April 17, 1928. 1,666,220

G. W. SCHULTZ

TELEPHONE MUFFLER

Filed May 24. 1927

FIG. 1.

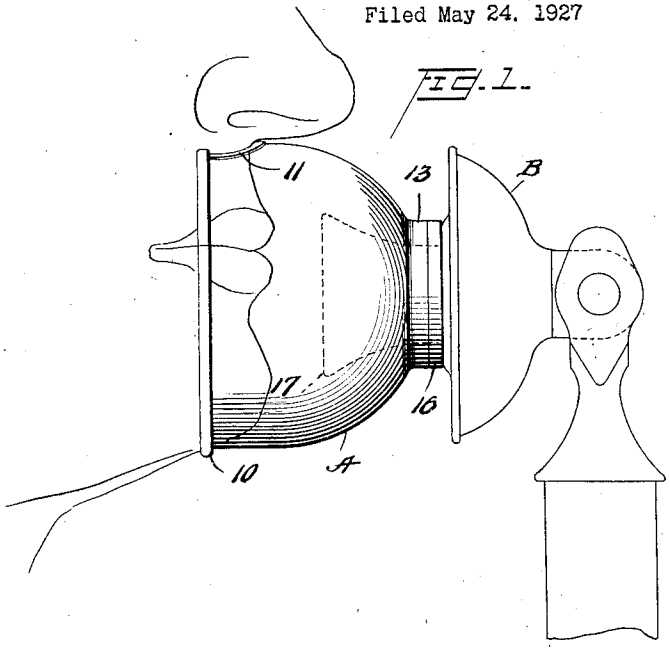


FIG. 2.

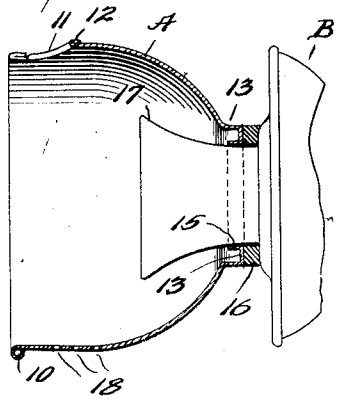
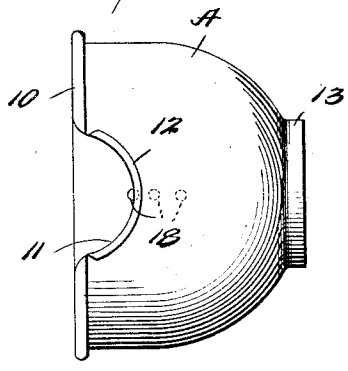


FIG. 3.



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UNITED STATES PATENT OFFICE.

GEORGE W. SCHULTZ, OF BOWERS, PENNSYLVANIA.

TELEPHONE MUFFLER.

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The present invention relates to voice mufflers for telephone transmitters.

The invention comprises an attachment to the mouth-piece of the standard form of telephone transmitter, in the shape of a cup having a neck portion frictionally engaged with the mouthpiece and an open end contoured in conformity with the lower face of a human being, whereby when the mouth is inserted in said open end and the face pressed against the rim of the cup the voice waves will be substantially confined to the interior of the cup and directed against the diaphragm of the transmitter, insuring privacy and enabling conversations to be carried on in low tones or even in whispers.

The object of the invention is to provide a voice muffler of the above mentioned character which can be manufactured at small cost, can be easily and quickly applied to the standard telephone transmitter without necessitating detachment of parts or changes in construction, is sightly and sanitary, eliminates the possibility of electric shocks to the user from lightning or crossed wires, and efficiently performs its function.

The particular nature of the invention will be described in connection with the accompanying drawings, which illustrate one embodiment of the invention, and the novel features will be pointed out in the claim.

Referring to the drawings:

Fig. 1 is a side elevation of a telephone transmitter having attached thereto a muffler embodying my invention;

Fig. 2 is a side view showing the muffler in vertical section; and

Fig. 3 is a plan view of the muffler detached.

The muffler illustrated by the drawings consists of a thin-walled cup designated generally by the reference character A. This cup may be formed of any suitable material, so far as the scope of the present invention is concerned, but I prefer to use a metal, such as aluminum, on account of its moderate cost, lightness, and resistance to corrosion.

The rim of the cup A is formed by curling over the marginal portion, as indicated at 10, and the upper wall is cut away to form a recess 11 which conforms to the general shape of the upper frontal jaw bone, so that when a person's mouth is inserted into the cup and the face pressed gently against the edges, as indicated in Fig. 1, the face substantially closes the cup, so that the voice waves are confined and concentrated on the diaphragm of the transmitter, insuring privacy in the conversation and enabling the conversation to be carried on in low tones. The marginal portions of the cut out portion 11 are folded over, as shown at 12 in Fig. 2, making a smooth rounded edge.

The cup is formed with a neck portion 13, and the metal thereof is bent, as shown in Fig. 2, to form an annular shoulder 14 in a plane perpendicular to the axis of the cup, and a sleeve 15. A soft rubber washer 16 is glued or otherwise attached to the annular shoulder 14. A number of small perforations 18 are formed in the lower wall of the cup, to provide for air circulation when the muffler is being used and to permit the escape of any moisture which may be condensed.

The cup is applied as shown in Figs. 1 and 2 by first unscrewing the mouthpiece 17 of the transmitter B, and inserting the threaded end of said mouthpiece into the cup and through the circular hole defined by the sleeve 15. The mouthpiece is then screwed into its normal position and in moving to such position the sleeve 15 is jammed against the conical surface of the mouthpiece and the rubber washer 16 is pressed against the metal face of the transmitter. The muffler is thus frictionally held on the mouthpiece of the transmitter and cannot be easily rotated from its correct position. It will be observed from Fig. 1 that the muffler extends a sufficient distance in front of the transmitter mouthpiece to eliminate any possibility of the mouthpiece being contacted by the mouth of the user or having disease germs, saliva or excretions from the nose deposited thereon. The muffler thus functions as a sanitary device. It will also be observed that the rubber washer 16 electrically insulates the muffler from the metal parts of the transmitter, thereby eliminating any chance of electric shocks to the user from lightning, crossed wires or the like.

Now having particularly described the nature of my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

In combination with a telephone transmitter having a metal face and a hard rubber flaring mouthpiece screwed therein, a voice muffler consisting of a metal cup having a neck portion bent to form an annular shoulder in a plane perpendicular to the axis of

the cup and a sleeve coaxial with said cup, and a soft rubber washer secured on said shoulder, so that when the threaded end of the transmitter mouthpiece is inserted through said sleeve and screwed up to its normal position said sleeve will be frictionally engaged with the conical surface of the mouthpiece and said washer will be pressed firmly against the metal face of the transmitter.

In testimony whereof I hereunto affix my signature.

GEORGE W. SCHULTZ.