No. 827,308. PATENTED JULY 31, 1906.

D. M. HITCH.

TOOTH BRUSH HOLDER AND STERILIZER.

APPLICATION FILED JAN. 27, 1906.

Fig. 1.

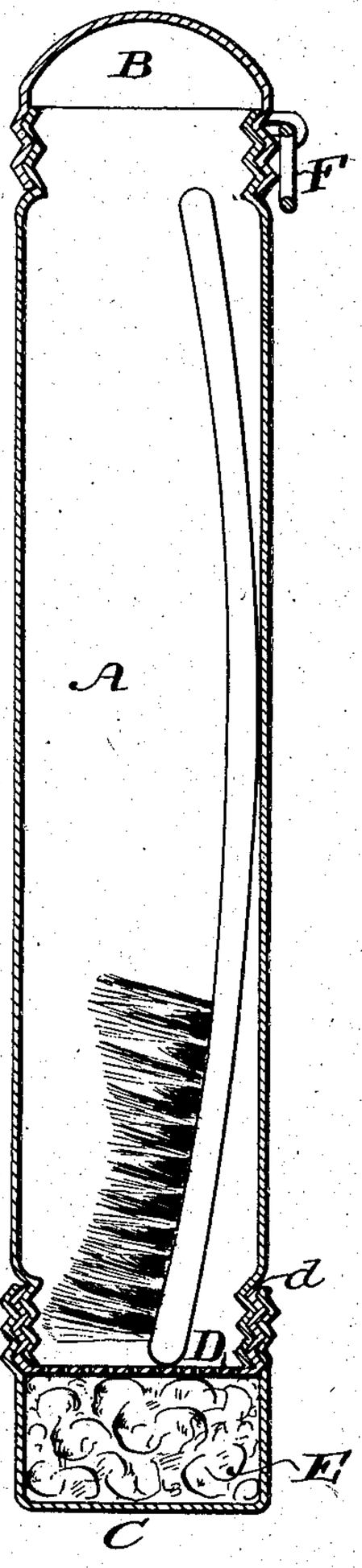
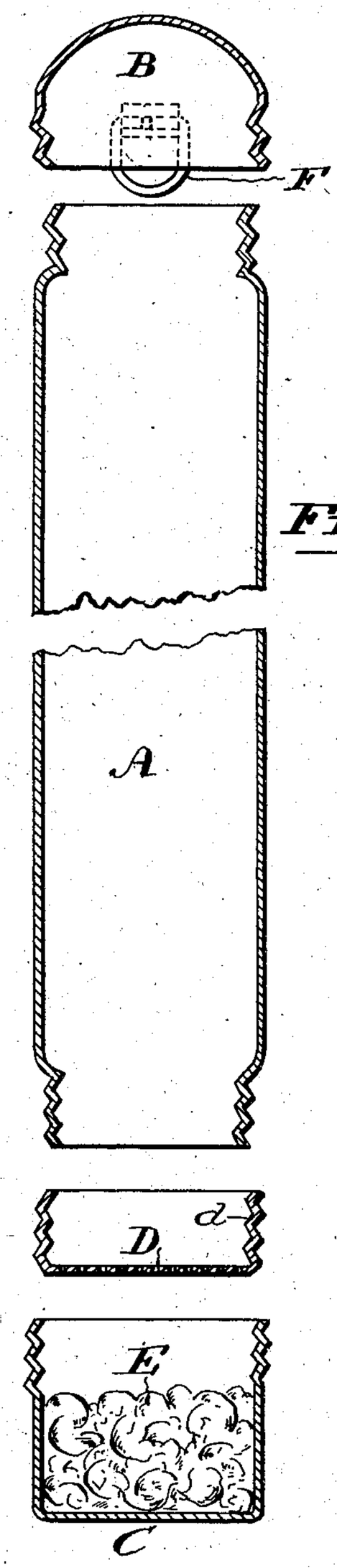


Fig. 2.



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UNITED STATES PATENT OFFICE.

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TOOTH-BRUSH HOLDER AND STERILIZER.

No. 827,308. Specification of Letters Patent. Patented July 31, 1906.

Application filed January 27, 1906. Serial No. 298,124.

To all whom it may concern:

Be it known that I, DAVID MARSHALL HITCH, a citizen of the United States, residing at Lansdowne, in the county of Delaware and State of Pennsylvania, have invented a certain new and useful Improvement in Tooth-Brush Holders and Sterilizers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to containers for tooth-brushes for holding the same when not in use, my object being to provide a container of convenient size and shape which will thoroughly sterilize tooth-brushes placed therein.

By repeated bacteriological tests I have ascertained that tooth-brushes after having been in use for but a short time exhibit germ-life to a marked degree, this also being true of brushes which have been immersed in a sterilizing liquid of a kind capable of being used in the mouth. I have further demonstrated that by placing the brushes in closed containers supplied with a germicide, such as formaldehyde-gas, they are kept entirely free of germs, by this means all germs being either destroyed or rendered innocuous.

For the purpose of sterilizing tooth-brushes in the manner above mentioned I have devised a container consisting of a tubular body having a closure at one end and having a receptacle at its opposite end for holding a sterilizing agent.

A simple embodiment of my invention is indicated in the accompanying drawings and described in the following specification and the invention pointed out in the claims at the conclusion of said specification.

In said drawings, Figure 1 is a sectional view of the container, and Fig. 2 is a similar view showing the parts separated.

The container illustrated in the drawings consists of a tubular glass body A of a size and shape adapting it to hold a tooth-brush. One end of said body is closed by a cap B, having threaded connection therewith, while the opposite end is provided with a receptacle or box C for holding the sterilizing agent or germicide. A perforated plate D is attached to the body for closing the end thereof to which said receptacle is applied, the plate being secured to the body by way of a threaded ring or flange *d*. Preferably this plate D is cemented in place. The receptacle C is likewise threaded and is attached to the body by screwing upon the ring *d* of the plate.

The germicide may be either a liquid, as formaldehyde solution, or solid in the form of tablets or grains, as preferred. If a liquid is used, a sponge or other absorbent material E is placed within the receptacle and saturated with the liquid.

To enable the container to stand in an upright position with the germicide-receptacle at its lower end, the bottom C of said receptacle should be made flat, while the top of the cap B may be rounded. The container also may be provided with a ring F, by means of which it may be hung up. After using, the tooth-brush to be disinfected is placed within the container and the top thereof closed by the cap B, the brush resting upon the plate D. The gas emanating from the receptacle fills the container and thoroughly sterilizes the brush.

The body may be made of glass or of metal, as preferred, and the perforated plate may be integral with the body. It is also to be noted that wire mesh may be substituted for the perforated plate, the object of which is to separate the interior of the body from the interior of the germicide-receptacle, thus preventing the liquid or solid germicide, as the case may be, from entering the container proper and also preventing the tooth-brush from coming in contact with the germicide.

My improved container not only provides a means for holding tooth-brushes when not in use, but, as before stated, it completely sterilizes them, thus keeping them always pure and clean. The brushes do not come in direct contact with the dry or liquid germicide, but are subjected while in the container to the sterilizing action of the gas produced by said germicide. Hence they are always in condition for instant use. The supply of the germicide may readily be renewed by simply pouring fresh liquid upon the absorbent in the receptacle, if a liquid be used, and by substituting some new tablets or grains for the spent ones if a solid germicide be used.

I claim as my invention—

1. In a tooth-brush container and sterilizer the combination of a tubular body for holding a tooth-brush, one end of said body being open, a perforated plate at the other end of said body, and a germicide-receptacle having detachable connection with that end of said holder provided with the perforated plate, said plate separating the interior of the

body from the interior of the germicide-receptacle, and the latter being capable of removal without disturbing said plate.

2. In a tooth-brush container and sterilizer, the combination of a tubular body for holding a tooth-brush, said body being open at its opposite ends, a closure for one of said ends, a perforated plate having detachable connection with the opposite open end, and a germicide-receptacle having detachable connection with that end of said holder to which the perforated plate is attached, said plate separating the interior of the body from the interior of the germicide-receptacle, and the latter being capable of removal without disturbing said plate.

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

DAVID MARSHALL HITCH.

Witnesses:

GEO. C. BARBER, Jr.,

HOWARD K. RUDOLPH.