

No. 661,260.

Patented Nov. 6, 1900.

R. H. FERGUSON.

TRANSMITTER.

(Application filed Aug. 15, 1900.)

(No Model.)

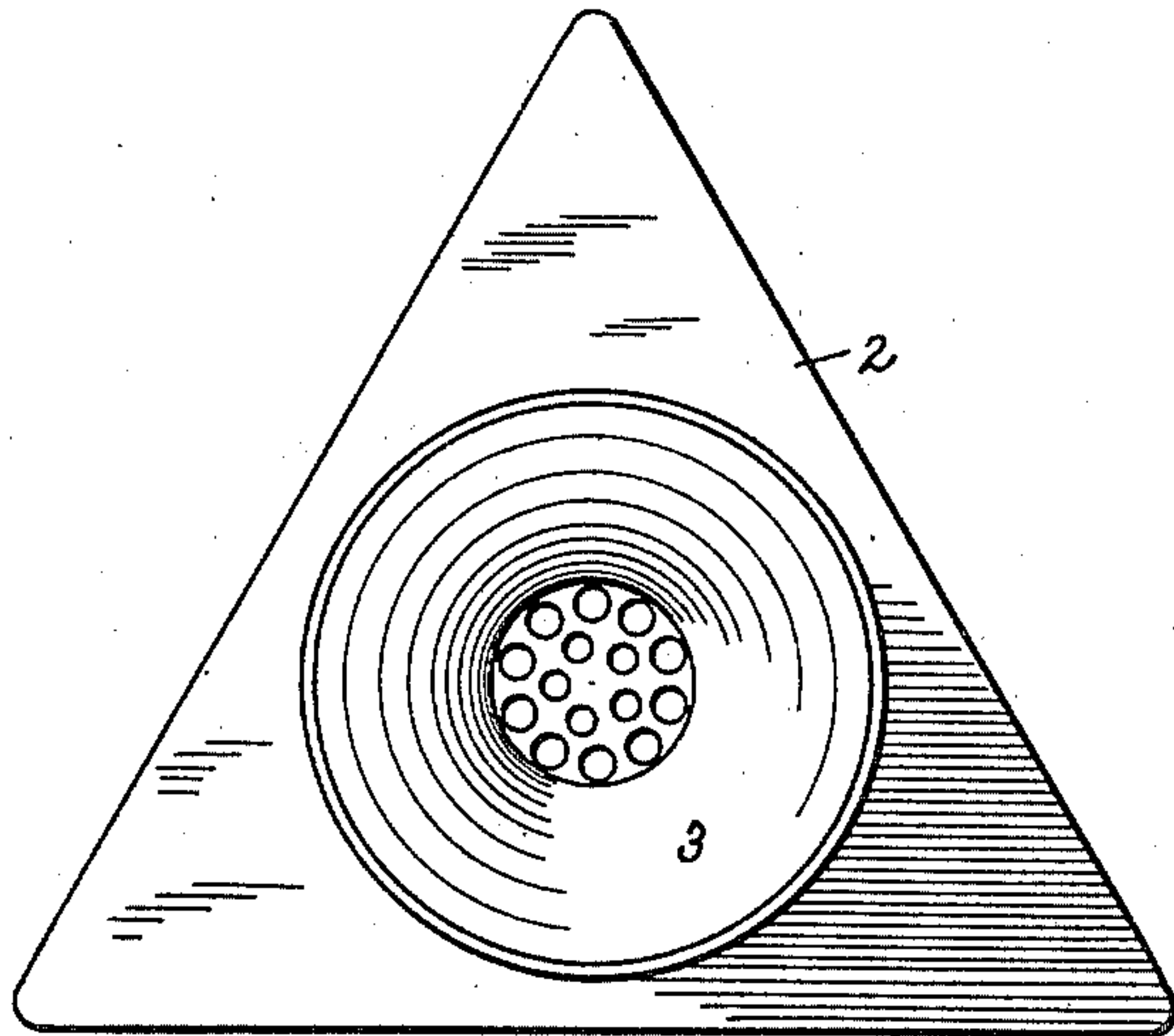


Fig. 1.

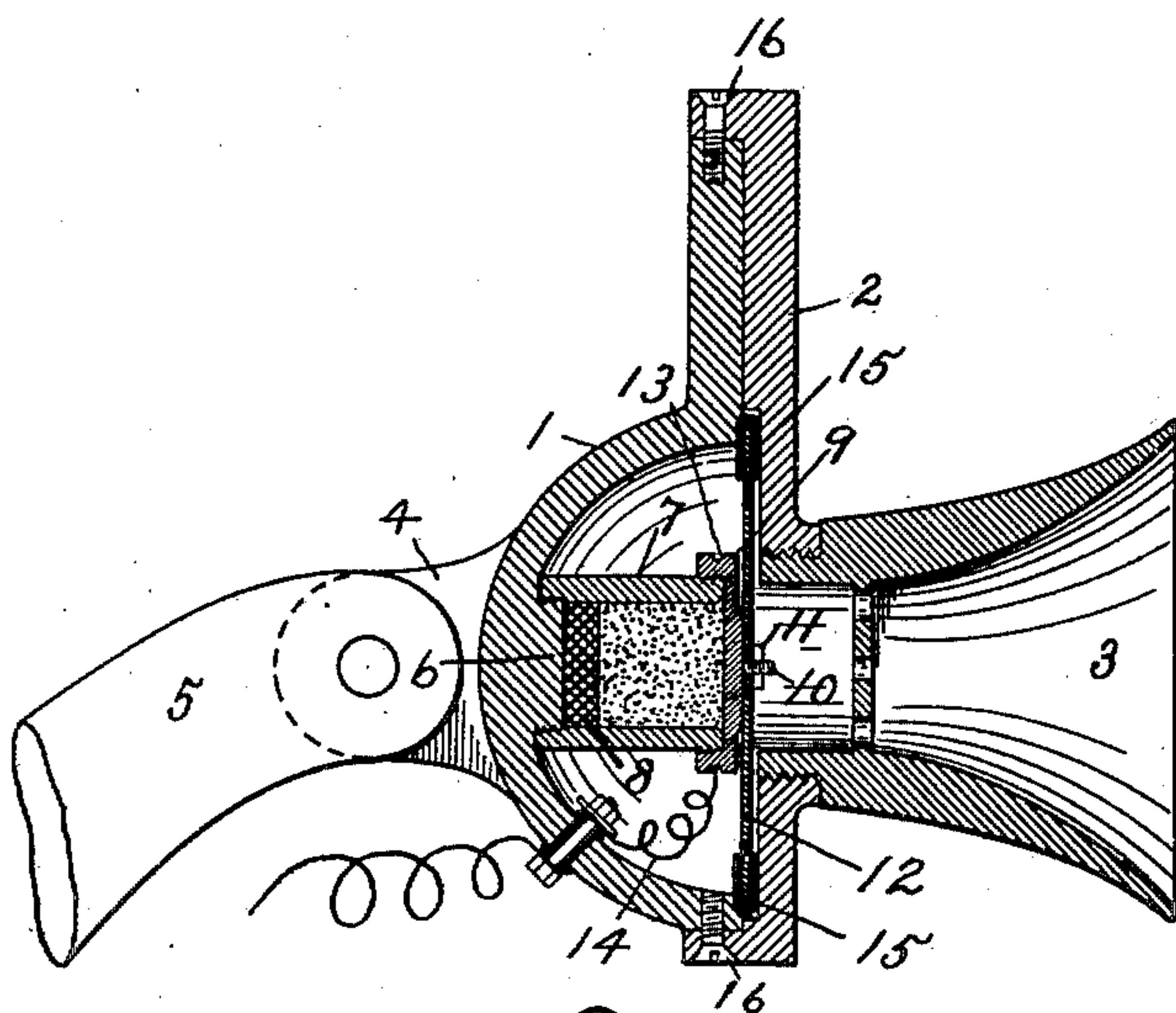


Fig. 2.

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UNITED STATES PATENT OFFICE.

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TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 661,260, dated November 6, 1900.

Application filed August 15, 1900. Serial No. 26,919. (No model.)

To all whom it may concern:

Be it known that I, RICHARD HUNTINGTON FERGUSON, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Transmitters, of which the following is a specification.

This invention relates to improvements in telephone-transmitters, and especially to that class in which are incorporated granules of carbon or other conducting material in a loose state; and it consists of certain novel features of construction, which will hereinafter appear in the description of the accompanying drawings, in which—

Figure 1 represents a front elevation of my improved transmitter, and Fig. 2 represents a vertical central section of same.

Similar reference-numerals designate like parts throughout both views.

In the accompanying drawings, 1 designates the outer casing, 2 the cap fitted thereon, and 3 the mouthpiece.

The casing 1 is made of metal or other conducting material and is provided with two ears or lugs 4, between which is secured the arm 5, also of metal or other conducting material. The said casing forms the fixed rear electrode. Secured to and projecting within the casing 1 is a screw-threaded lug 6, to which is secured a chamber 7, of hard rubber or other non-conducting material. This chamber 7 is provided with a block of carbon 8, which latter impinges against the lug 6 of the casing 1. Within the chamber 7 are placed the granules of carbon or other conducting material in a loose state. The front end of the chamber 7 is screw-threaded for the application of a cap 9, which closes the end of the said chamber and forms the front electrode. The outer surface of the cap 9 is provided with a screw 10 and nut 11 for the purpose of securing the sound-diaphragm 12 to the said cap 9. The said cap 9 is provided with an annular groove 13, in which is fitted the wire connection 14. The cap 9 is constructed of metal sufficiently flexible to be capable of responding to vibrations of the diaphragm.

The diaphragm 12 is secured to the cap 9 by the screw 10 and nut 11 and is provided

on its periphery with a rubber insulation 15, which latter is clamped between the casing 1 and the cap 2 and held securely in position.

The cap 2 fits over the casing 1 and is held thereto by means of screws 16.

The mouthpiece 3 is secured to the cap 2, as shown in Fig. 2.

It will be seen that by making the casing 1 of conducting material and the chamber 7 secured thereto and having the carbon block 8 impinging against the lug 6 one connection will be through the said casing 1, lugs 6 and 4, and through the arm 5 and the other connection through the wire 14, secured to the cap 9.

Having thus described my invention, what I claim is—

1. A telephone-transmitter comprising a casing having a screw-threaded lug projecting inwardly therefrom; a chamber fitting over and screwed upon the said lug and having a carbon block therein, which latter impinges against the said lug, and granules of carbon between the said block and the opposite end of the chamber; a cap of metal or other conducting material fitted over the front end of the said chamber; a sound-diaphragm secured to the front of the said cap and having its periphery insulated; a cap fitting over and secured to the said casing; and a mouthpiece secured to the said cap.

2. A telephone-transmitter comprising a casing having a screw-threaded lug projecting inwardly therefrom; a chamber containing granules of carbon, having one end flexibly closed and the opposite end screw-threaded upon its inner surface and screwed upon the said lug; a block of carbon fitted within the said chamber and impinging against the said lug; a sound-diaphragm secured to the front end of the said chamber and having its periphery clamped between the casing and front cap and insulated therefrom; a cap fitted over and secured to the said casing; and a mouthpiece secured to the said cap.

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

RICHARD HUNTINGTON FERGUSON.

Witnesses:

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