

No. 898,288.

PATENTED SEPT. 8, 1908.

C. K. VOLCKENING.
BOTTLE WASHER BRUSH.
APPLICATION FILED FEB. 1, 1908.

Fig. 1

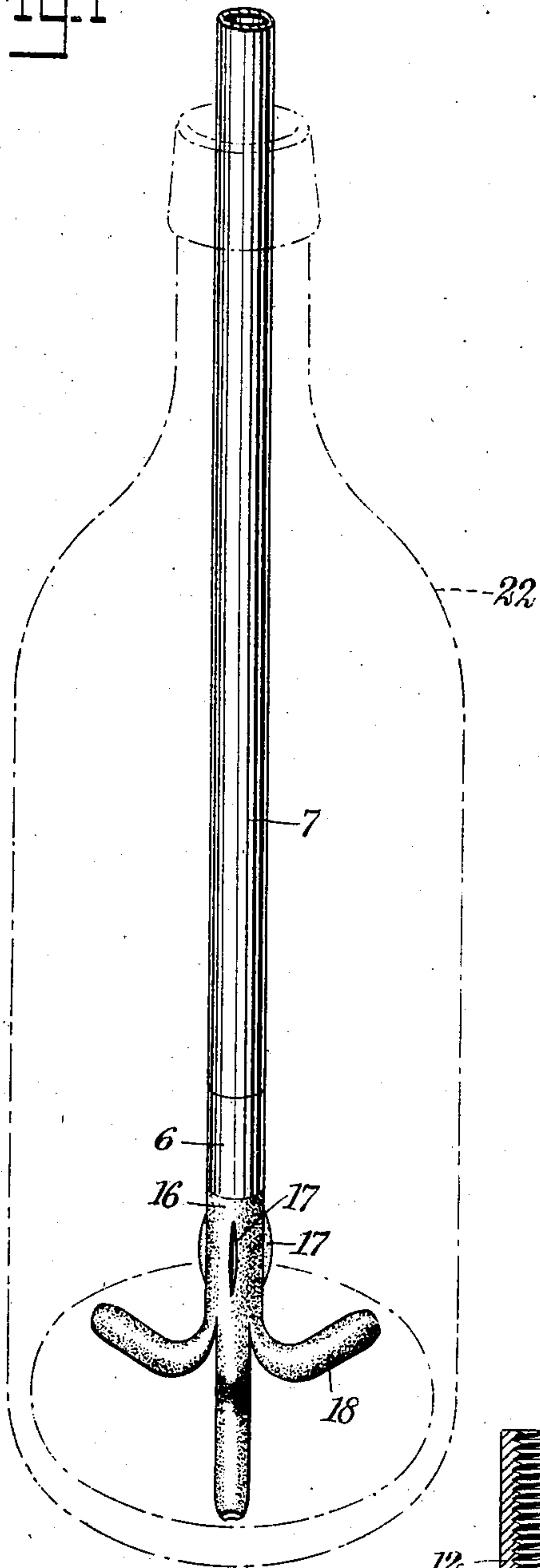


Fig. 2

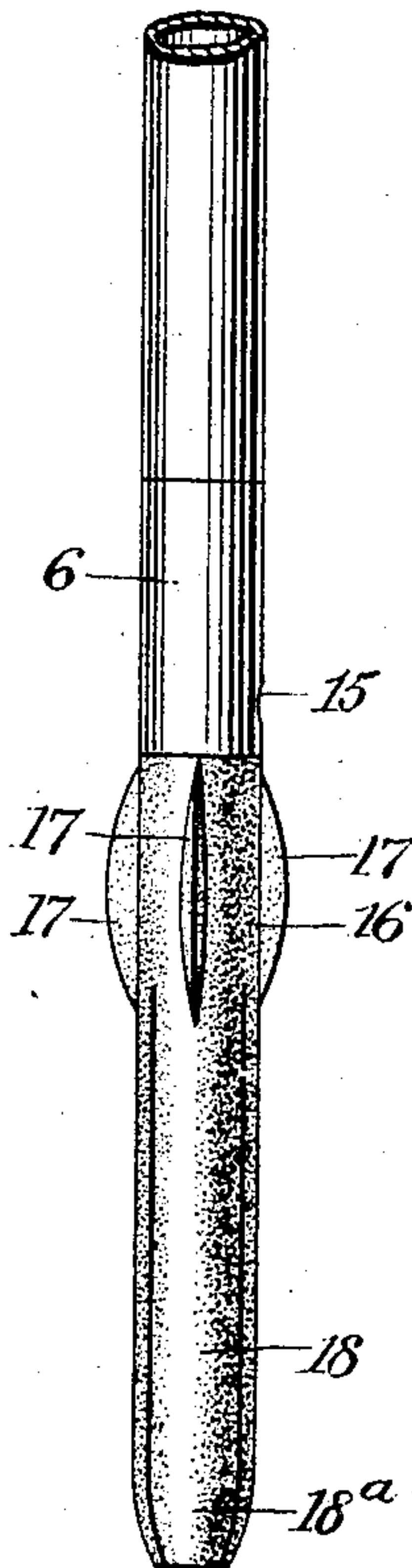


Fig. 3

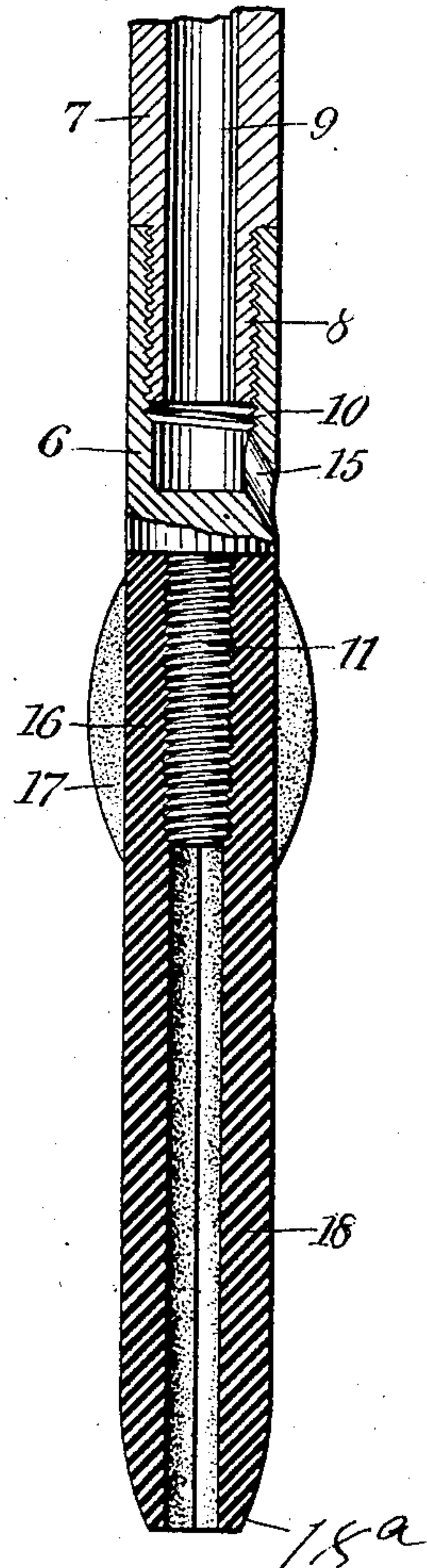


Fig. 4

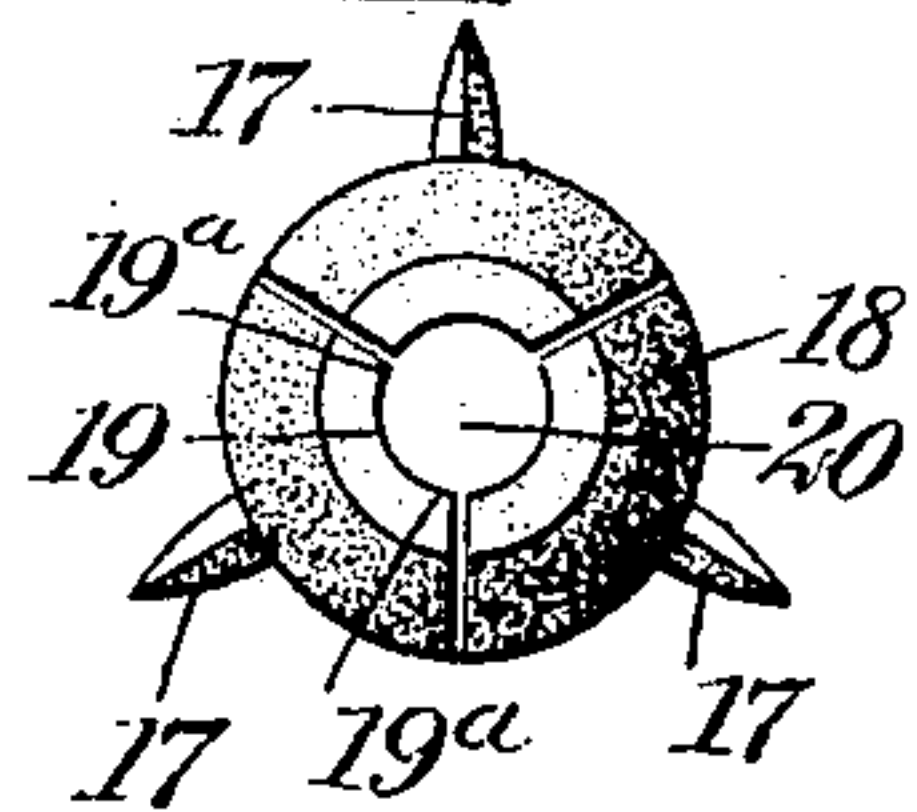
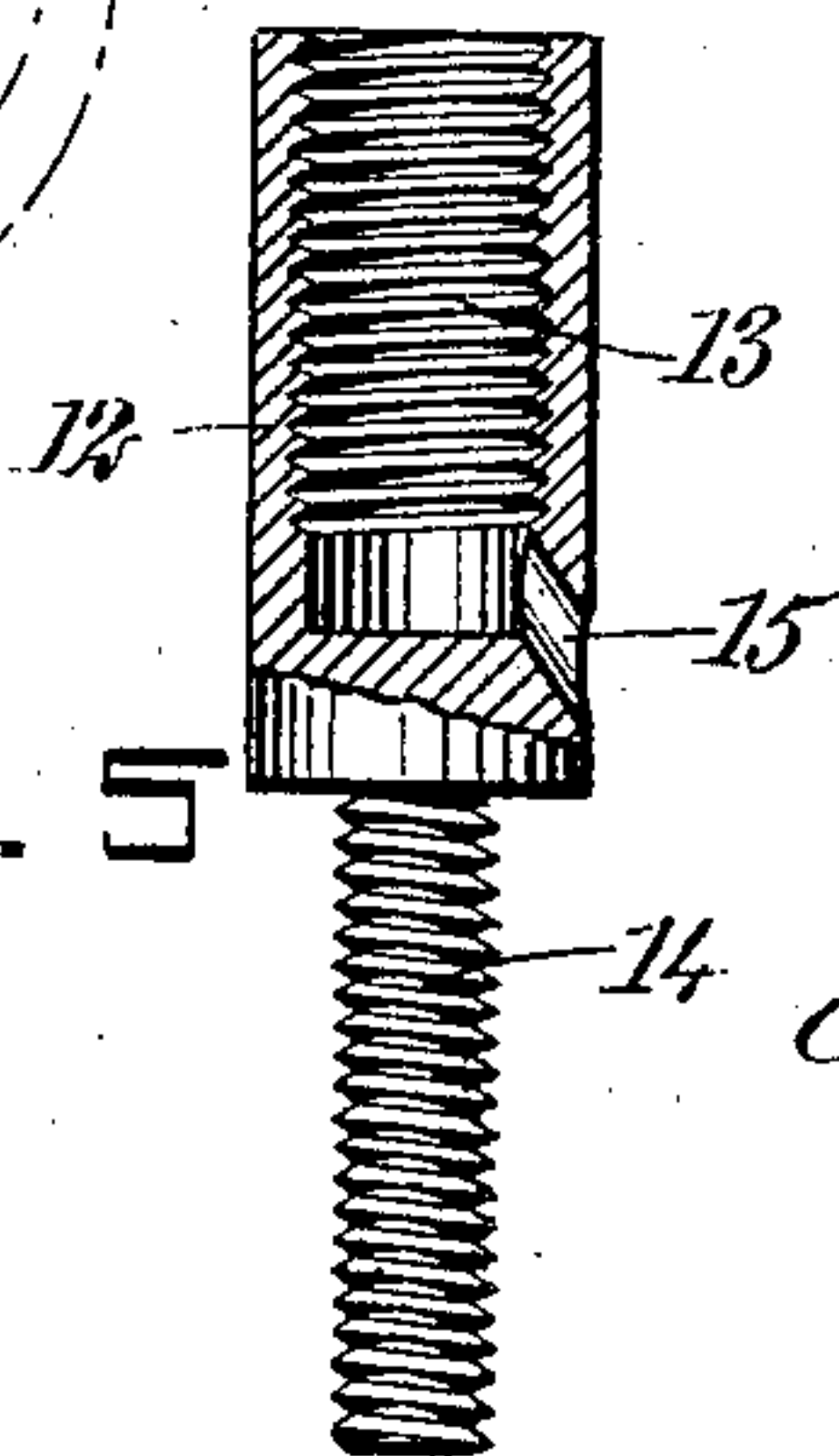


Fig. 5



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CHARLES K. VOLCKENING, OF NEW YORK, N. Y.

BOTTLE-WASHER BRUSH.

No. 898,288.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed February 1, 1908. Serial No. 413,908.

To all whom it may concern:

Be it known that I, CHARLES KASPER VOLCKENING, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Bottle-Washer Brush, of which the following is a full, clear, and exact description.

My invention relates to brushes of the kind used for washing bottles and the like, my more particular object being to produce a type of brush suitable for mounting upon a tubular spindle and capable of cleaning the bottom and corners of the bottle and the inside of the bottle neck, and in doing this to make the brush of such construction that hot and cold water can have but little deleterious effect upon it.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective showing in dotted lines a bottle, and in full lines one form of my improved brush as used for cleaning the bottle; Fig. 2 is an enlarged fragmentary elevation showing the tubular bottle-washer spindle, the ferrule connected therewith and the brush screwed upon the front end of the ferrule; Fig. 3 is a fragmentary section through the brush and ferrule supporting it, this view showing the brush as made of resilient material, preferably rubber, and as provided with wings integral therewith and serving as scrapers to remove dirt from the inside of the bottle neck, and further showing the fingers made of the same material as the body of the brush which is screwed upon the front end of a metal ferrule; Fig. 4 is an enlarged end elevation of the brush showing the fingers adapted to spread radially apart by centrifugal motion, and also showing the wings serving as scrapers; and Fig. 5 shows partly in section and partly in elevation, a ferrule for holding the brush, this ferrule differing from that shown in the other views, in that its threads are wound in the contrary direction, so that in order to secure the parts in position, they are turned in a direction opposite to that necessary for securing the parts in the other views.

At 6 is shown a ferrule, made of metal and mounted upon the lower end of a tubular spindle 7, the latter being provided with a

threaded neck 8 for this purpose. The longitudinal aperture through the tubular spindle 7 is shown at 9 and is used for directing water into the bottle. The ferrule 6 is provided internally with a thread 10 whereby it may be screwed upon the threaded neck 8. The ferrule 6 is further provided with a reduced threaded portion 11 serving as a screw.

In the form shown in Fig. 5 the ferrule appears at 12 and is provided internally with a thread 13, and the screw portion is shown at 14. Contrasting Figs. 3 and 5 it will be noted that in Fig. 3 both threads of the ferrule are right-handed, whereas in Fig. 5 they are left-handed. The ferrule of either type is provided with an opening 15 for discharging the water. This opening is slanting at an angle of 45 degrees.

A cylindrical body portion 16 of rubber or analogous material is provided with wings 17 integral therewith. Each wing is beveled upon its outer periphery and its general contour, as seen in a plane crossing its general direction, is arcuate. This enables it to scrape thoroughly the inside of the bottle neck, and also saves it from undue injury by abrasion or mutilation while in use. The body portion 16 is further provided with fingers 18 integral therewith, these fingers being provided with reduced ends 18^a adapted to reach into the angular recesses of the bottle, as will be understood from Fig. 1. By the rotary motion of the spindle, the fingers are forced radially outward from each other, so that their ends are brought into close proximity with the main wall of the bottle, the spindle being then turned in a clockwise direction or in a contra-clockwise direction, according to the direction of the threads used for connecting the parts together, the fingers 18 thoroughly cleansing the bottom of the bottle. The spindle 7 being partially withdrawn, the wings 17 are brought into the neck of the bottle, and the spindle being again rotated, the neck is thoroughly cleaned. The fingers 18 are severally provided with concave inner surfaces 19, these surfaces preferably together encircling a substantially cylindrical passage 20. When, however, the fingers 18 are spread out, as indicated in Fig. 1, the concave surfaces 19 are all pressed against the bottom of the bottle. It will be noted that when the fingers are in this position, the concave surfaces 19 are being directed toward the bottom of the bottle. The fingers are necessarily effective in dis-

lodging dirt. The two separate edges 19^a upon each finger (see Fig. 4) I have found are especially adapted for scraping dirt from the bottom of the bottle. The parts being assembled as above described, the brush is ready for use. The bottle to be washed is shown at 22.

The operation of my device is as follows: The brush being inserted within the bottle, as indicated in Fig. 1, and the water being turned on, the brush is turned so that the inner faces of the fingers 18 scrape upon the bottom of the bottle, as above described, so as to dislodge the dirt. The spindle 7 being raised so as to bring the neck 17 into the bottle neck, the brush is again turned, with the result that the inner surface of the bottle neck is now rendered clean. During all this time the water escapes freely from the opening 15 so as to assist in removing the dirt from the bottle.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

The combination of a stem, a ferrule mounted thereupon and provided with a reduced threaded portion, and a member of resilient material having an opening to be stretched over said reduced portion, said member of resilient material being provided with fingers, and being further provided with wings, each wing being wide and thick at its middle portion and tapered off to nothing at its ends.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES K. VOLCKENING.

Witnesses:

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