

No. 652,745.

Patented July 3, 1900.

M. N. CLARKE.

DEVICE FOR CLEANING TELEPHONE MOUTHPIECES.

(Application filed Aug. 24, 1899.)

(No Model.)

Fig. 1.

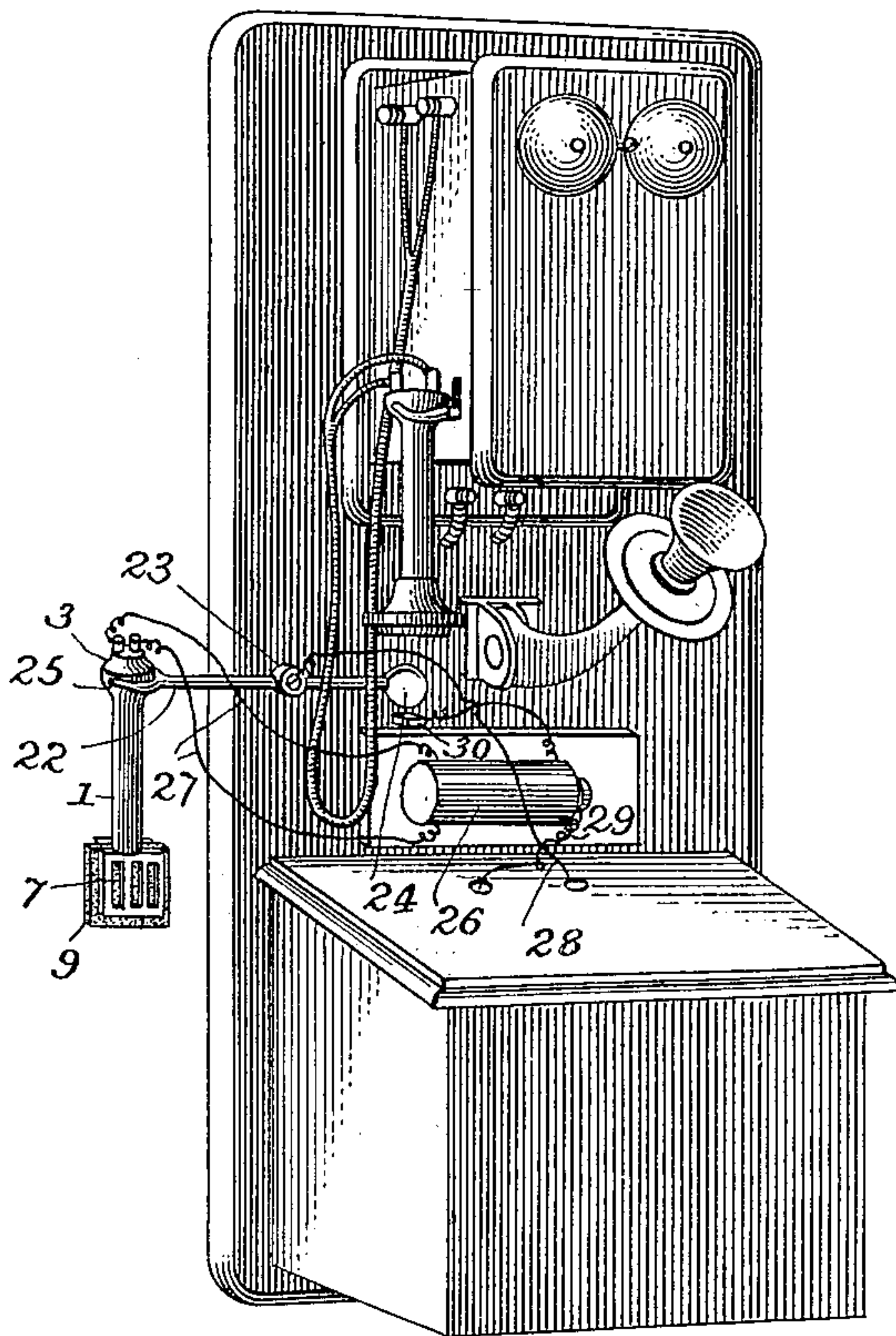


Fig. 2.

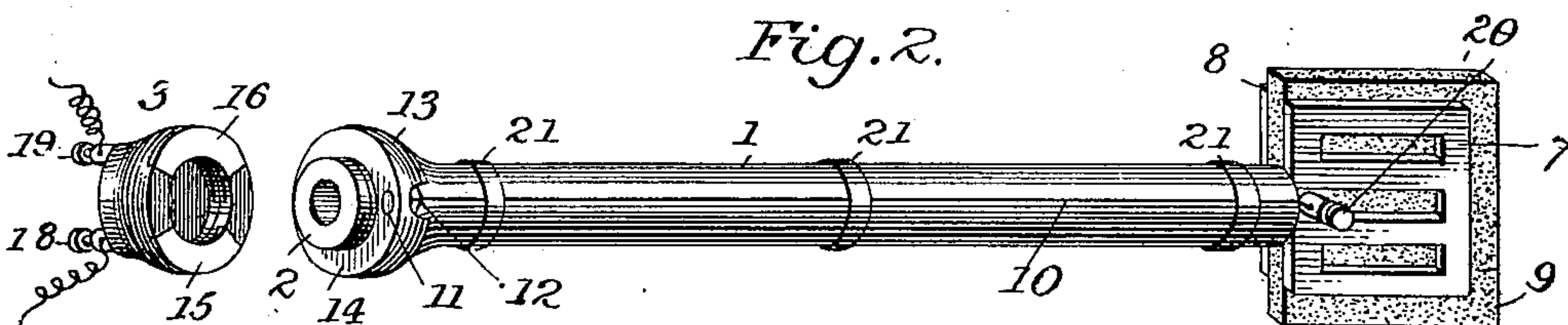


Fig. 3.

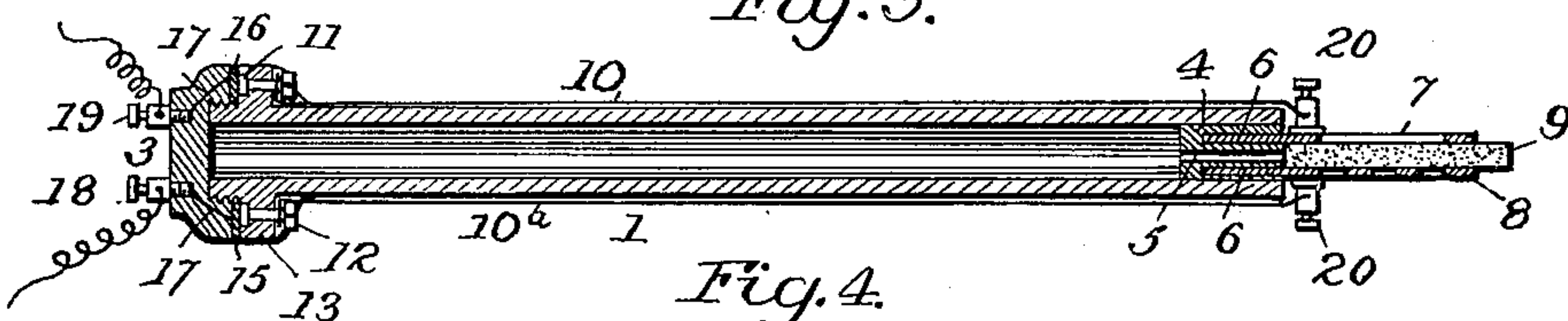
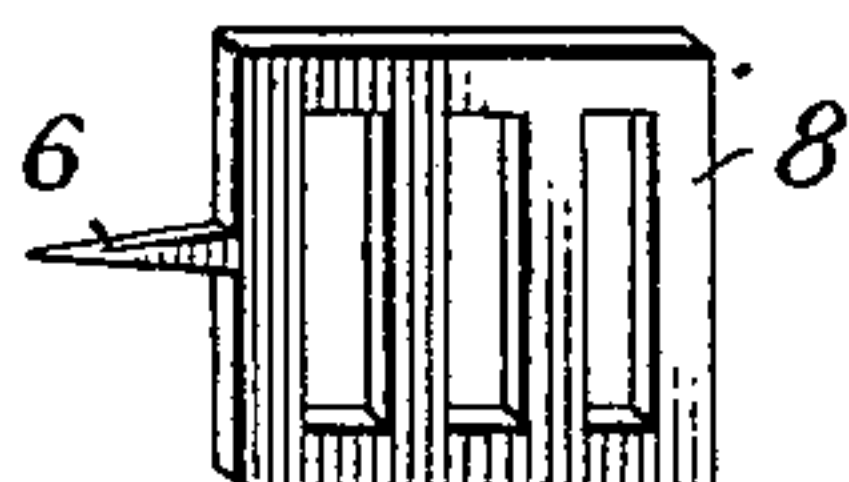


Fig. 4.



Witnesses

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DEVICE FOR CLEANING TELEPHONE-MOUTHPIECES.

SPECIFICATION forming part of Letters Patent No. 652,745, dated July 3, 1900.

Application filed August 24, 1899. Serial No. 728,388. (No model.)

To all whom it may concern:

Be it known that I, MARIAN N. CLARKE, a citizen of the United States, residing at Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Cleaning Telephone-Mouthpieces, of which the following is a specification.

My invention relates to improvements in devices for cleaning the mouthpieces of telephones and for destroying any germ life which may be taken up by the brush or brought in contact therewith.

In the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of a telephone with my improved electric cleaning-brush attached. Fig. 2 is a similar view of the brush with the cap-piece of the handle removed. Fig. 3 is a central longitudinal section through the brush, and Fig. 4 is a perspective view of one of the electrodes.

Referring to the drawings, 1 indicates a hollow handle, made of hard rubber or other suitable insulating material and having a screw-threaded end 2, adapted to receive a cap 3. In the opposite end of the handle is fitted a plug 4, made of insulating material and having a central opening 5. The plug is also formed with sockets on either side of the central opening, into which are driven the stems 6 of metal plates 7 and 8, which form the electrodes. The electrodes 7 and 8 are thus securely held in place parallel with each other, and between the plates is inserted a piece of fibrous material 9, preferably felt, which is frictionally held in place by the electrodes. The felt is wider and longer than the electrodes, so that it extends beyond them on three sides, and its inner end abuts against the end of the plug and extends across the opening 5, so that when the handle is filled with a liquid the felt will become saturated by absorption.

The electrodes 7 and 8 are slotted in opposite directions, as shown, for the purpose of a better distribution of the electric current in its passage through the fabric, and said electrodes are electrically connected by means of insulated wires 10 and 10^a, extending along the outside of the handle to contact-screws 11 and 12, respectively. These contact-screws extend through a boss 13 at the free end of the

handle, their heads being flush with the surface 14, against which the inner face of the cap 3 abuts when the cap is in place. The inner face of the cap is fitted with arc-shaped plates 15 and 16, and when screwed down into place upon the handle one of these plates comes in contact with the screw 11, while the other plate comes in contact with the screw 12. The plates 15 and 16 are connected by wires 17 with binding-screws 18 and 19, respectively, secured in the end of the cap-piece. The cap may thus be readily removed for the purpose of filling the fountain-handle, and when replaced the electrical connections will be restored. The wires 10 and 10^a may be connected to the electrodes in any suitable manner. As shown, they are connected by means of screws 20, which screw into the electrodes. Being insulated, the wires might be arranged to extend through the tubular handle instead of alongside of it; but for convenience I prefer to arrange them along the outside of the tube, as shown, and bind them on at suitable intervals by cords or bands 21. After the handle has been filled with a suitable liquid and the cap screwed in place the binding-posts 18 and 19 are connected to a suitable source of electricity, and it is then ready for use. This fluid employed is preferably an antiseptic; but water or any other fluid may be used to saturate the absorbent material 9, so as to provide a path for the electric current between the electrodes.

In using the device on telephone-mouthpieces the mouthpiece is cleaned by means of the moistened felt brush, and the electricity flowing through the fabric acts as a germicide upon any living organisms which may be taken up by the felt.

In arranging the device upon a telephone I provide a lever 22, pivoted upon a stud 23 and having a weight 24 at one end and a fork 25 at the opposite end, upon which the handle of the brush is supported by means of the shoulder 13, which rests within the fork. I also arrange at a convenient point upon the telephone an induction-coil 26 similar to the coils generally employed by physicians for medical purposes. The brush is connected by wires 27 to the secondary of the induction-coil. A wire 28, leading from the local battery of the telephone, is connected to the stud

23 in contact with the lever 22, and the primary wire of the induction-coil is connected to the battery by a wire 29, leading through a suitable circuit-interrupter, and to a contact-piece 30, arranged beneath the weighted end of the lever 22. When the brush is supported upon the lever, the weighted end of the lever is held out of contact with the piece 30, and no current will pass. When, however, the device is lifted off the hook, the weighted end of the lever will fall and the primary circuit will be closed, thereby setting the induction-coil in action and sending a high-tension current through the electrodes and the moistened fibrous material until the device is again hung upon the lever.

I prefer as a fibrous material a white felt, which will readily show any accumulation of dirt. The strips of felt being held frictionally in place may be readily removed and replaced by clean ones.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

25 1. An instrument for cleaning telephone-mouthpieces consisting of a handle, a pair of electrodes secured at one end of said handle, wires connecting said electrodes with a suit-

able source of electricity, and a fibrous material arranged between said electrodes. 30

2. An instrument for cleaning telephone-mouthpieces consisting of a hollow handle adapted to contain a liquid, and having an opening at one end, a pair of electrodes secured to the handle on either side of said opening, wires connecting said electrodes with a suitable source of electricity, and a fibrous material arranged between said electrodes and extending across the opening. 35

3. An instrument for cleaning telephone-mouthpieces consisting of a handle, a pair of electrodes secured at one end of said handle and a fibrous material between said electrodes, in combination with an induction-coil having its secondary winding connected to said electrodes, and its primary winding in circuit with the local battery of a telephone, and a switch for interrupting the primary circuit when the instrument is not in use. 40 45

In testimony whereof I affix my signature 50 in presence of two witnesses.

MARIAN N. CLARKE.

Witnesses:

W. L. RAEDER,
WM. C. OLDS.