Oct. 6, 1925. 1,556,148

D. KNOTT

STERILIZER

Filed Feb. 16, 1925

Fig. 1.

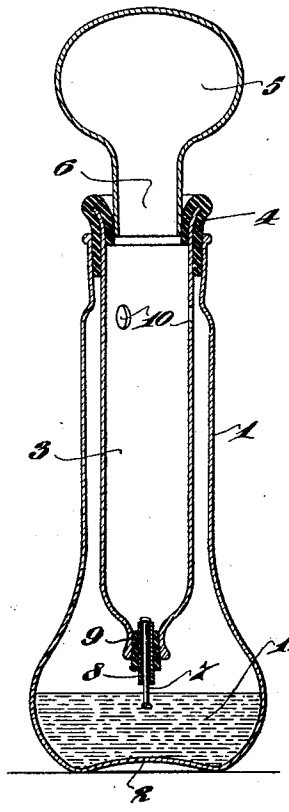


Fig. 2.

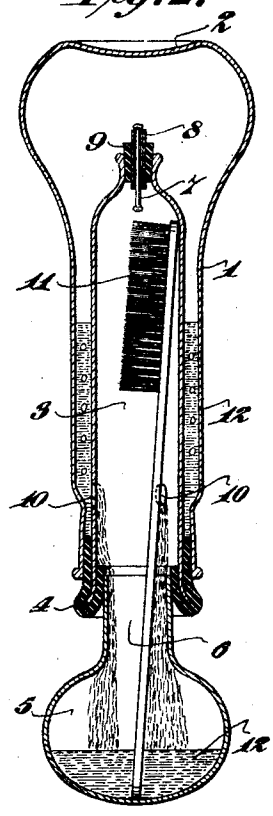
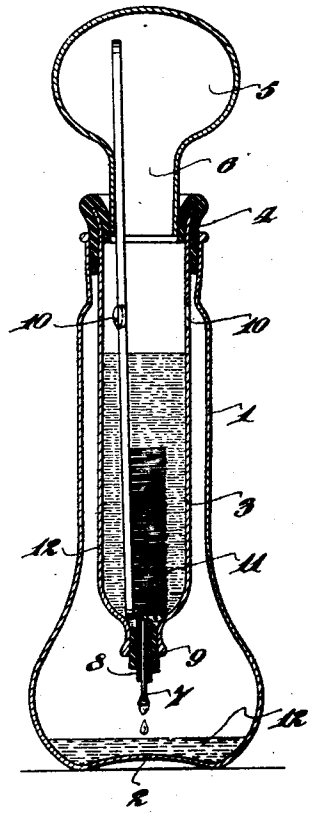


Fig. 3.



INVENTOR
DOROTHY KNOTT
By D. F. Woodward
Atty.

Patented Oct. 6, 1925. 1,556,148

UNITED STATES PATENT OFFICE.

DOROTHY KNOTT, OF WIMBLEDON COMMON, ENGLAND.

STERILIZER.

Application filed February 16, 1925. Serial No. 9,690.

To all whom it may concern:

Be it known that I, DOROTHY KNOTT, a subject of the King of Great Britain and Ireland, and a resident of Wimbledon Common, county of Surrey, England, have invented a certain new and useful Improvement in Sterilizers, of which the following is a specification.

My invention has reference to a sterilizer primarily designed for sterilizing tooth and other brushes for personal use, but applicable also, according to shape and size, for sterilizing dental, surgical and other instruments.

Broadly, the sterilizer, which may be made of glass or other suitable material, consists of a vessel of bottle-like shape, of convenient height, and provided with a broad bottom, an inner vessel or percolator suspended in an air and liquid-tight manner, from the mouth of the outer vessel, and a hollow head whose mouthpiece is adapted to fit in a removable and air and liquid-tight manner in the mouth of the inner vessel or percolator, which inner vessel or percolator is at its lower end provided with a pin valve and at its upper end with a convenient number of perforations or holes in the wall thereof.

In use, the inner vessel or percolator and with it the hollow head, is withdrawn from the outer vessel which is then charged with a sterilizing liquid. The hollow head is withdrawn from the mouth of the percolator, a tooth or like brush, bristles or head downwards, is inserted into said percolator, and the head is, by its mouthpiece, inserted into the mouth of the percolator, which is then replaced in the mouth of the outer vessel.

The sterilizer is then turned upside down so that the sterilizing liquid in the outer vessel passes down the space intervening between the percolator and said outer vessel and thence through the perforations or holes in said percolator into the hollow head, air from the head and percolator passing therefrom up through the falling liquid into the outer vessel.

The sterilizer is then turned back again and is stood in a vertical position, with the result that the sterilizing liquid falls into the percolator, over and around the bristles of the tooth or other brush therein, and percolates from said percolator, drop by drop, past the pin valve at the bottom of the outer vessel, so that the bristles are gradually cleansed and sterilized by the lowering and emptying of the sterilizing liquid, which lowering occupies, say, more or less, fifteen minutes, leaving the bristles dry, whereupon the hollow head is removed and the tooth or other brush withdrawn, leaving the sterilizer ready for action again.

The invention is illustrated by the accompanying sheet of drawings, wherein:—

Figure 1 is a vertical sectional view of a sterilizer in accordance with the invention.

Figure 2 is a similar view showing tooth brush in position and sterilizer turned upside down.

Figure 3 is a view similar to Figure 1 and illustrative of the sterilizing of said tooth brush.

In said drawings, 1 represents the outer vessel, 2 the broad bottom thereof, 3 the percolator or inner vessel whose mouth is held in a rubber closure piece 4 adapted to fit in the mouth of the outer vessel 1, and 5 is the hollow head whose mouthpiece 6 is adapted to make a closure with the interior of the rubber piece 4, whilst 7 represents the pin of the valve 8 secured by means of a rubber closure piece 9 in the lower part of the inner vessel; 10 represents the holes or perforations in said inner vessel; 11 represents the bristles or head of the tooth or other brush, and 12 the sterilizing liquid.

I claim:—

1. A sterilizer comprising an outer vessel and an inner vessel mounted in the mouth thereof in an air-tight manner, and a hollow head removably fitted to the mouth of the inner vessel, and a valve and aperture in said inner vessel, substantially as and for purposes set forth.

2. A sterilizer consisting of an outer vessel with a flat bottom thereto, a percolator suspended in an air and liquid-tight manner from the mouth of the outer vessel, and a hollow head fitted in a removable and air and liquid-tight manner in the mouth of the percolator, said percolator being provided with a pin valve and perforations for the purposes set forth.

3. A sterilizer consisting of an outer vessel of bottle-like shape, provided with a flat bottom to receive a supply of a sterilizing

liquid, an inner vessel suspended by a rubber closure in an air and liquid-tight manner from the mouth of the outer vessel, a pin valve removably secured by a rubber closure in the lower end of said inner vessel, perforations in the wall of said inner vessel and at the upper part thereof, and a hollow head removably fitting in an air and liquid-tight manner in the mouth of the rubber closure holding said inner and outer vessels together.

In testimony whereof I have affixed my signature hereto this 4th day of February 1925.

DOROTHY KNOTT.