the bushing 6 is most restricted intermediate its ends, as at 10, tapering from that point toward each end of the bushing, the opening 9 being thus in the form of a double cone. The stem 3 is thus securely gripped by the bushing 6 at the point 10.

While in the drawings the stem 3 is shown as meeting the diaphragm at exactly right angles, it is obvious that the tapered opening through the bushing 6 readily permits, without imposing a strain on the parts, of such slight variations from an exact right angle as are commonly met with in actual practice.

I claim:

1. In a telephone transmitter, a button provided with a movable electrode having a stem projecting therefrom, a diaphragm, means for supporting said button and diaphragm, a bushing on said diaphragm having a tapered opening through which said stem projects, and means for clamping said bushing about said stem.

2. In a telephone transmitter, a diaphragm having a central opening, a button at the rear of said diaphragm having a stem projecting through said opening, a bushing upon the front face of said diaphragm about said opening, said bushing having an opening tapering from said diaphragm, and means for clamping said bushing about said stem.

3. In a telephone transmitter, a diaphragm having a central opening, a button at the rear of said diaphragm having a stem projecting through said opening, a tapered,

exteriorly threaded bushing upon the front face of said diaphragm about said opening, said bushing having a conical opening tapering from said diaphragm, and a nut for
5 clamping said bushing about said stem.

4. In a telephone transmitter, a diaphragm having a central opening, a button at the rear of said diaphragm having a stem projecting through said opening, a bushing
10 upon the front face of said diaphragm about said opening, said bushing having an opening

tapering from its intermediate portion toward each end, and means for clamping said bushing about said stem.

In witness whereof, I hereunto subscribe 15
my name this twenty-first day of October
A. D., 1907.

HENRY F. ALBRIGHT.

Witnesses:

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