May 4, 1926. 1,583,664

E. L. H. COSBY

BRUSH

Filed July 5, 1924 2 Sheets-Sheet 1

Fig. 1.

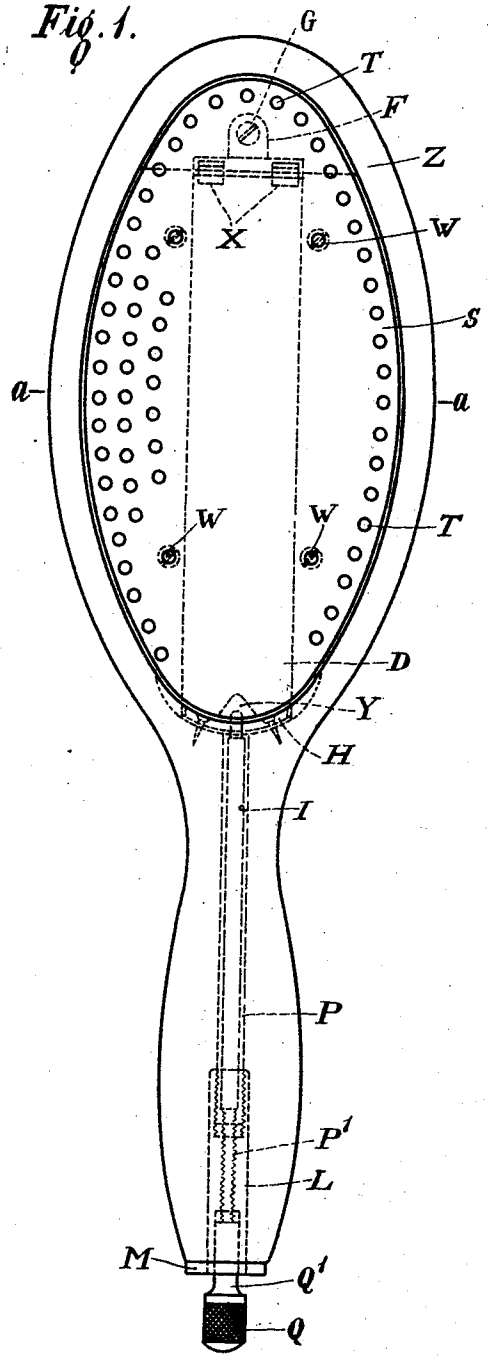
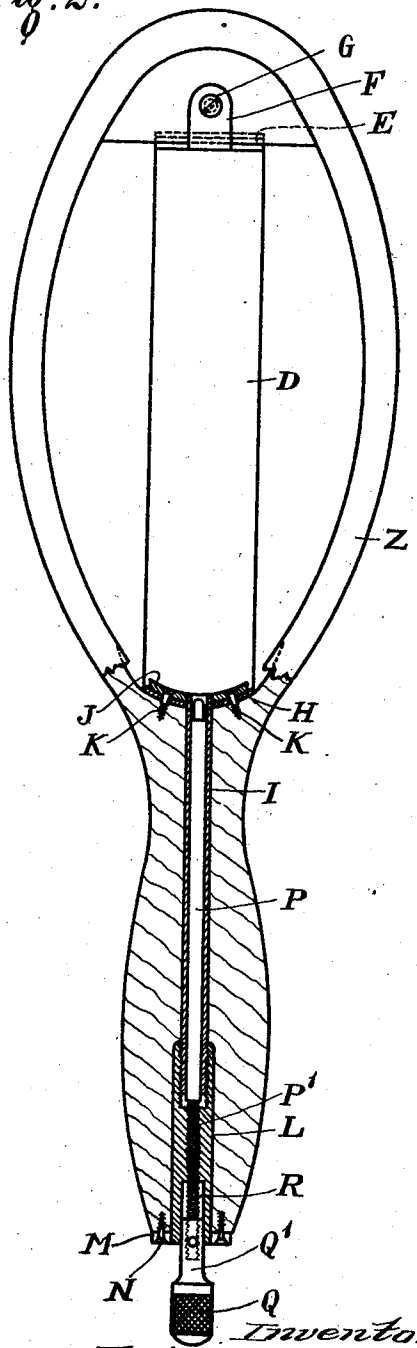


Fig. 2.



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Fig. 3.

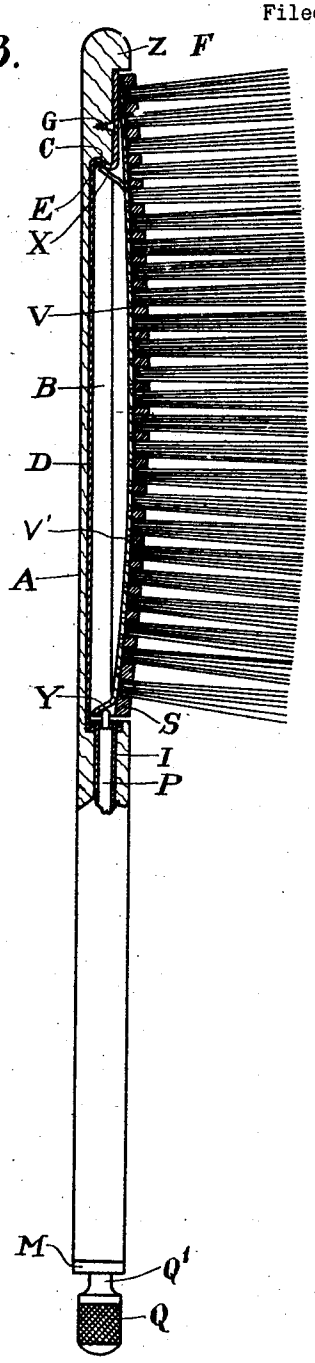


Fig. 4.

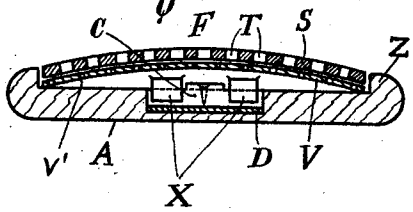
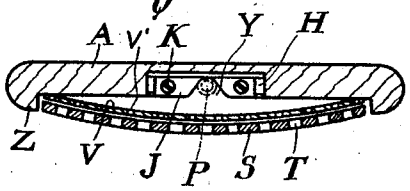


Fig. 5.



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Patented May 4, 1926. 1,583,664

UNITED STATES PATENT OFFICE.

ERIC LEOPOLD HUGO COSBY, OF TEDDINGTON, ENGLAND.

BRUSH.

Application filed July 5, 1924. Serial No. 724,442.

To all whom it may concern:

Be it known that ERIC LEOPOLD HUGO COSBY, a subject of the King of Great Britain, residing at Teddington, Middlesex, England, has invented certain new and useful Improvements in or Relating to Brushes, of which the following is a specification.

This invention relates to that class of brush in which the stock carrying the bristles is detachably secured to the back so that, should the bristles become worn or damaged in any way, the old stock and bristles can be readily removed and a fresh one substituted.

According to my present invention the stock is held to the brush back itself and not to a projecting rim around same as is known, and I construct the holed stock from a plate which is preferably hollowed, as is known and, after securing the bristles in the holes, I affix to the back of the stock a plate corresponding in shape to the stock to cover the heads of the bristles and I form or provide one end of the plate with one, two or more angled, hooked, slotted or like projections and form or provide the other end with one angled projection which is preferably of V or U shape in cross section. Instead of providing the plate with projections I may provide the stock with projections which pass through holes in the plate.

The back of the brush is formed with a recess or recesses in which may be held a metal or other plate having an undercut lip at one end and a right angled perforated lip at the other and this plate is secured in the recess with the perforated lip at the handle or a thickened end or the plate may be dispensed with and a perforation may be formed in the brush back itself.

Instead of forming the projections on the plate and the recess or recesses in the back their positions may be reversed.

In the handle or thickened end I provide means of either a spring or screw type for engaging the V or U shaped angled projections when the stock is fitted to the back with the hooked or angled projections in engagement with the end of the slot so that the end of the screw or spring means presses against the V or U shaped projection and holds the stock firmly to the back, but I prefer to employ two tubes screwed together and in these tubes I position a rod with a plain portion fitting one tube whilst a screw threaded portion of the rod fits the other tube which is screw threaded. On the screw threaded end I mount a knob which projects beyond the handle of the brush, the construction being such that the rod can be moved endwise within certain limits in either direction by the screw and yet be retained to the tube and brush handle. The strain on the screw rod is taken by the tubes and not by the handle direct.

The end of the rod is intended to project into the recess in the brush back, and in connecting the stock to the back, the stock is laid in the back of the brush and the angled projection or projections are brought into engagement with the undercut portion in the recess of the brush back so that the stock will lay in or on the brush when a turn of the knob will project the rod to bring its end into engagement with the V or U projection on the stock plate so that it and the projections engaging the undercut portion will effectually hold the stock to the back.

I prefer that the brush back be formed with a rim around same so that the stock lies within it.

My invention will be clearly understood from the following description together with the annexed drawings, in which

Figure 1 is a plan of a brush back, stock and fastening appliances, the bristles being omitted.

Figure 2 is a plan of a brush back showing the stock fastening appliances.

Figure 3 is a part sectional side view of a complete brush.

Figure 4 is a section on line *a a* of Figure 1 looking towards the forward end of the brush.

Figure 5 is a section on the same line *a a* looking towards the handle end of brush.

According to my invention I form in the back A of the brush a recess B having at one end an undercut portion C and in this recess B I fit a strip D having one end E turned up at an angle to closely fit the undercut position C of the back and then turned to form an extension F parallel with the strip D by which extension the strip can be secured in the recess by the aid of a screw G.

The other end H of the recess B is bent at a right angle and lies against the end wall of the strip and is provided with a hole. The handle or a thickened end of the brush is

perforated and contains a tube I having at one end a bridge J which, after the tube is inserted in the handle abuts against the turned up end H of the strip and both it and said turned up end are held to the brush back by screws K, K.

This tube I is plain except at the end adjacent the free end the handle where it is externally screw threaded, and on this screw threaded end is screwed another tube L such, tube L being formed of about the same internal diameter at the end portions and having an internally threaded screw threaded portion of smaller diameter between said ends. This tube L carries at its free end a plate M which is secured to the end of the handle by screws N.

Within the tube I is a rod P having one end P^1 provided with a screw thread which engages the screw thread of the tube L and to said end P^1 is secured a knob Q which projects beyond the end of the brush handle and is provided with a stem Q^1 which enters the larger internal diameter R of the tube L.

The larger internal diameter R of the tube L is of a length sufficient to permit the desired endwise movement of the rod P.

The stock S is made somewhat of a segment of a curve and is provided with holes T to receive the bristles U, and such bristled stock is backed up by a plate V of similar shape to the stock S. The plate V thus forms a support for the bristles, and being held to the stock S by screws W or other means, and further such plate is provided at one end with two projections X which extend at an angle to the back thereof, and at its other end with a V or U shaped projection Y the projections X and Y extending in opposite directions.

The brush back is shown as provided with a rim Z within which the stock rests, but such rim need not be provided in some brushes. Further the stock B may be provided with a rim to engage the back.

When the rod P is drawn back into the handle as shown in Figure 2, the stock can be positioned in or on the back B with the projections X in engagement with the undercut portion C the projection Y will then lie in front of the end of the rod P and when the knob Q is rotated in one direction the rod I will be moved endwise to bring its end into engagement with an extension Y and thus lock the stock to the brush back.

When the knob Q is rotated in opposite direction the end of the rod P will be withdrawn from the projection Y and the stock can be removed from the back.

The plate V may be provided with the perforations V^1 not coincident with the holes in the stock so that, when the brush is washed, no water or sediment will remain between the stock and the back.

What I do claim as my invention and desire to secure by Letters Patent, is:—

A brush comprising a back peripherally flanged, forming a recess, said recess being shallow adjacent the forward end of the brush and deeper rearwardly of the shallow portion, the wall between said portions being transversely undercut, the deeper portion of said recess having a hole in the wall thereof adjacent the handle of the brush, a strip running longitudinally of said back in conformation with the walls of said recess, said strip having a hole corresponding to the hole in the wall of the deeper portion of said recess, tubes in the brush handle, one tube having a screw thread, a rod in the tubes having a screw thread engaging the screw threaded tube, a knob on said rod, said rod being movable relatively to said tubes, a bristle-carrying stock fitting said recess, a plate secured to the stock having oppositely arranged angle projections at the ends, one of which interengages said undercut wall when the stock is fitted to the back, the other projection being engaged by said rod to lock said stock to the back as herein set forth.

In testimony whereof I have hereunto set my hand.

ERIC LEOPOLD HUGO COSBY.