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1,485,918

H. S. HEARN

TELEPHONE MOUTHPIECE

Filed Jan. 22, 1923

Fig. 1.

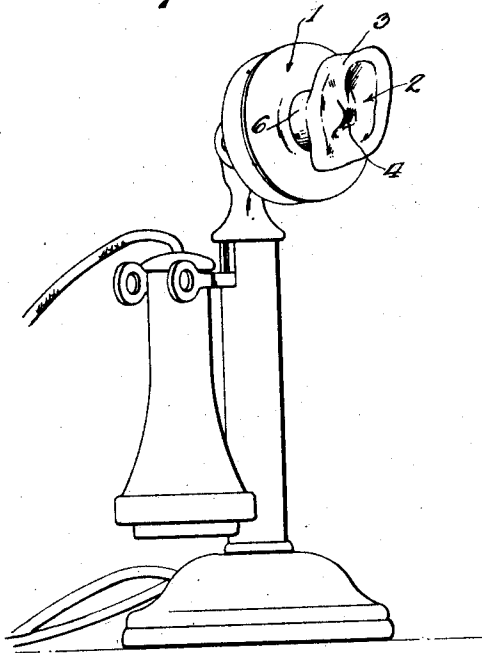


Fig. 2.

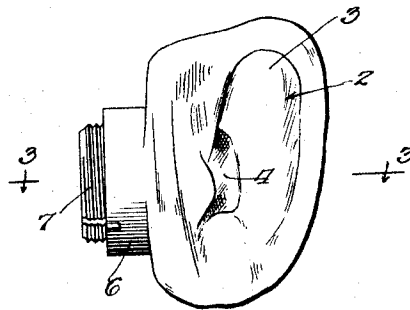


Fig. 3.

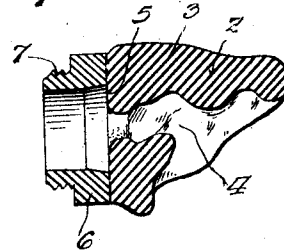


Fig. 4.

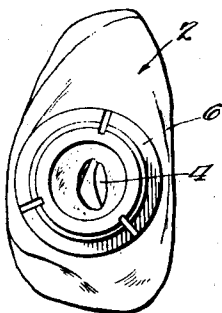
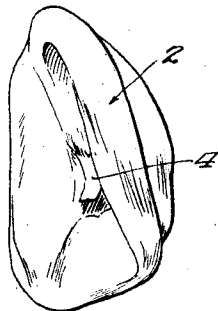


Fig. 5.



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UNITED STATES PATENT OFFICE.

HIRAM SAMUEL HEARN, OF DENVER, COLORADO.

TELEPHONE MOUTHPIECE.

Application filed January 22, 1923. Serial No. 614,239.

To all whom it may concern:

Be it known that I, HIRAM SAMUEL HEARN, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Telephone Mouthpieces, of which the following is a specification.

This invention relates to improvements in telephone transmitters and more particularly to an improved mouth piece for telephones. The primary object of the invention being to provide a mouth piece of such a contour as to be most effective in collecting the sound waves and delivering them to the diaphragm of the transmitter. In the ordinary forms of mouth pieces, there is more or less reflection of the sound waves and the waves are more or less interfered with in their passage to the diaphragm of the transmitter. Therefore, the present invention contemplates the provision of a mouth piece so shaped as to obviate this difficulty and provide for transmission of the sound waves in precisely the manner in which they are received and transmitted by the human outer ear.

In the accompanying drawings:

Figure 1 is a perspective view of the device embodying the invention installed upon a telephone;

Figure 2 is a side elevation of the mouth piece removed;

Figure 3 is a detail horizontal sectional view on the line 3—3 of Figure 2;

Figure 4 is a rear elevation of the mouth piece;

Figure 5 is a front elevation thereof.

The mouth piece embodying the invention is applicable to telephone sets of any of the standard types and is illustrated in Figure 1 as applied to a telephone set of the desk type, the transmitter being indicated by the numeral 1 and the mouth piece in

general by the numeral 2. The mouth piece 2 comprises a body 3 which is preferably molded from soft rubber and will preferably be given a flesh tint. The body 3 is given the form of the human ear and consequently is provided with an orifice which is indicated by the numeral 4 and through which the sound waves may pass to the diaphragm of the transmitter.

As stated, the body 3 is preferably of soft rubber and the rear side of the body, during the molding operation, is formed flat, as indicated by the numeral 5. This side of the body is disposed against and united, by cement, adhesive, or otherwise, to the flat forward end of a nipple 6 which may be of hard rubber and which has an exteriorly threaded extension 7 adapted to be fitted into the threaded socket provided in the casing of the transmitter in precisely the same manner that the ordinary flared mouth piece is fitted into place.

The orifice 4 is in communication with the interior of the nipple 6 so that the sound waves are conducted to the interior of the transmitter casing and reach and act upon the diaphragm. By giving to the body 3 the form illustrated in the drawings, which form is that of the human exterior ear, the sound waves are more effectually collected by the mouth piece and transmitted to the diaphragm of the transmitter and with less interference than where mouth pieces of the ordinary form are employed.

Having thus described the invention, what is claimed as new is:

A telephone mouth piece having the form of a human exterior ear provided with a sound passage therethrough having undulations adapted to eliminate the reflection of sound waves.

In testimony whereof I affix my signature.

HIRAM SAMUEL HEARN.