

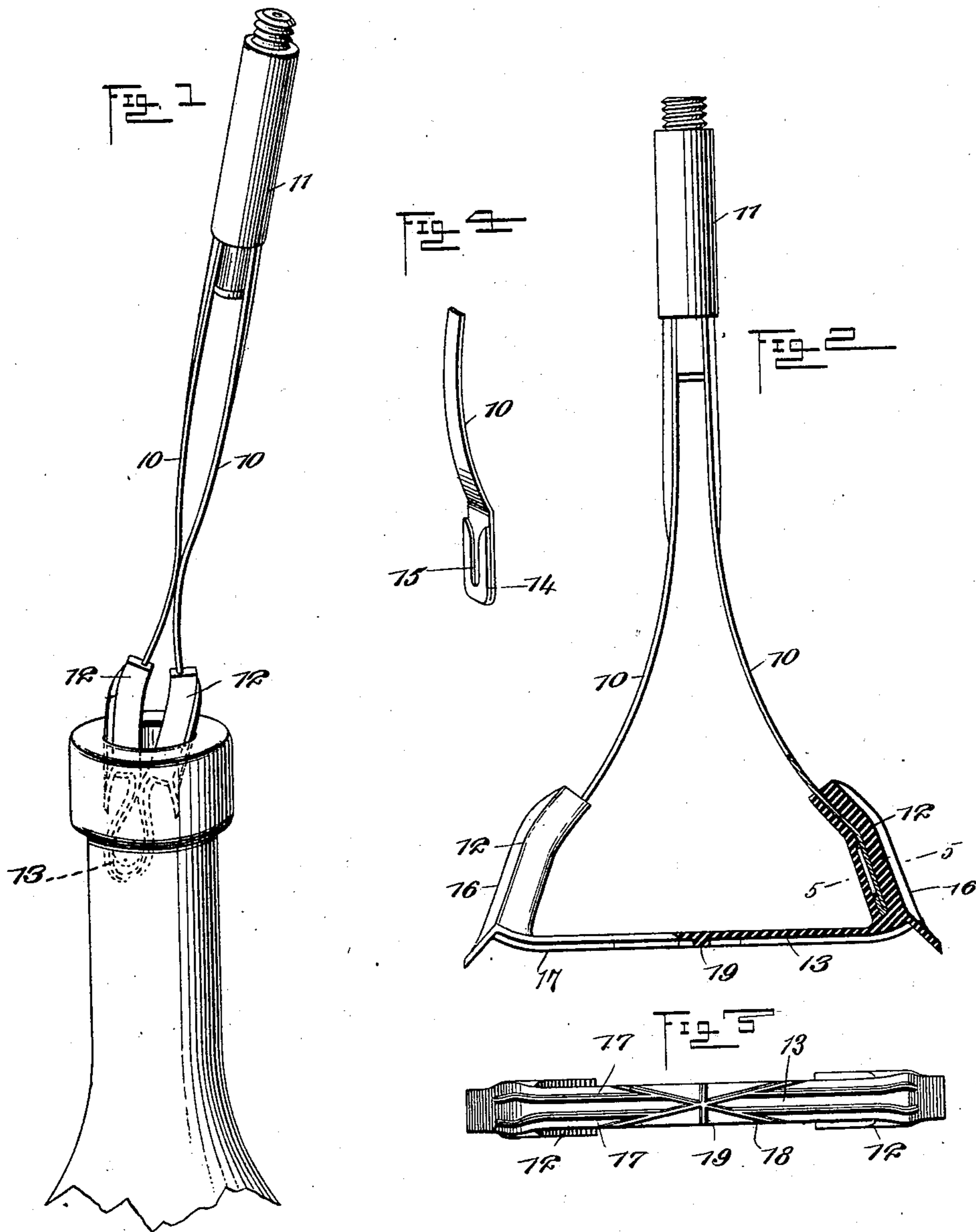
No. 705,983.

Patented July 29, 1902.

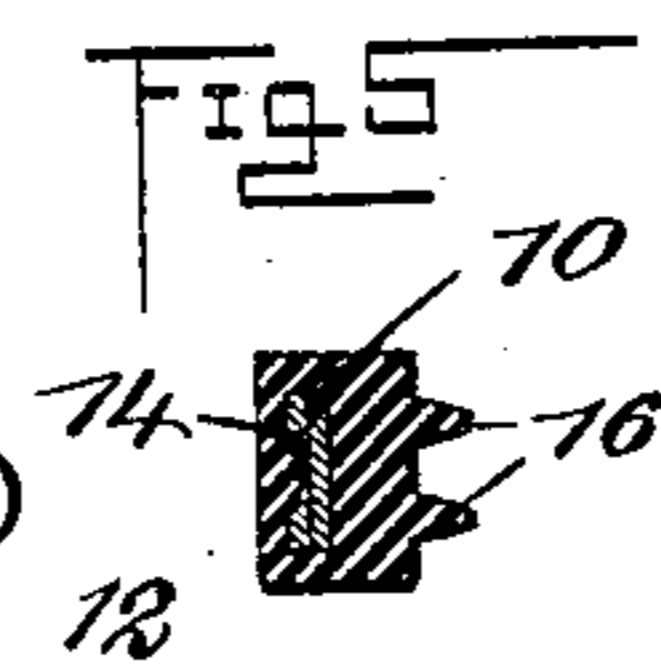
C. K. VOLCKENING.
BOTTLE WASHING BRUSH.

(Application filed Mar. 13, 1902.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

CARL K. VOLCKENING, OF BROOKLYN, NEW YORK.

BOTTLE-WASHING BRUSH.

SPECIFICATION forming part of Letters Patent No. 705,983, dated July 29, 1902.

Application filed March 13, 1902. Serial No. 98,004. (No model.)

To all whom it may concern:

Be it known that I, CARL K. 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-Washing Brush, of which the following is a full, clear, and exact description.

This invention relates to improvements in brushes employed in bottle-washing machines, and an object is to provide a novel and simple means to prevent the rubber brush from slipping off the expanding fingers, and another object is to so construct the brush that it will thoroughly clean all parts of the bottle-bottom.

I will describe a bottle-washing brush embodying my invention and then point out the novel features in the appended claims.

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 view showing a brush embodying my invention as about to be inserted through the neck of a bottle. Fig. 2 is a plan view, partly in section, of the brush. Fig. 3 is an end view. Fig. 4 is a perspective view of a portion of one of the expanding fingers, and Fig. 5 is a section on the line 5 5 of Fig. 2.

Referring to the drawings, 10 designates the two spring yielding or expanding fingers, attached in the usual manner to a tube 11, designed to be engaged with a water-supply tube. These fingers 10 are divergent and engage at their ends in the socket members 12 of the brush, which are connected at the front end by a cross-strip 13. The parts 12 and 13 are formed of soft rubber. The ends of the fingers are turned back upon the main portion, as indicated at 14 in Fig. 4, and in this return portion is an outwardly-opening channel or slot 15. When a finger is inserted in a socket, the rubber will be forced into the channel or slot 15 and, of course, over the ends of the return portion 14. This will effectually prevent the brush from being drawn off the end of the finger, and, further, by turning over this end 14 the finger is very much thickened at the edges, so that cutting through

the soft rubber at the sides is prevented. The outer surfaces of the socket members 12 are provided with ribs 16, and the cross piece or strip 13 is provided with longitudinal ribs 17, crossed ribs 18, and a central transverse rib 19. This central transverse rib 19 is a very essential feature of the brush, because it thoroughly cleans or scrapes the bottom of a bottle at the center, and the crossed ribs 18 force the dirt outward toward the sides of the bottle.

It will be noted that at the junction of the part 13 with the ends of the socket members the said part 13 is curved rearward or toward the ends of the expanding fingers. By this construction when the fingers are forced together for inserting the brush in the neck of a bottle the cross-strip 13 will fold outward, as indicated in dotted lines in Fig. 1, thus permitting the socket members to come close together, allowing the brush to be inserted through a bottle having a small neck, while it is obvious that should this cross-strip 13 fold inward the close engagement of the sockets would be prevented.

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

1. A bottle-washing brush comprising expanding fingers, the end of each finger being provided with an opening, and a rubber-brush material having socket members to engage over said ends of the fingers, portions of the socket members engaging in said openings, substantially as specified.

2. In a bottle-washing brush, spring-fingers, each finger having its end turned over upon the main portion, the said turned-over end having a rearwardly-opening slot or channel, and a rubber brush having socket members for engaging over said ends, substantially as specified.

3. A bottle-washing brush comprising spring-fingers, a rubber-brush material having socket members for engaging over the ends of the fingers, and a cross-strip connecting the socket members, the said cross-strip at its ends being curved rearward toward the ends of the fingers, substantially as specified.

4. A bottle-washing brush comprising socket members, spring-fingers for engaging

in said socket members, a cross-strip connecting the socket members, longitudinal ribs on said cross-strip, and a transverse central rib on said cross-strip, substantially as specified.

- 5 5. A bottle-washing brush comprising spring-fingers, a rubber-brush material having socket members for engaging on said fingers and having a cross-strip, longitudinal ribs on said cross-strip, crossed ribs on the

cross-strip, and a transverse central rib, substantially as specified. 10

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

CARL K. VOLCKENING.

Witnesses:

C. R. FERGUSON,

EVERARD BOLTON MARSHALL.