F. W. COOK.

TELEPHONE MUFFLER.

APPLICATION FILED MAR. 12, 1910.

990,527.

Patented Apr. 25, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

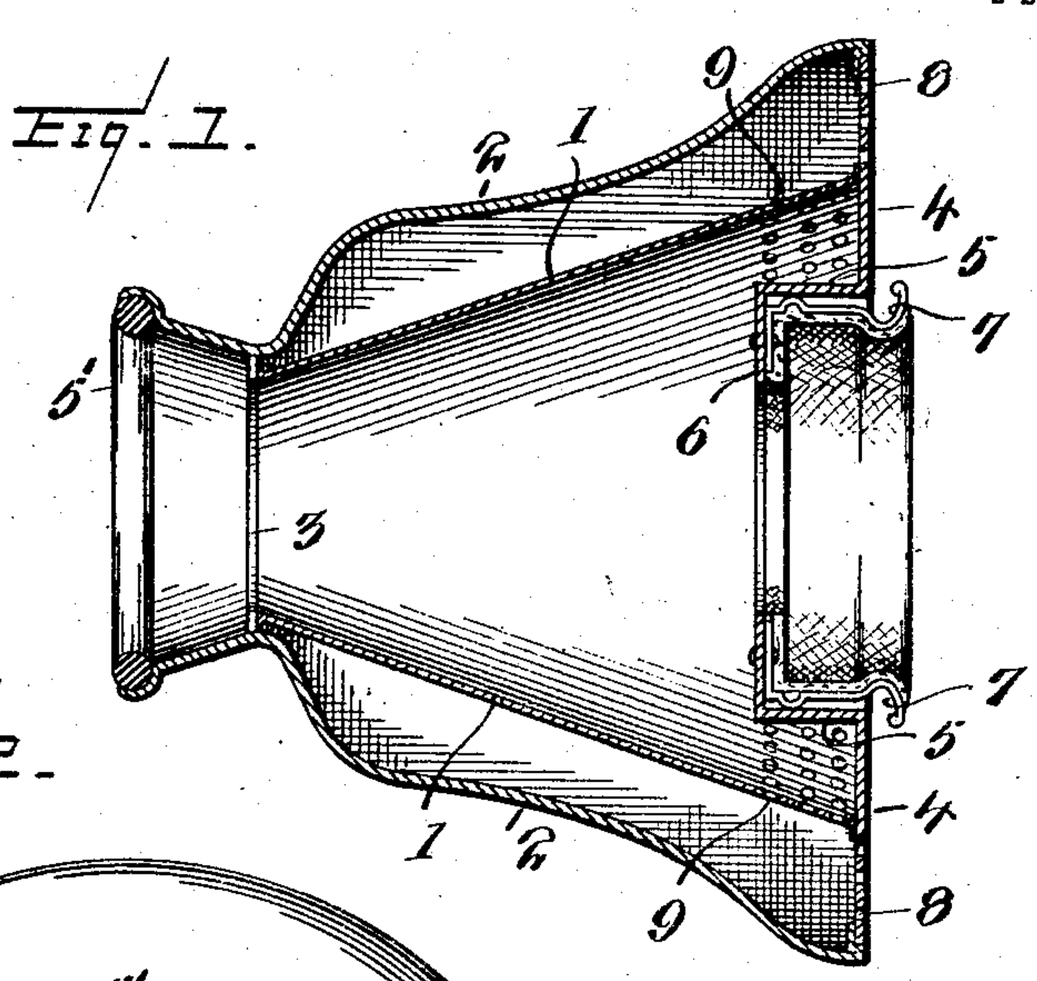


Fig. 2.

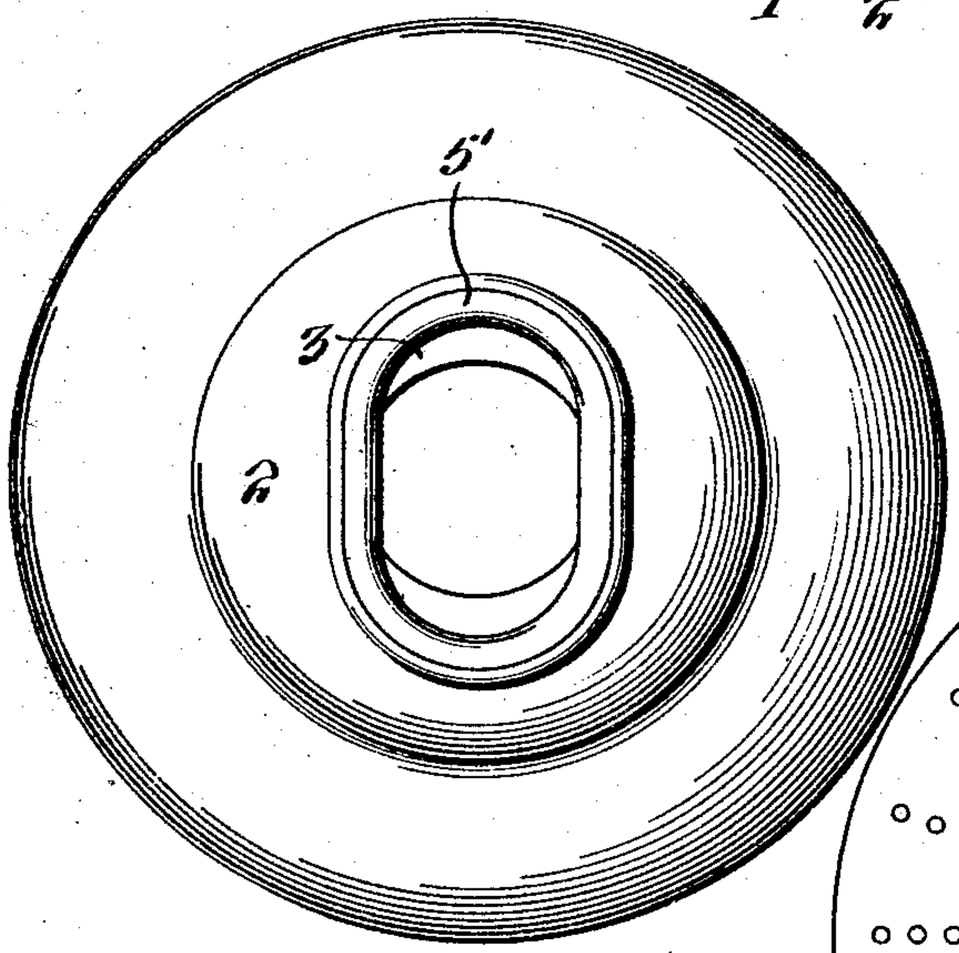
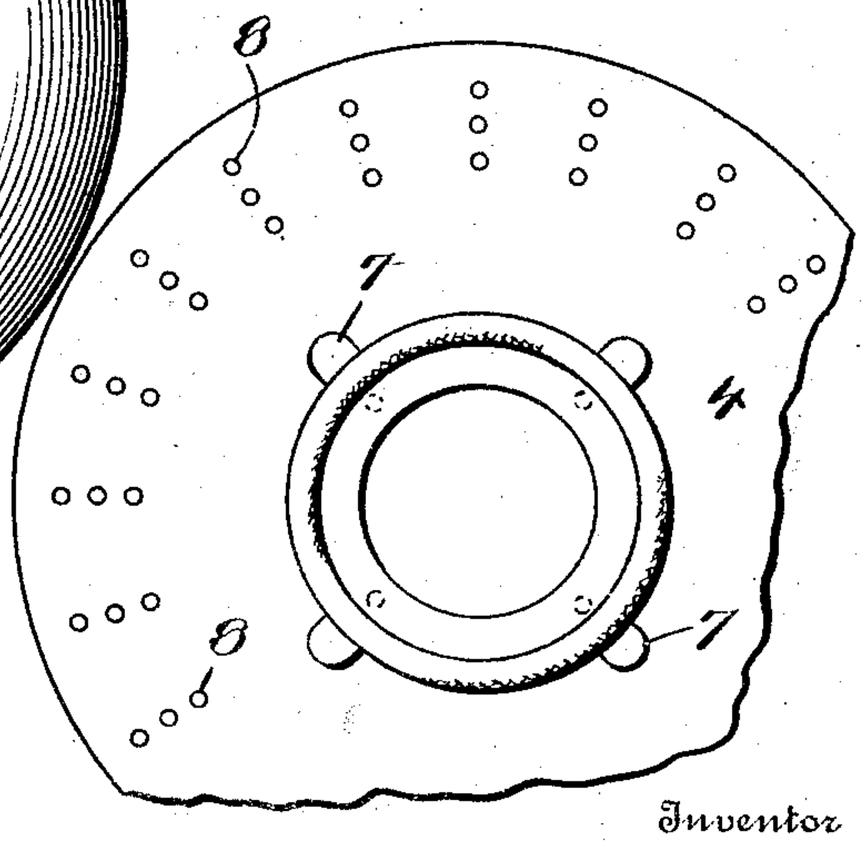


Fig. 3.



Witnesses

E. R. Ruppert.

V. B. Tellyard.

Inventor

Fred W. Cook

By Victor J. Evans

Attorney

F. W. COOK.

TELEPHONE MUFFLER.

APPLICATION FILED MAR. 12, 1910.

990,527.

Patented Apr. 25, 1911.

2 SHEETS—SHEET 2.

Fig. 4.

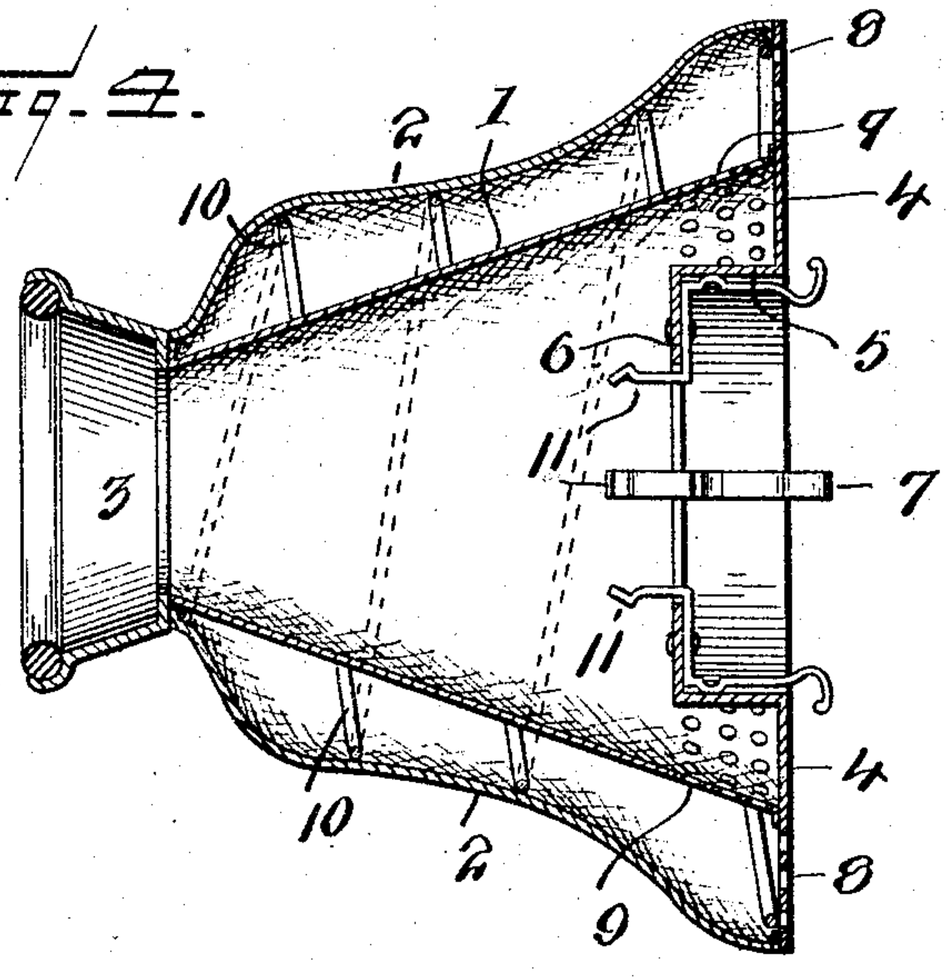
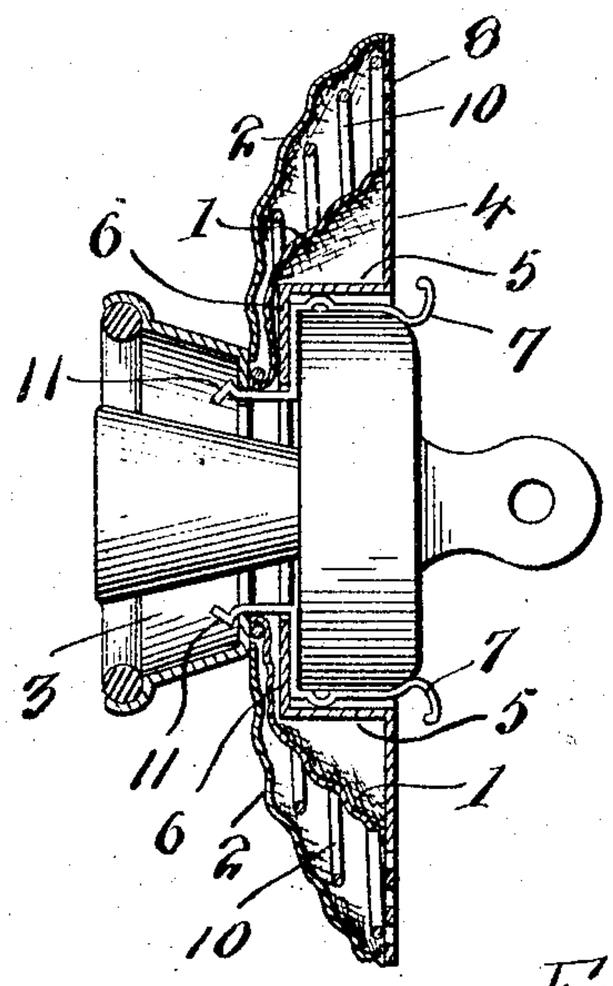


Fig. 5.



Witnesses:
E. R. Ruppert.
V. B. Hillyard.

Inventor
Fred W. Cook
By Victor J. Evans
Attorney

UNITED STATES PATENT OFFICE.

FRED W. COOK, OF DENVER, COLORADO.

TELEPHONE-MUFFLER

990,527. Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed March 12, 1910. Serial No. 548,859.

To all whom it may concern:

Be it known that I, FRED W. COOK, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented new and useful Improvements in Telephone-Mufflers, of which the following is a specification.

The present invention provides a device to be fitted to the transmitter of telephones for confining the sound and preventing any one in close proximity to the instrument from hearing the conversation of the person sending a telephonic message and at the same time excluding external sound so that the recipient of the communication may hear the message with distinctness.

The invention provides an article of the character aforesaid which may be detachably fitted to the average telephone transmitter and which may be conveniently carried in the pocket so that a person using a public telephone may prevent any one from learning the nature of the message transmitted, particularly in places where booths are not provided.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawings, and pointed out in the appended claims.

Referring to the drawings, forming a part of the application, Figure 1 is a central longitudinal section of a muffler for telephone transmitters embodying the invention. Fig. 2 is a front view thereof. Fig. 3 is a rear view of the attachment. Fig. 4 is a view similar to Fig. 1 of a modification in which the muffler is constructed to be collapsed. Fig. 5 is a view of the modification in collapsed form and shown applied to the transmitter of a telephone.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawings, by the same reference characters.

The muffler comprises inner and outer shells 1 and 2, which are spaced apart and of tapered form in their length, a mouth-piece 3 at the smaller end of the body, and a plate 4 at the larger end of the body, the shells 1 and 2 being connected at their ends to the parts 3 and 4 in any substantial way.

The mouth-piece 3 may be of any construction to insure a close fit between the lips of the person using the instrument and the device so as to confine the sound and at the same time prevent external noise from interfering with clear and distinct transmission. In the event of the mouth-piece 3 being constructed of solid material, such as celluloid, vulcanite, metal or the like, it is preferred to provide the outer edge with a rubber binding 5', which is yieldable, thereby insuring a close fit between the lips of a person using the instrument and the mouth-piece.

The back plate 4 may be of metal or other rigid material and is provided with a centrally disposed opening to receive the head of the transmitter. A collar 5 is secured to the back plate 4 and extends forwardly therefrom in line with the opening and is provided at its forward end with an inner flange 6 designed to engage the front of the telephone head and limit the rearward movement of the attachment when placed in position thereon.

Spring clips 7 are secured to the back portion of the attachment for retaining the same upon the telephone when the attachment is placed in proper position thereon. The spring clips 7 may be of any construction and attached to the back portion of the device in any manner. As shown the spring clips are substantially of L-form and their inner ends are secured by rivets to the annular flange 6.

It is to be understood that the parts are to be covered so as to prevent injury to the instrument when placing the attachment in position or removing it therefrom.

The shells 1 and 2 are spaced apart so as to inclose an air space, thereby preventing external noise being transmitted to the interior space and interfering with distinct articulation when using the attachment during transmission of a message.

The outer portion of the back plate 4 is perforated, as indicated at 8, and the rear portion of the inner shell 1 is perforated, as shown at 9, thereby providing for respiration when using the device so that it will not be necessary for the person using the instrument to remove the lips from the mouth-piece in order to breathe freely.

In the modification shown in Figs. 4 and 5 the shells 1 and 2 are constructed of flexible material, such as textile, thereby enabling the device to be collapsed so as to be conveniently carried in the pocket or to be out of the way when using the telephone transmitter in the ordinary way. To hold

the shells 1 and 2 extended a helical spring 10 is located in the space formed between the shells and may be connected at its ends to respectively the mouth-piece 3 and the plate 4. The spring 10 is of conical form to approximate the tapered shape of the body of the device. Spring catches 11 extend forwardly from the flange 6 and are adapted to engage the mouth-piece 3 and hold the device in collapsed form, as indicated most clearly in Fig. 5. The catches 11 preferably form a part of the spring clips 7.

The attachment acts in the capacity of a muffler to confine the sound when transmitting a message and also serves to cut off external noise and prevent confusion in the reception of a communication, thereby facilitating both the transmitting of a communication and the receiving of the same. In the construction shown in Fig. 1 the shells 1 and 2 are of relatively rigid material, such as sheet metal, thereby resulting in the provision of an attachment or muffler having a rigid body, whereas in the construction shown in Figs. 4 and 5 the shells 1 and 2 being flexible results in supplying an attachment having a collapsible body, which may be reduced to a compact form to be conveniently carried in the pocket for individual use.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

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

1. A telephone attachment of the character specified comprising a hollow body provided at one end with a mouth-piece and having its opposite end provided with a plate in which an opening is formed for receiving the telephone instrument, a collar extended forwardly from the said plate in line with the opening thereof, a flange at the forward end of said collar, and spring clips attached to the rear portion of the device for securing the same in place upon the instrument.

2. A telephone attachment of the character specified comprising a collapsible body having a mouth-piece at one end and securing means at the opposite end for fastening the same upon the telephone instrument when fitted thereto, and means for holding opposite end portions of the device when collapsed.

3. A telephone attachment consisting of a hollow body comprising inner and outer spaced shells having a mouth-piece at one end and having a chambered portion at its opposite end to receive the instrument, and having a plurality of small openings in the rear portions of the shells substantially in the plane of the chambered portion receiving the instrument.

4. A telephone attachment consisting of a collapsible body provided at one end of the mouth-piece and adapted to have its opposite end receive the instrument, a spring normally exerting a force to hold the body extended, and means for holding the body collapsed against the tension of said spring.

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

FRED W. COOK.

Witnesses:

C. A. LAUD,

CHARLES A. KITZMILLER.