Feb. 10, 1942. G. L. N. MEYER 2,272,419

BRUSH

Filed Nov. 13, 1939

Fig. 1.

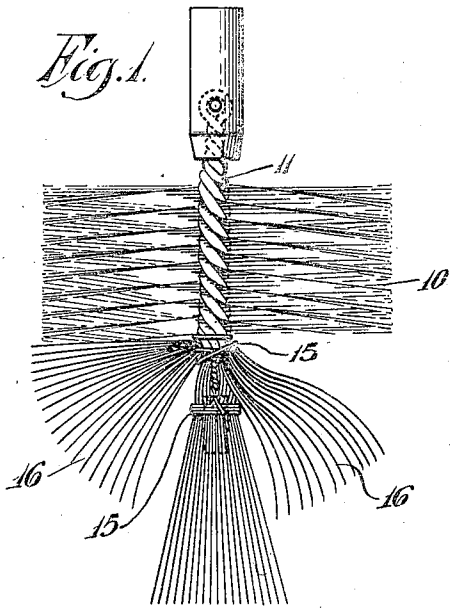


Fig. 2.

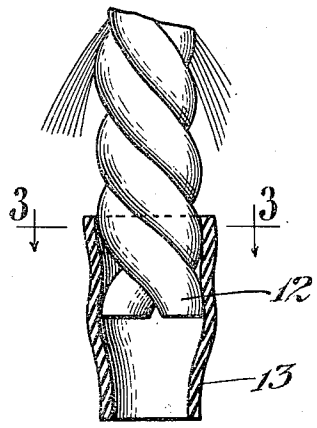


Fig. 3.

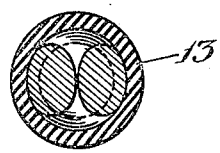
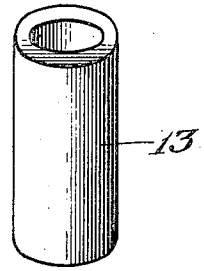


Fig. 4.



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BRUSH

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Application November 13, 1939, Serial No. 304,050

2 Claims. (Cl. 15—206)

This invention relates to brushes and more particularly to a brush adapted to clean the interior of bottles.

Brushes heretofore used to clean bottles, and particularly those operated by mechanical bottle washing machines, have had a tendency to scratch and mar the bottles due to sharp metal edges which project from the end of the brush.

An object of the present invention is to devise a brush for use in bottle washing machines which will not scratch the bottles.

Another object is to produce a brush which will thoroughly clean the bottles without breaking or marring them.

Other objects will become apparent from the following description.

According to the present invention the rubber tip of the brush is encased in a soft sleeve which sleeve is held in place by suitable binders.

In the drawing:

Fig. 1 is an elevational view of a brush embodying the present invention;

Fig. 2 is an enlarged view of the tip of the brush with the sleeve in place prior to binding;

Fig. 3 is a cross-section on the line 3—3 of Fig. 2; and

Fig. 4 is a perspective view of the sleeve.

Referring to the drawing in which like numerals indicate like parts throughout the several views, the brush is made by distributing a quantity of bristles 10 evenly along a portion of the length of a U-shaped wire base. The wire is then twisted as shown to form a metal base 11 binding the bristles between the twisted portion leaving, at one end, an eye, and at the other end the normal sharp edges 12 of the cut wire.

The soft rubber sleeve 13, shown in perspective in Fig. 4, is then applied over the projecting ends 12 of the wire.

A portion of the bristles adjacent the end of the brush are bent forward axially substantially parallel to the wires 11 and are bound in that position by a binding wire 15, which, at the same time, binds the sleeve 13 in place over the sharp ends 12 of the brush base 11. Other bristles adjacent that end of the brush are bent outwardly in a helix as shown at 16 and bound in place by the wire 15.

The brush is mounted in an attaching nipple by inserting the end of the brush containing the eye in the end of the nipple and fastening it in place with a pin passing through the eye. The nipple may be attached to a brush spindle of any conventional design and the brush rotated thereby to clean the interior of the bottle.

Having thus described the invention it is realized that it is susceptible to various changes and modifications and it is not, therefore, desired to limit the invention to the precise form herein shown and described but only by the scope of the appended claims.

The invention is hereby claimed as follows:

1. A brush of the character described comprising, an elongated metal base, bristles secured in said metal base, a tip of soft material fitting over one end of said metal base, a portion of said bristles extending over said tip, a single means securing said portion of bristles and said tip in place.

2. A brush of the character described comprising, an elongated metal base, a rubber tip shielding one end of said base, a plurality of bristles secured in said base and bent axially to cover said tip, a means to bind said plurality of bristles in place over said tip and binding said tip on to the end of said base.

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