No. 777,607. PATENTED DEC. 13, 1904.

A. B. CRUICKSHANK.

MOUTHPIECE FOR TELEPHONE TRANSMITTERS.

APPLICATION FILED JULY 27, 1904.

NO MODEL.

Fig. 1.

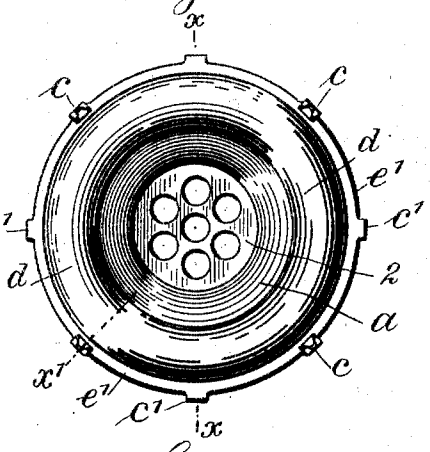


Fig. 2.

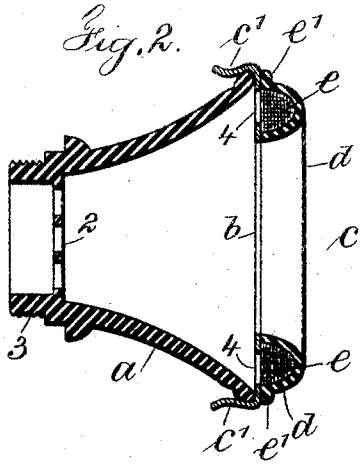


Fig. 3.

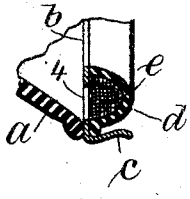


Fig. 4.

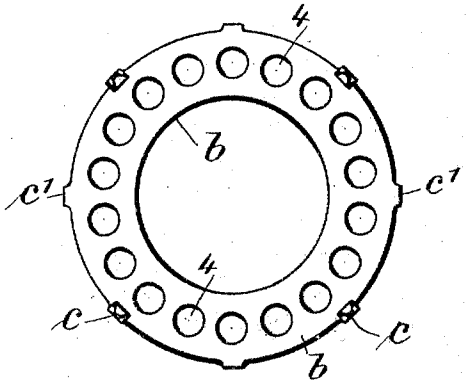
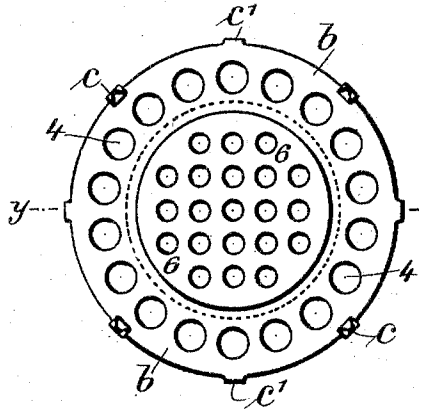


Fig. 6.



Fig. 5.



Witnesses

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No. 777,607. Patented December 13, 1904.

UNITED STATES PATENT OFFICE.

ARTHUR B. CRUICKSHANK, OF LONDON, ENGLAND, ASSIGNOR TO HIMSELF, AND ARCHIBALD EDWARD RYKERT, OF PARIS, FRANCE.

MOUTHPIECE FOR TELEPHONE-TRANSMITTERS.

SPECIFICATION forming part of Letters Patent No. 777,607, dated December 13, 1904.

Application filed July 27, 1904. Serial No. 218,327. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR B. CRUICKSHANK, a subject of the King of Great Britain, residing in London, England, have invented an Improvement in Mouthpieces for Telephone-Transmitters, of which the following is a specification.

It is generally conceded as a fact that the mouthpieces of telephone-transmitters as commonly constructed are receptacles for all kinds of microbes and disease germs, and consequently are the means of spreading disease.

The object of my invention is the provision of a sanitary attachment for the mouthpiece of a telephone-transmitter which may be readily attached to any transmitter or mouthpiece and which will destroy or render innocuous all microbes or disease germs which may come into contact with the same.

In carrying out my invention I employ the customary bell-shaped member of the telephone-transmitter and provide the same with a perforated plate, a ring having a circular recess in one side thereof, an absorbent material filling the said ring and adapted to be saturated with any good fluid antiseptic substance, and means for maintaining the said ring in position on the rim of the bell-shaped member with the said plate intervening between these parts.

In the drawings, Figure 1 is a front elevation of my improved mouthpiece for telephone-transmitters. Fig. 2 is a central longitudinal section of the same on line $x\ x$, Fig. 1. Fig. 3 is a partial section on line $x'\ x'$, Fig. 1. Fig. 4 is an elevation of the plate. Fig. 5 is an elevation of a modified form of the plate; and Fig. 6 is a section on line $y\ y$, Fig. 5.

a represents the usual bell-shaped mouthpiece commonly employed with telephone-transmitters and provided with the usual perforated diaphragm 2 and the screw-threaded shank 3 for securing the same to the telephone instrument.

b represents an annular plate, preferably made of sheet metal and provided with a circular series of apertures or perforations 4. In suitably-spaced-apart positions on the periphery of the annular plate b I provide spring-fingers $c\ c'$, which may be integral with the same or otherwise, as found convenient, the spring-fingers indicated at c projecting in one direction and those indicated at c' in the other direction. The annular plate b is approximately of the same diameter as the rim of the mouthpiece a, and one set of the spring-fingers is adapted to snap over the said rim to hold the plate b to the mouthpiece a.

d represents a ring approximately semicircular in cross-section and one side of which is flattened and provided with a circular recess adapted to receive a filling of absorbent material—such, for instance, as felt e. The ring d is provided with a rim e', which is also approximately of the same diameter as the rim of the mouthpiece a, and the ring d is adapted to be snapped into position into the spring-fingers c with the flat face thereof adjacent to the plate b, in which position the absorbent material e lies adjacent to the perforations 4 in the said plate b and is held in position by the same.

If a greater surface giving off the volatile antiseptic is desired, I may provide the annular plate b with a sheet of perforated material 5, secured to one side of the plate b and preferably covering the opening in the same, and in the recess formed by the sheet of perforated material 5 and the opening in the plate b I may set a piece of absorbent material 6, provided with suitable perforations and also adapted to be saturated with a volatile antiseptic substance.

It is to be understood that I do not limit myself to the use of the spring-fingers $c\ c'$ for securing the plate b to the ordinary mouthpiece and the ring to the plate, as it is obvious that other equivalent means may be employed without departing from the spirit of my invention.

I claim as my invention—

1. A mouthpiece for telephone-transmitters, comprising a bell-shaped member, a perforated plate, a ring having a circular recess in one side thereof, an absorbent material filling said recess and means for maintaining the said

ring in position on the rim of said bell-shaped member with said plate intervening.

2. A mouthpiece for telephone-transmitters, comprising a bell-shaped member, a plate having perforations therein and lying flatwise on the rim of the bell-shaped member, a ring having a circular recess therein, an absorbent material filling said recess, means for connecting the said plate to the rim of the said bell-shaped member and means for connecting the said ring to the said plate.

3. A mouthpiece for telephone-transmitters, comprising a bell-shaped member, an annular plate having a circular series of perforations therein, a ring having a circular recess therein, an absorbent material filling said recess and means for connecting the said ring to the rim of the bell-shaped member with the said plate intervening and in such a position that the said absorbent material comes adjacent to the circular series of perforations in the said plate.

4. A mouthpiece for telephone-transmitters, comprising a bell-shaped member, a plate having a circular series of perforations therein, a ring having a circular recess therein, an absorbent material filling said recess, a series of spaced-apart spring-fingers projecting in one direction from the periphery of the said plate and adapted to engage the rim of the bell-shaped member and another series of spaced-apart spring-fingers projecting in the opposite direction from the periphery of said plate and adapted to engage the rim of said ring.

5. A mouthpiece for telephone-transmitters, comprising a bell-shaped member, a plate having a circular series of perforations therein, a ring having a circular recess therein, an absorbent material filling said recess, a series of spaced-apart spring-fingers projecting in one direction from the periphery of the said plate and adapted to engage the rim of the bell-shaped member, another series of spaced-apart spring-fingers projecting in the opposite direction from the periphery of said plate and adapted to engage the rim of said ring, a sheet of perforated material secured to one side of said annular plate and a piece of perforated absorbent material set in the recess formed by said perforated sheet and the opening in the said annular plate.

6. In a mouthpiece for telephone-transmitters, the combination with the base member, an outer member and an absorbent material, of a perforated plate intermediate of said parts, a series of fingers formed with said plate part projecting in one direction and adapted to engage the base member and part projecting in the opposite direction and adapted to engage the outer member.

7. In a mouthpiece for telephone-transmitters, the combination with the base member, of an outer hollow ring member and an absorbent material filling to the ring member, a perforated plate intermediate of said parts, a series of fingers projecting from the periphery of said plate in opposite directions and at right angles to the surfaces thereof, those extending in one direction engaging the base member and those extending in the opposite direction engaging the hollow ring member.

Signed by me this 10th day of June, 1904.

ARTHUR B. CRUICKSHANK.

Witnesses:
HANSON C. COXE,
JOHN BAKER.