

(No Model.)

H. W. LIBBEY.
TRANSMITTING AND RECEIVING ATTACHMENT FOR TELEPHONES.
No. 543,626.
Patented July 30, 1895.

Fig. 1.

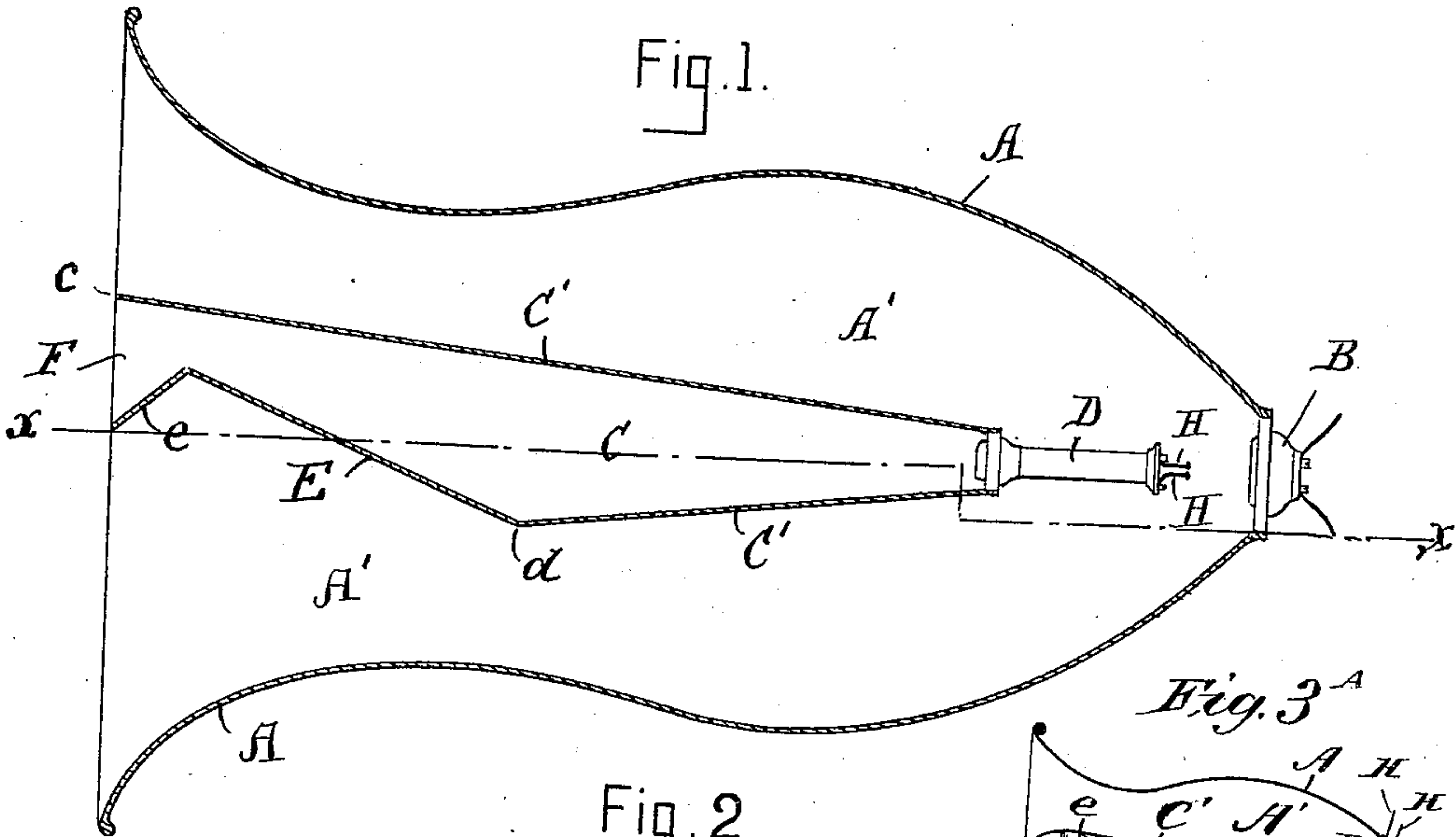


Fig. 2.

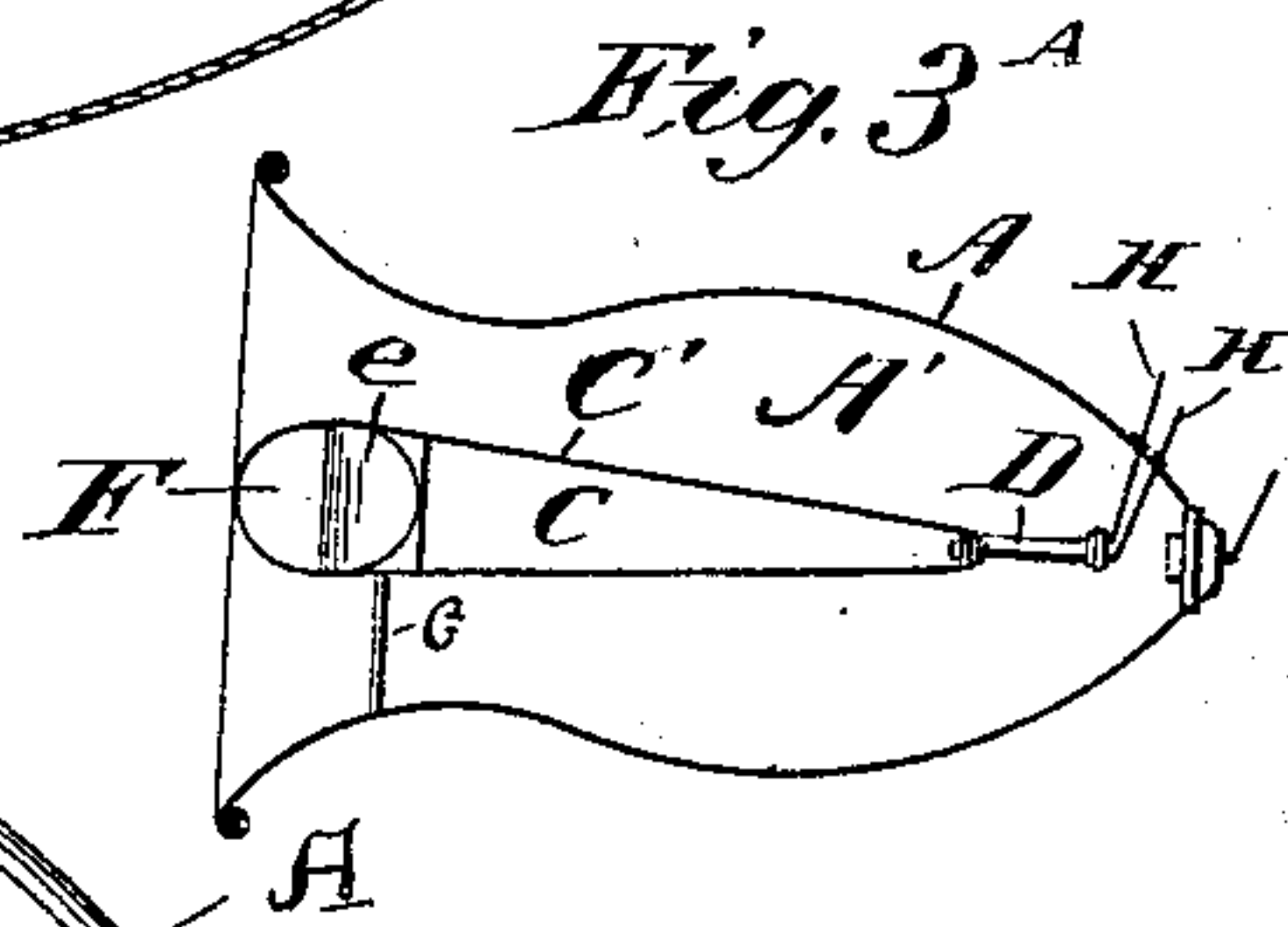
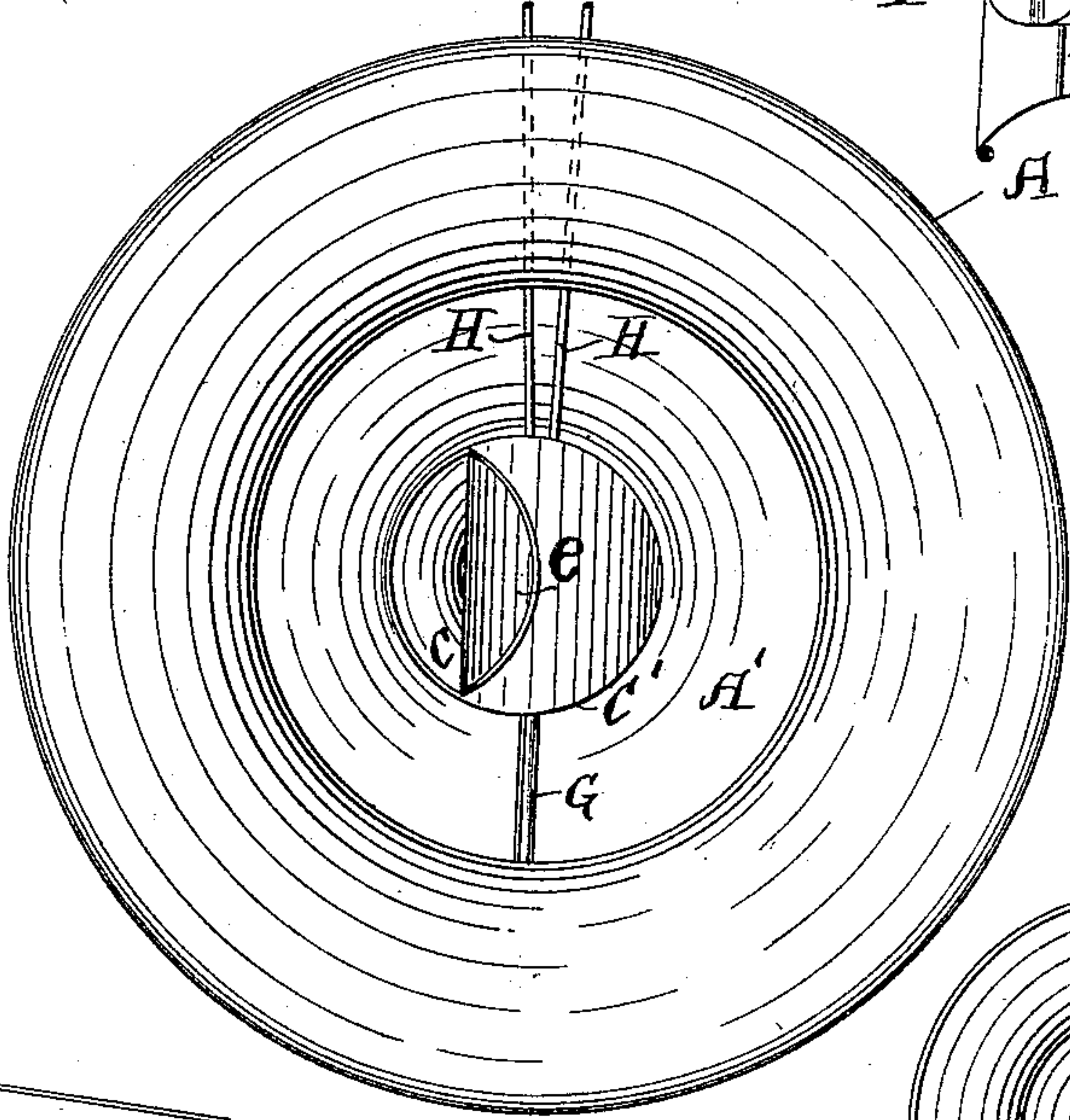


Fig. 5.

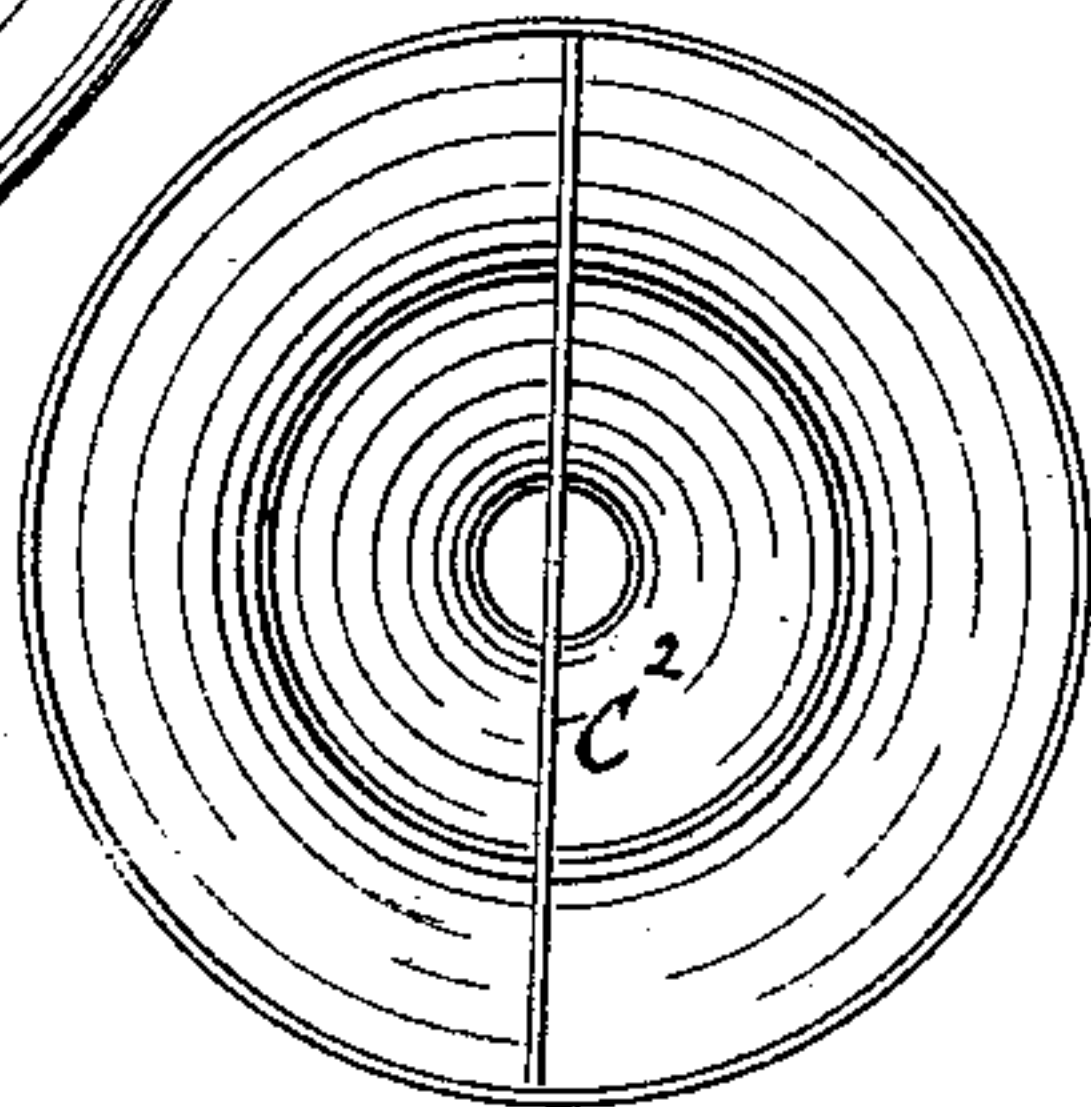


Fig. 4.

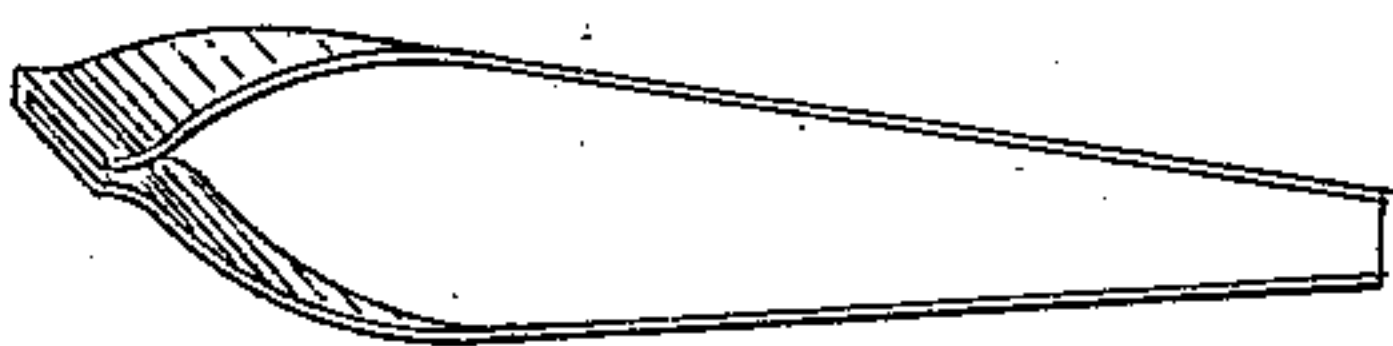
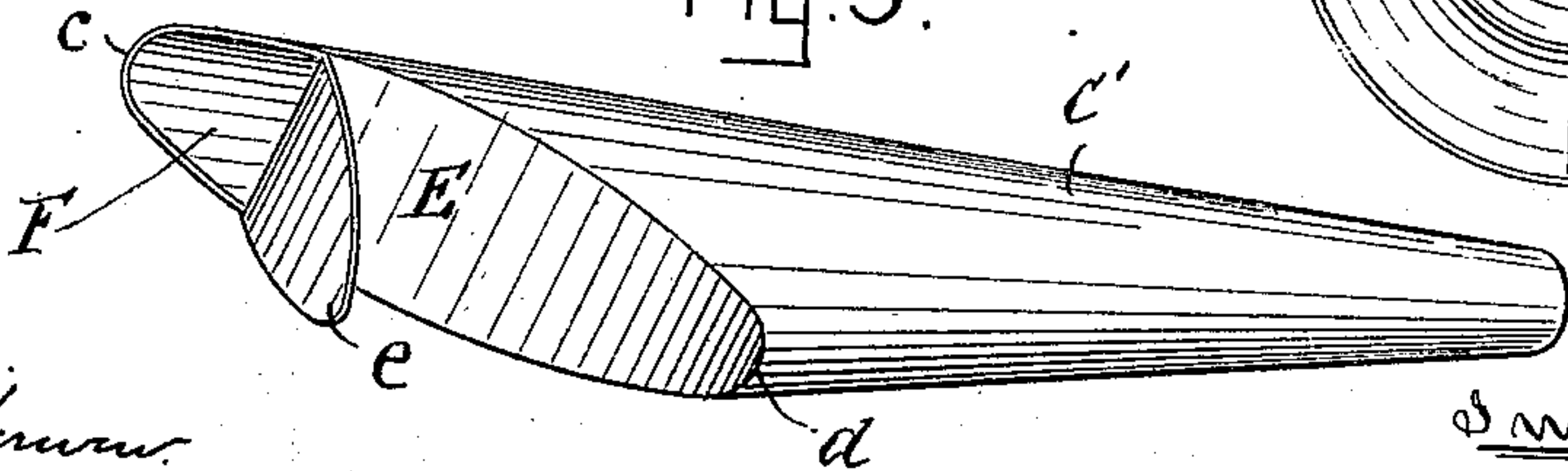


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

HOSEA W. LIBBEY, OF BOSTON, MASSACHUSETTS.

TRANSMITTING AND RECEIVING ATTACHMENT FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 543,626, dated July 30, 1895.

Application filed October 9, 1894. Serial No. 525,359. (No model.)

To all whom it may concern:

Be it known that I, HOSEA W. LIBBEY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Transmitting and Receiving Attachments for Telephones, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to certain improvements in transmitting and receiving attachments for telephones; and the invention consists of two receptacles the casings of which are arranged one within the other, the rear of the outer one being attached to the transmitter and the rear of the inner one to the receiver, as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, Figure 1 represents a horizontal longitudinal section of a transmitting and receiving attachment for telephones embodying my invention. Fig. 2 is a front view of same. Fig. 3 is a perspective view of the inner casing, taken on line $x x$, Fig. 1. Fig. 3^A is a vertical longitudinal section of the transmitting and receiving attachment, taken on line $x x$ of Fig. 1. Fig. 4 is a sectional view of a modified form of the inner casing. Fig. 5 is a front view of another modification.

A represents the outer casing, which is at its rear end attached to the transmitter B. This casing I prefer to form of a bell shape, as shown, (but it might be of any other desired shape,) and forms a sound-receptacle A' to receive the voice to be transmitted.

C is an inner receptacle, the casing C' of which is preferably of conical form. To the inner end of this casing is attached the receiver D. The large end of this cone is cut back a suitable distance, as shown, from c to d , to form a re-entrant angle, the mouth being covered by a piece E, which near the outer end is bent over to form a lip e , so that the voice delivered from the receiver D will be concentrated and delivered through the opening F. The front end of this casing C' is supported in the center of the casing A by a small wire or other support G, its rear end being attached to the receiver D, which is supported by the circuit-wires H H that pass through the outer casing A, where they are

secured in any suitable manner, thus giving support to the rear end of the inner casing.

The object of having the conical casing C' cut back, as described, to form a re-entrant angle is to allow the voice to freely pass into the outer receptacle A' and prevent the escape of sound through the inner casing.

The apparatus can be supported in any suitable place, as upon a wall or desk, and the voice will be received and can be delivered without having to place the ear or mouth close to the apparatus.

In Fig. 4 I have shown a modified form of the inner casing. In this case it is cut back on both sides instead of on one side only, as before described; and in Fig. 5 I have shown a modification in which a partition C² is employed instead of the conical casing C'. In this case the sound would be received on one side of the instrument and transmitted on the other side; but the results would not be so satisfactory as with the construction first described.

What I claim is—

1. In combination with a telephone transmitter and receiver an attachment consisting of an outer casing to receive the voice to be transmitted and convey it to the transmitter and an inner casing to receive the voice from the receiver and deliver the same substantially as set forth.

2. A transmitting and receiving attachment for telephones consisting of an outer casing A, forming a sound receptacle A', an inner conical casing C', the front end of the same being cut to form a re-entrant angle as described and its mouth covered by a piece having a lip substantially as and for the purposes set forth.

3. The combination of a telephone transmitter and casing forming a sound receptacle attached thereto with a receiver D, and casing C', attached thereto and arranged within the outer casing A, substantially as and for the purposes set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 28th day of February, A. D. 1894.

HOSEA W. LIBBEY.

Witnesses:

CHAS. STEERE,
EDWIN PLANTA.