G. KNOKE.

BOTTLE CLEANING BRUSH.

APPLICATION FILED JUNE 25, 1912.

1,074,875. Patented Oct. 7, 1913.

Fig. 1.

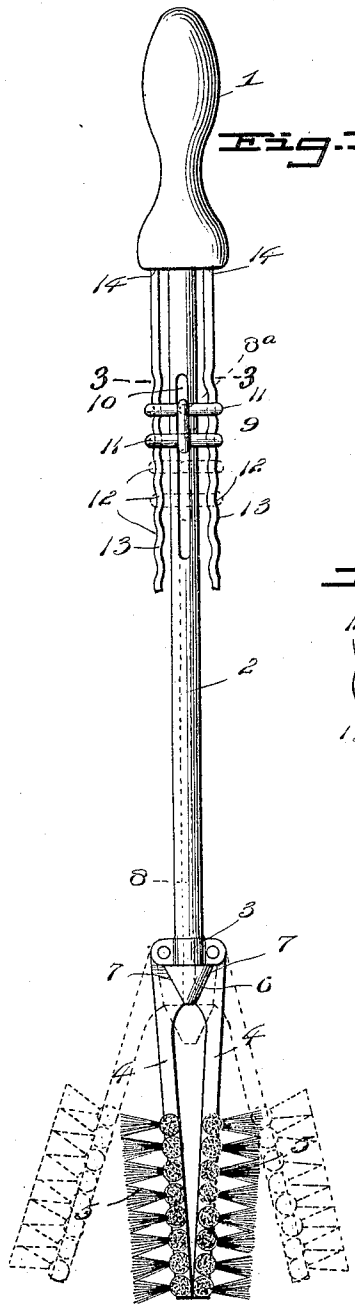


Fig. 3.

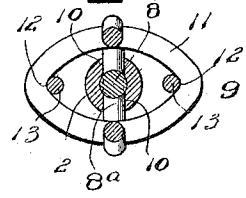
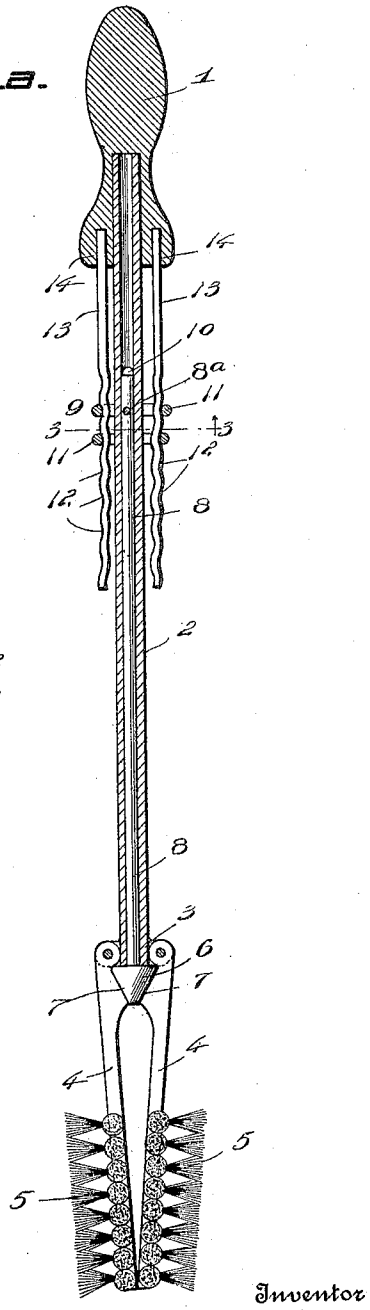


Fig. 2.



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UNITED STATES PATENT OFFICE.

GEORGE KNOKE, OF RICHMOND, VIRGINIA.

BOTTLE-CLEANING BRUSH.

1,074,875. Specification of Letters Patent. Patented Oct. 7, 1913.

Application filed June 25, 1912. Serial No. 705,813.

To all whom it may concern:

Be it known that I, GEORGE KNOKE, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented new and useful Improvements in Bottle-Cleaning Brushes, of which the following is a specification.

This invention relates to bottle cleaning brushes and has for an object to provide a brush of this character which will be so constructed that the cleaning surfaces or bristle supporting portions of the brush will be adjustable relatively in a radial plane whereby said cleaning surfaces or bristles can be readily inserted into or withdrawn from the bottle as the occasion may demand.

Another object of the invention is to provide means for holding the cleaning surfaces or bristle supporting members in their adjusted positions in the bottle.

In the drawing forming a portion of this application, and in which like letters of reference indicate similar parts in the several views: Fig. 1 is a side view of the brush. Fig. 2 is a longitudinal section therethrough. Fig. 3 is a horizontal section taken on line 3—3 of Fig. 1.

The brush comprises a handle 1 having a tubular member 2 fixed thereto at one end and extending preferably centrally therefrom. The lower extremity of the tubular member 2 has a collar 3 secured thereto and pivoted to the collar are the inner extremities of radially adjustable rods 4 which have outer cleaning surfaces or bristles 5.

Means for adjusting the rods 4 radially comprises a conical member 6 slidable longitudinally between the companion rods 4 and having contact with beveled surfaces 7 of the rods as shown. This conical member is operatively connected with one end of an adjusting element 8 which is in form of a long stem which extends through the hollow tubular member 2 and which is connected by a transverse pin 8^a with a longitudinally movable runner 9, the said pin 8^a being extended through longitudinal slots 10 in the member 2 as shown. The runner 9 includes spaced rings 11 which are connected together in any suitable obvious manner and which are adapted for locking engagement in the transverse concavities 12 which are formed in relatively springy retaining devices 13 whose inner ends are secured at 14 to the handle 1.

Now from the construction described it is evident that adjustment of the runner 9 can be made so as to draw the rods 4 into such relative proximity that they may be conveniently inserted through the neck of a bottle. It is also evident from the construction that after the cleaning portion of the brush is properly inserted in the bottle the runner 9 can be actuated to impart the necessary movement to the conical expanding cone 6 to cause the rods 4 to be distended relatively with a resultant operative engagement of the cleaning surfaces or bristles 5 with the inner walls of the bottle. After the parts 4 have been operatively distended the device may be reciprocated, rotated or controlled in any suitable manner to effect a proper cleaning of the bottle.

I claim:—

A device of the class described comprising a tubular member having a slot formed therein, a handle secured to one end of the tubular member, means slidably mounted within the tubular member and contacting with the movable members for actuating the same, a pin carried by said means and extending through the slot in said tubular member, a runner carried by said pin, depending retaining devices carried by said handle, the said runner embracing the said tubular member and said depending retaining devices and adapted to interlock with said retaining devices thereby holding the slidably mounted means in adjusted position.

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

GEORGE KNOKE.

Witnesses:
REBECCA STEELE MORRIS,
W. T. B. MORRIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."