UNITED STATES PATENT OFFICE.

CHARLES BUCHHEIT, OF ST. LOUIS, MISSOURI.

BRUSH BOTTLE-CLEANING MACHINE.

957,301.


To all whom it may concern:

Be it known that I, CHARLES BUCHHEIT, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Brush Bottle-Cleaning Machines, of which the following is a specification.

My invention relates to an improved brush-bottle-cleaning machine, and has for its object to provide a machine adapted to clean the interior of the bottle, while simultaneously cleansing the depressions or corrugations, if any, surrounding the mouth of the neck of the bottle; meaning thereby the corrugations which are commonly used in the bottle making art where metallic caps are used as bottle closures.

In the drawings—Figure 1 is a transverse vertical view in mid-section of a device embodying my invention, showing its application to the interior and exterior of a bottle. Fig. 2 is a bottom plan view of the upper portion of the device of my invention, taken along the line 2—2 of Fig. 1. Fig. 3 is an enlarged perspective view of one of the series of external brushes used to cleanse the corrugations about the neck of the bottle. Fig. 4 is a longitudinal view in mid-section of the same. Fig. 5 is a cross-sectional view of the same.

As shown in the drawings, I employ a rotatable shaft 6 provided at its lower extremity with a bottom brush 7, and provided around its lower end with the spiral brush 8. Upon the shaft 6 is provided the collar 9 journaled as indicated by the numeral 10 to permit of its sliding adjustment upon the shaft 6, and provided with a set screw 11 whereby it is secured to the shaft 6 when adjusted to the desired point. The collar 9 is recessed as indicated by the numeral 12 to receive the resilient gasket 13, which is adapted to receive the mouth of the bottle and thus prevent the accidental breakage of the bottle. The collar 9 carries the frame 14 of the form shown in plan view in Fig. 2, having four pockets 15, which pockets 15 are annular in section and provided with slotted openings 16 to receive the cylindrical brush-bodies 17, which are provided with inwardly projecting brushes 18. The brush-bodies 17 are held in place within the collar 9 by means of screws 19 extending into the screw-threaded openings 20 with which the brush-bodies are provided. The collar 9 having been moved to the desired point on the shaft 6, is secured in place by the set screw 11; the shaft 6 with its brushes 7 and 8 is then inserted within the body of the bottle, such insertion bringing the brushes 18 into place upon the outer surface of the neck of the bottle (see Fig. 1).

In the use of bottles of the class to the cleansing of which my invention is adapted, in which metallic caps are employed, the moisture present in the use of said caps tends to cause the oxidation of said caps and the deposit within the corrugation 21 of a film of rust or other dirt, to the removal of which my invention is peculiarly adapted.

Having fully described my invention, what I claim as new and desire to have secured to me by the grant of Letters Patent, is:

1. In a brush-bottle-cleaning machine, the combination of a rotatable shaft; a bottom brush mounted upon the end of the shaft; a spiral brush mounted about the body of the shaft; an adjustable collar; a frame mounted on said collar and provided with a pocket; a cylindrical brush-body adapted to be mounted in said pocket and provided with inwardly projecting brushes; and means for retaining the brush-body in place within the pocket, substantially as described.

2. In a brush-bottle-cleaning machine, the combination of a rotatable shaft; a bottom brush mounted upon the end of the shaft; a spiral brush mounted about the body of the shaft; an adjustable collar; a frame mounted on said collar and provided with a pocket; a cylindrical brush-body adapted to be mounted in said pocket and provided with inwardly projecting brushes; and means for removable securing said brush-body in place within said pocket, substantially as described.

3. In a brush-bottle-cleaning machine, the combination of a rotatable shaft; a bottom brush mounted upon the end of the shaft; a spiral brush mounted about the body of the shaft; an adjustable collar; a frame mounted on said collar and provided with a pocket; a cylindrical brush-body adapted to be
mounted in said pocket and provided with inwardly projectng brushes; means for retaining the brush-body in place within the pocket; and a resilient gasket carried by said collar and adapted to contact with the mouth of the bottle to be cleansed, substantially as described. In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

CHARLES BUCHHEIT.

Witnesses:
JAMES L. HOPKINS,
WALTER C. STEIN.