Sept. 19, 1961 H. ROSENBLUM 3,001,033

TELEPHONE STERILIZERS

Filed Nov. 3, 1958

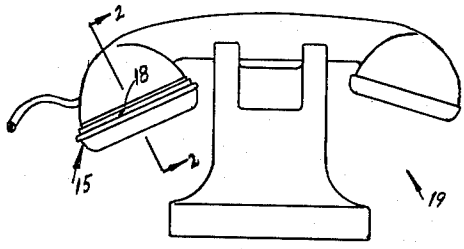


Fig. 1.

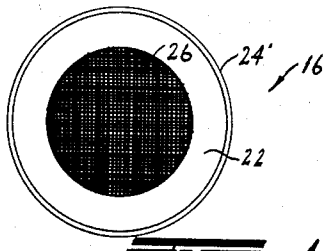


Fig. 4.

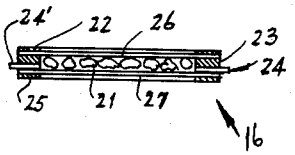


Fig. 3.

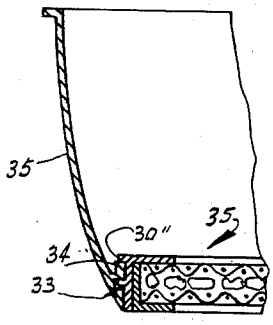


Fig. 7.

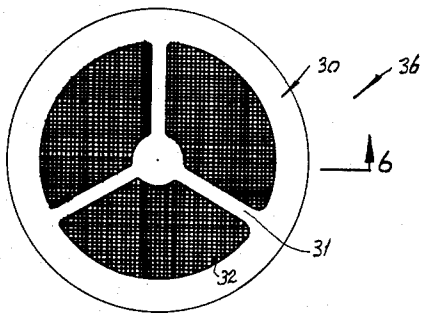


Fig. 5.

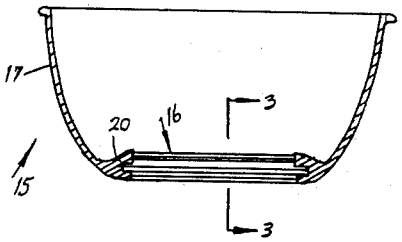


Fig. 2.

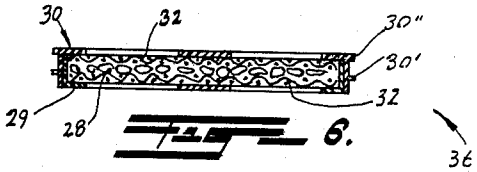


Fig. 6.

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TELEPHONE STERILIZERS

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The present invention relates to improvements in telephone sterilizers and more particularly to the type which is carried on the perforated cap closing the transmitter end of a hand set instrument.

The principal object of this invention is to provide a novel and improved construction in telephone sterilizers of the character mentioned, in which the components thereof are associated in releasably locked relation affording easy replacement of the chemical cartridge.

Another object there of is to provide a novel and improved telephone sterilizer construction of the type described, which is reasonably cheap to manufacture and maintain and efficient in carrying out the purpose for which it is designed.

Other objects and advantages will become apparent as this disclosure proceeds.

For the practice of this invention, one form it may assume is to have an item which is cup-shaped to be frictionally fitted as a cap for the perforated screw cap of the transmitter. The bottom of said cup is a removable thin container of stuff having sterilizing quality. Such stuff may be granular or in pill form whose active ingredients are volatile and of course, the said container therefor is perforated. Said container is cylindrical and has a peripheral flange of yieldable material which sets in and is engaged by an inward annular channel in the side wall of the bottom hole in said cup member.

In the accompanying drawings forming part of this specification, similar characters of reference indicate corresponding parts in all the views.

FIG. 1 is an elevational view of a telephone instrument shown equipped with a sterilizer embodying the teachings of this invention.

FIG. 2 is a section taken at lines 2—2 of FIG. 1.

FIG. 3 is a section taken at lines 3—3 in FIG. 2 of the sterilizer cartridge.

FIG. 4 is a top plan view of FIG. 3.

FIG. 5 is a top plan view of a sterilizer cartridge of a modified construction.

FIG. 6 is a section taken at lines 6—6 in FIG. 5.

FIG. 7 is a fragmentary enlarged section similar to FIG. 2, but including the cartridge of FIG. 5.

In the drawing, the sterilizer designated generally by the numeral **15**, is comprised of a sterilizer component indicated generally by the numeral **16** which is releasably associated with a tubular member denoted generally by the numeral **17**. In assembly, these components **16** and **17** form a cup-shaped item which is frictionally fitted as a cap onto the perforated cap **18** of the transmitter end of a hand set telephone instrument **19**.

The tubular member **17** has an inner annular groove **20** near its bottom end. The sterilizer component **16**, may be comprised of a container holding granules **21** which have been mentioned. This container is made up of cardboard washers **22, 23, 24, 25**, with gauze discs **26, 27** held between them in spaced relation as shown. The granules **21** are housed between said gauze discs. All the said washers and discs are of the same diameter to frictionally fit into the lower end of the member **17**, but the washer **24** which is between said gauze discs, is of slightly larger diameter to provide a peripheral flange **24'**, which upon insertion of the sterilizer component **16**, flexes and enters the annular groove **20**. This locks the parts **16** and **17**, but allows the forced removal of the sterilizer **16** when its chemical content has become spent and needs to be replaced. Replacement is made with a complete sterilizer component **16**, whose manufacturing cost is cheap, because its washer and disc parts are assembled by being merely pasted together by a glue applied to the washers. This is a suggestion for economy of manufacture.

In the modified construction shown in FIGS. 5–7, the container for the chemical stuff **28**, may be a box made up of the telescopically fitted parts **29** and **30**, whose faces have substantial openings between the narrow spoke-formation ribs **31**. Within said box, against said open faces, there are the fine gauze discs **32**, between which are housed the granules **28**. The outer box part **30** has a peripheral flange **30'** intermediate its top and bottom, for releasable engagement in the annular groove **33**, and may have another flange **30''** at its very top, to rest on the seat **34** within the tubular member **35**.

The box parts **29, 30** should be made of a material having some resilient quality, in order to afford proper mounting and removal of the cartridge indicated generally by the numeral **36**. Polyethylene is recommended for this purpose and also for the tubular members **17** and **35**.

The granules **21** and **28** may for example be paraformaldehyde with a perfume substance, and naphthalene, chlorophyl and other suitable substances.

This invention is capable of numerous forms and various applications without departing from the essential features herein disclosed. It is therefore intended and desired that the embodiments shown herein be deemed illustrative and not restrictive and that the patent shall cover all patentable novelty herein set forth; reference being had to the following claims rather than to the specific description herein to indicate the scope of this invention.

I claim:

1. In a sterilizer device for the transmitter of a telephone instrument, a tubular member having an annular groove in its inside wall near an end of said member, a perforated container within said tubular member across said end and in frictional engagement with said member; said container having a perimetral flange of material having some resilient quality; said flange being within and engaged by said annular groove, and yieldable so that it enters said groove when the perforated container is forced into said tubular member and so that it leaves said groove when the perforated container is forced out of said tubular member; said container being comprised of at least two gauze discs in spaced relation, with at least one washer between them and each disc between washers and pasted to them; the washer between said discs, extending beyond the other washers to form the mentioned flange and solid particles having a volatile content of sterilizing quality, housed within said container between the gauze discs; said tubular member being adapted to be set on the cap of the transmitter end of a telephone instrument, so that said container is adjacent said transmitter cap.

2. An article as defined in claim 1, wherein all the washers are of cardboard.

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