

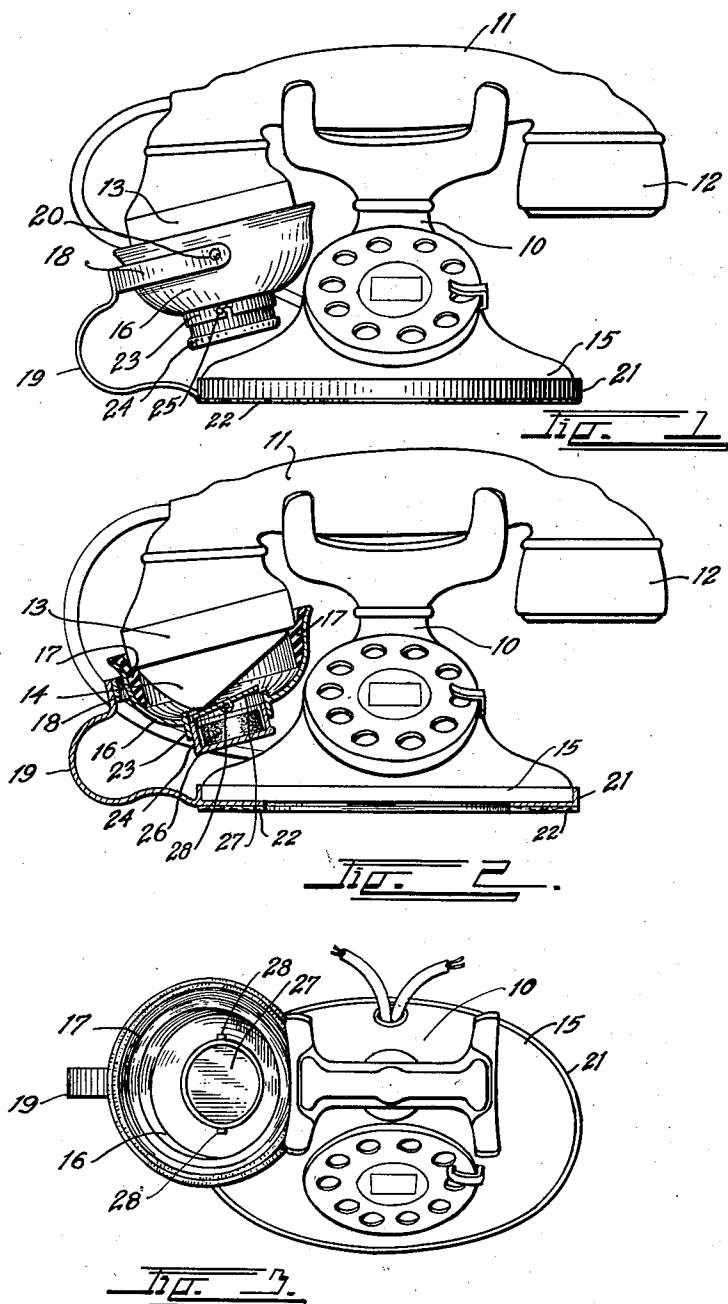
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TELEPHONE STERILIZER

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TELEPHONE STERILIZER

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4 Claims. (Cl. 179—185)

This invention relates to an automatic telephone mouth piece sterilizer and has for its principal object the provision of a device of this character which will subject the mouth piece of a telephone to the action of a gaseous germicide when the telephone is not in use.

It is more particularly useful for public type phones wherein the transmission of disease germs through the telephone mouth piece from one user to the other is easily possible.

Other objects of the invention are to provide a device of this character which will require no fixed attachment of any kind to the phone mechanism; which will not interfere with the normal use of the phone; which will require no attention on the part of the telephone user; and which will emit its germicidal gas only when the telephone mouth piece is in proper position to receive it.

Other objects and advantages reside in the detailed construction of the invention, which is designed for simplicity, economy, and efficiency. These will become more apparent from the following description.

In the following detailed description of the invention reference is had to the accompanying drawing which forms a part hereof. Like numerals refer to like parts in all views of the drawing and throughout the description.

In the drawing:

Fig. 1 illustrates the invention as it appears in combination with a typical desk type phone.

Fig. 2 is a sectional view of the invention illustrating its relation to the phone.

Fig. 3 is a plan view thereof with the head set removed.

In the drawing, a typical telephone stand is illustrated at 10 with a typical head set at 11 having a receiver 12 at one extremity and a transmitter 13 at the other extremity. The usual transmitter is formed with a mouth piece 14 of convenient shape, preferably inclined, to receive the voice vibrations. The stand 10 is provided with an enlarged base portion 15 for supporting the phone on a desk, table or other supporting surface.

The invention employs a receiving cup 16 of the proper size to receive the mouth piece 14 of the head set. The mouth of the receiving cup is lined with a very soft, resilient, annular, sealing gasket 17 which seals the cup to the transmitter 13 when the latter is in place therein. The receiving cup is swingingly mounted in a yoke member 18 which is supported from a resilient bracket arm 19. The extremities of the

yoke 18 are perforated to receive hinge pins 20 projecting from the cup member.

Thus, it can be seen that the cup member is free to swing in to alignment with and seal itself with any angle of the mouth piece 14. The resilient bracket is so arranged that it will lift the cup upwardly when the head set is removed from the phone and will be forced downwardly when the head set is replaced on the phone. This action causes the inherent resiliency in the bracket 19 to constantly urge the cup against the mouth piece to maintain it in sealing relation therewith. The upward force of the bracket is not sufficient however to lift the headset from the phone.

The bracket member 19 is secured to and extends from a flanged tray 21 of the proper size and shape to receive the base 15 of the telephone. The bottom of the tray is covered with a pad 22, of felt or similar material, to prevent marring of furniture. The tray bottom may be open, as illustrated, or completely closed if desired.

It can be readily seen that the shape of the tray prevents relative movement between the tray and the telephone so that the receiving cup is always held in proper position to receive the mouth piece or transmitter of the head set. The cup may be arranged in any desired way to hold germicidal or disinfecting materials of a type which will have the effect of sterilizing the telephone mouth piece.

In the form of the invention illustrated, the bottom of the cup is formed with an opening outlined by a cylindrical sleeve 23. A hollow cap 24 is telescopically received in the sleeve 23 and can be locked therein by means of a pin and bayonet slot joint 25. Thus, by a simple turn, the cap can be removed from or inserted in the cup member.

The cap 24 is designed to carry a tablet 26 of any suitable volatile disinfectant material. This material may be left exposed at all times if desired. It is preferred, however, to provide an arrangement whereby the disinfectant material is sealed when the phone is in use to prevent escape of the germicidal vapors or gases.

In the form illustrated, the sealing is accomplished by means of a tilting valve plate 27 mounted on a pivot pin 28 in the sleeve 23 of the bottom opening of the receiving cup. The pin and valve plate are so positioned that the inclined extremity of the mouth piece 14 will engage one side of the plate and tilt it to the open position of Fig. 2 when the phone is not in use. When the phone is in use, the valve plate swings

across the opening of the sleeve 23 to seal the cap 24.

While a specific form of the improvement has been described and illustrated herein, it is desired to be understood that the same may be varied, within the scope of the appended claims, without departing from the spirit of the invention.

Having thus described the invention, what is claimed and desired secured by Letters Patent is:

1. An automatic, telephone mouth piece sterilizer comprising: a tray of a size and shape to snugly receive the base of a telephone; a resilient bracket arm extending from said tray; a U-shaped yoke on the extremity of said bracket member; a cup member swingingly mounted between the extremities of said yoke in a position to receive the mouth piece of said phone; a sealing gasket in said cup member for sealing said mouth piece therein; and a cap removable through the bottom of said cup member for receiving disinfectant means; and valve means operable by said mouth piece for opening the interior of said cap to said cup member.

2. An automatic, telephone mouth piece sterilizer comprising: a tray of a size and shape to snugly receive the base of a telephone; a resilient bracket arm extending from said tray; a U-shaped yoke on the extremity of said bracket

member; a cup member swingingly mounted between the extremities of said yoke in a position to receive the mouth piece of said phone; a sealing gasket in said cup member for sealing said mouth piece therein; a removable cap in the bottom of said cup member for receiving disinfectant means; and a tiltable valve plate in said cup member operable by contact with said mouth piece for opening the interior of said cup.

3. In a telephone sterilizer, a cup for receiving the transmitter of a telephone, a recess in the bottom of said cup for receiving disinfectant material; a pivot pin extending across said recess; and a tilting valve plate pivotally mounted on said pin and positioned so that it will be tilted by contact with the transmitter for the purpose of opening said recess.

4. In a telephone sterilizer, a cup for receiving the transmitter of a telephone, a recess in the bottom of said cup for receiving disinfectant material; a pivot pin extending across said recess; a tilting valve plate pivotally mounted on said pin and positioned so that it will be contacted by the transmitter and tilted for the purpose of opening said recess; and a removable bottom in said recess to allow access to said disinfectant material.

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