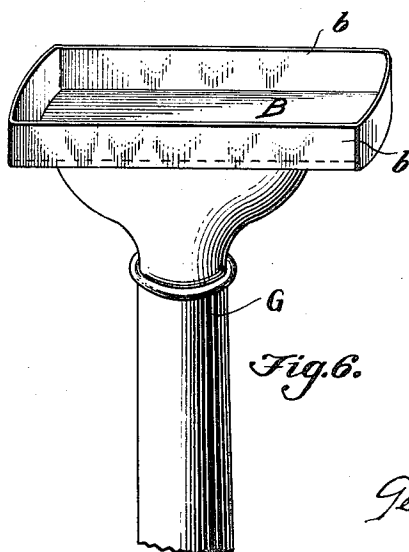
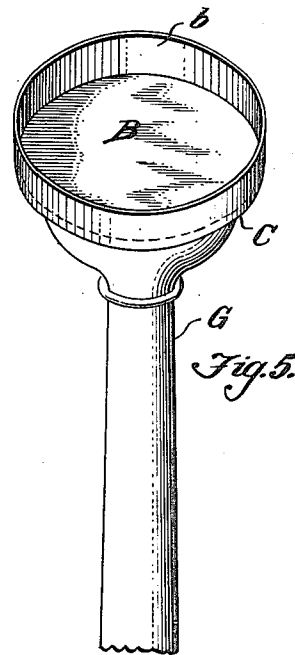
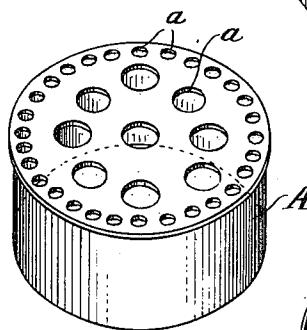
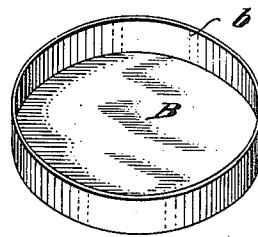
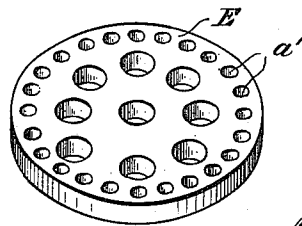
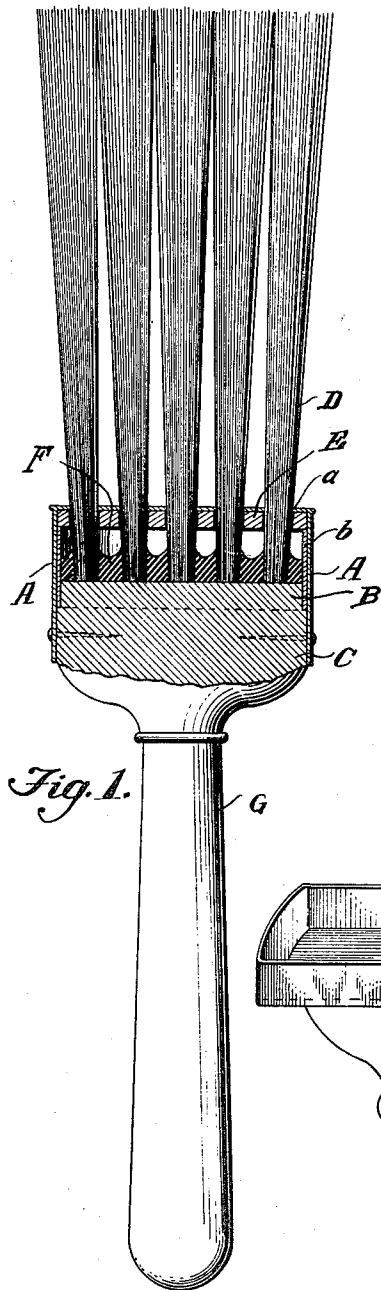


Feb. 5, 1924.

1,482,415

G. E. SEABOYER ET AL
METHOD OF CONSTRUCTING BRUSHES

Filed Aug. 18, 1922



Inventors.

*Geo. E. Seaboyer,
Paul H. Anderson,
By Hiram Swartz, Atty.*

UNITED STATES PATENT OFFICE

GEORGE EDWARD SEABOYER AND PAUL H. ANDERSON, OF WOOSTER, OHIO.

METHOD OF CONSTRUCTING BRUSHES.

Application filed August 18, 1922. Serial No. 582,664.

To all whom it may concern:

Be it known that we, GEORGE E. SEABOYER and PAUL H. ANDERSON, citizens of the United States, residing at Wooster, in the county of Wayne and State of Ohio, have invented a new and useful Method of Constructing Brushes, of which the following is a specification.

Our invention relates to improvements in brushes, and particularly to improvements in method of making paint, varnish, and calcimine brushes and the like, in which the brush material is secured in the brush head by cement or other like adhesive material.

The principal object of our invention is to provide a simple and inexpensive and efficient means of inserting and inlaying the cement material, in softened or semi-liquid condition, between the inner ends of the brush material and ferrule, or head of the brush handle, in such manner as to thoroughly saturate the ends of the bristles with the liquid after they are inserted in the ferrule, and surround each bunch of material within the brush head with a larger amount of liquid cement than has heretofore been possible, without permitting any of it to escape into or thru the brush material beyond the ferrule, and to stiffen and make more shapely the brush material when assembled in the brush head or block, and better secure the material therein in the cement drying and hardening process. It consists mainly in providing a novel means for introducing the cement material while in semi-liquid or plastic state, and holding it in compact relation to the brush material during the drying and hardening of the cement, and at the same time preventing its escape to the exterior of the brush, or thru the bunches of bristles beyond the ferrule, thereby making the brush more elastic and durable, and externally free from cement drippings, as hereinafter set forth and stated in the appended claim.

Our invention is illustrated by the accompanying drawings in which similar letters and figures of reference indicate like parts.

Referring thereto, Fig. 1 is a longitudinal sectional view of a brush, showing our completed brush in section; Fig. 2 is a detail perspective view of the ferrule of the brush, detached; Fig. 3 is a detail perspective view of a perforated plate thru which the bristles D pass into the interior of the ferrule; Fig. 4 is a detail perspective view

of the cement cup or receptacle, detached from the brush handle and ferrule; Fig. 5 is a like detail view of the cup, with handle attached thereto, and Fig. 6 is a modification of Fig. 5 for a flat brush.

In the drawings, A indicates the ferrule, which is similar exteriorly to such as are in common use. It may be perforated as at *a*, in any preferred manner, to receive bunches of bristles or other like brush material, and constructed out of any suitable sheet metal, and the ferrule may terminate at its lower edge; but in our improved method of construction we place a perforated plate E (Fig. 3) within the lower edge of the ferrule, as shown in Fig. 1, of a thickness of about one-fourth of an inch, the perforations being bored at a proper slant to give proper shape to the bristles D, when placed therethru; this plate may be covered by the lower surface of the ferrule, in whole or in part, being bored to register with the perforations in the plate, but such covering of the plate is not essential to our method.

The Figs. 4, 5 and 6 show varying forms of a cup or receptacle, to hold sufficient quantity of liquid or semi-liquid cement to properly saturate and cover the inner ends of the bristles D, which are introduced thru the perforations of the plate E prior to the application of cement thereto, so as to be perfectly clean and free from the same until such application, which is made by inserting within the ferrule the cup B enclosing within its thin marginal rim *b* the said cement; and pressing the cup upwardly, with the bristles D in vertical position until their adjacent inner ends are completely covered and saturated with the cement, so that, by gravity, the latter is prevented from passing upwardly thru the perforations of the plate, and thereby also the cement may be detained below the plate E, so as to leave a space unoccupied therebetween, as shown in Fig. 1. After applying the cement in the manner stated, the brush is to be held in vertical position, in a rack or otherwise, until the cement has gone thru a drying and hardening process by heating or otherwise. If preferred the rim *b* of the cement receptacle may be attached either to a thin bottom of the cup B, or directly to the block C of the brush handle, as may be most convenient for drying the cement; and the brush may be made round, or flat, or elliptical in form as may be desired for the trade. The cement

cup is preferably made by surrounding the bottom of the cup B, or the block of the handle G, with a thin metal band of sufficient width to hold an adequate quantity of the cement required for the particular brush.

By the means and method aforesaid the parts of the brush may be more readily assembled than heretofore, and the quantity of cement for any kind of brush may be measured in advance, and applied without soiling the bristles thereby, and a stronger and more pliable brush constructed than has heretofore been possible with the use of cement for the purpose.

Having thus fully described our invention what we claim as new and desire to secure by Letters Patent is—

The herein described method of constructing a brush, comprising inserting bristles or other brush material thru a perforated plate within a ferrule, and while held in a verti-

cal position, the inner ends of the bristles being projected thru said perforations downwardly sufficient for their immersion in liquid cement, applying the latter thereto by means of a cement cup or receptacle, adequately filled and pressed upwardly within the ferrule until said inner ends of brush material are thoroughly saturated and surrounded with the cement, and then, while so held in vertical position to prevent leakage, completing the process by drying and hardening the cement thus enclosed, substantially as set forth.

In witness whereof, we hereto set our hands this 16th day of June, A. D. 1922, in presence of two witnesses.

GEORGE EDWARD SEABOYER.

PAUL H. ANDERSON.

Witnesses:

HIRAM B. SWARTZ,

KAIL SALTSMAN.