

May 6, 1941.

B. BUDDISH

2,240,547

SHAVING BRUSH

Filed July 18, 1933

2 Sheets-Sheet 1

FIG. 1.

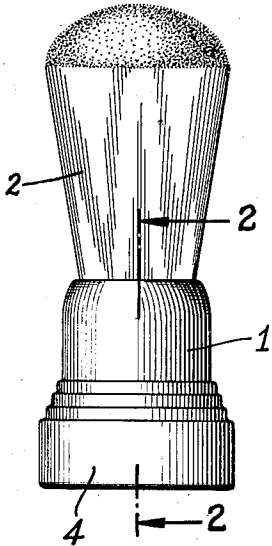


FIG. 2.

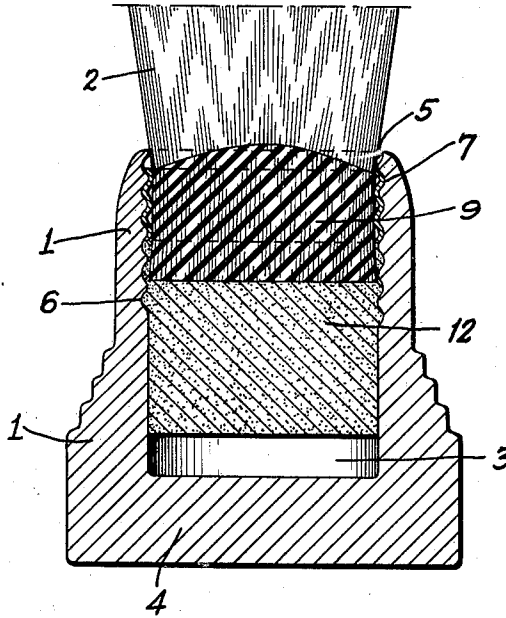


FIG. 5.

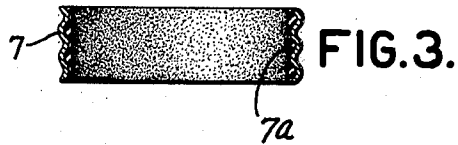
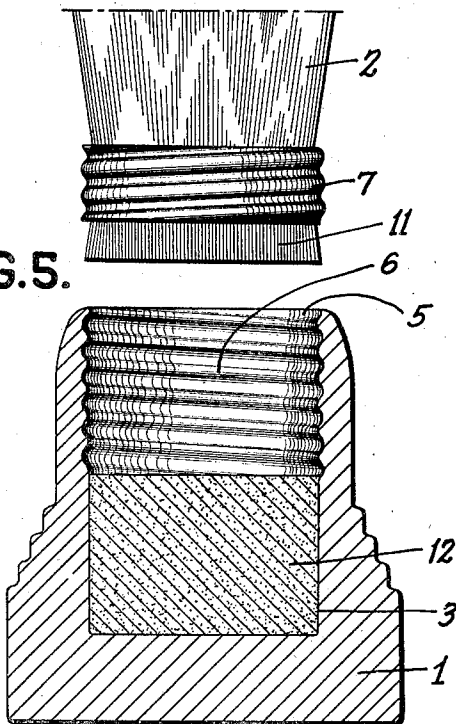
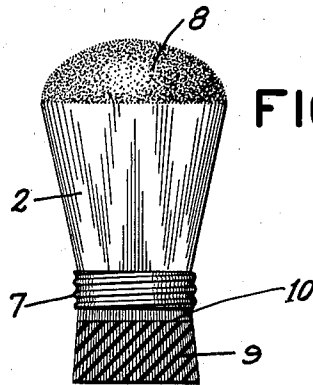


FIG. 4.



INVENTOR
BARNETT BUDDISH

BY *H. C. Blossing*
ATTORNEY

May 6, 1941.

B. BUDDISH

2,240,547

SHAVING BRUSH

Filed July 18, 1938

2 Sheets-Sheet 2

FIG. 6.

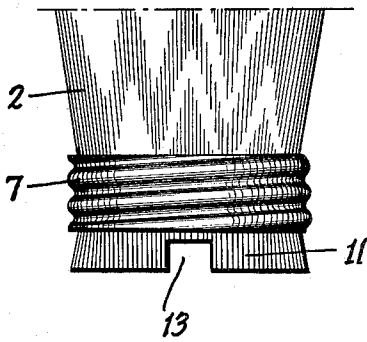


FIG. 9.

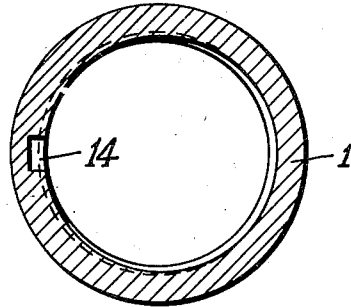


FIG. 7.

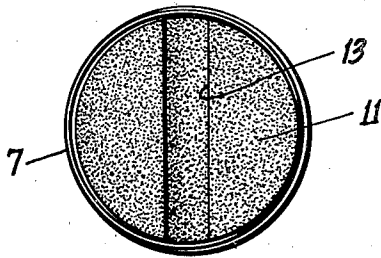


FIG. 10.

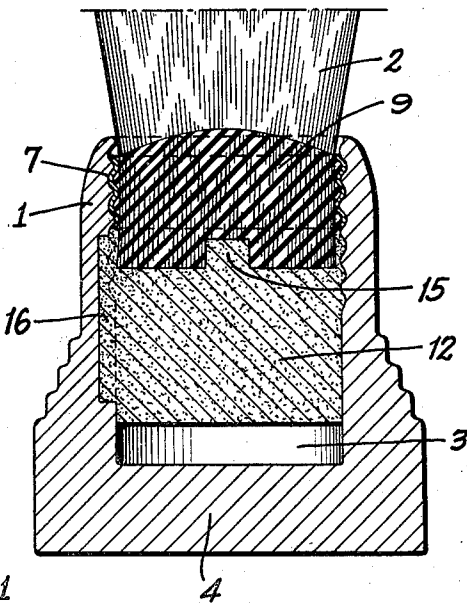


FIG. 8.

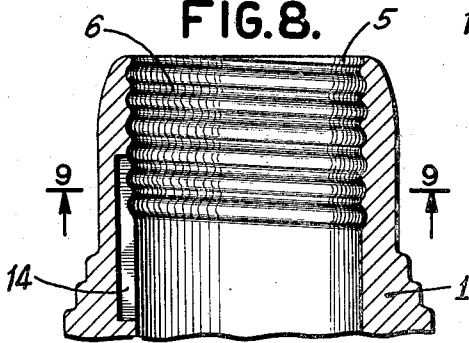
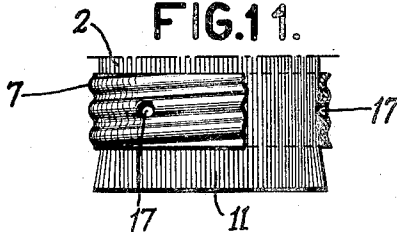


FIG. 11.



INVENTOR
BARNETT BUDDISH

BY
H. C. Hoisinger
ATTORNEY

UNITED STATES PATENT OFFICE

2,240,547

SHAVING BRUSH

Barnett Buddish, Newark, N. J., assignor to
Rubberset Company, Newark, N. J., a corpora-
tion of New Jersey

Application July 18, 1938, Serial No. 219,684

4 Claims. (Cl. 15--193)

This invention relates to improvements in brushes and particularly to lather or shaving brushed composed of a single body of bristles, preferably circular in cross section, fixed in a suitable handle. More particularly it pertains to a shaving brush in which the knot is fixedly held in a one-piece hollowed handle having a single opening through which the bristles suitably project.

A primary object of the invention has been to provide effective anchoring means whereby the body or knot of bristles is so secured in the handle as to prevent its loosening or detachment in usage. Another object has been to so construct certain component parts of the brush that with the use of cementitious materials, interlocking formations are obtained which rigidly connect the parts and provide a substantially unitary structure. These and other objects and advantages will become more readily apparent from the description, which follows, of a preferred, illustrative embodiment of the invention.

The accompanying drawings, referred to herein and which constitute a part hereof, together with the specifications, serve to disclose the nature of the invention in detail.

Of the drawings Figure 1 is a view in elevation of a brush forming an embodiment of the invention.

Figure 2 is an enlarged, longitudinal cross section through the brush along the line 2-2 of Fig. 1 and is taken in the direction of the arrows, the top portion of the bristles being omitted.

Figure 3 is an enlarged sectional view of the ferrule showing a desirable treatment of the same.

Figure 4 illustrates the position of the ferrule around the knot of bristles at one stage in the process of making the brush.

Figure 5 illustrates the handle and bristle unit in another stage in the construction of the brush, the handle being shown in longitudinal section and the bristles, shown separated from the handle, having their top portion omitted.

Figure 6 shows in elevation a modification of the assembled and processed bristle-knot, the top portion of the bristles being omitted.

Figure 7 is a bottom view of the bristle-knot shown in Figure 6.

Figure 8 is a longitudinal sectional view of the upper portion of a modified form of handle.

Figure 9 is a transverse sectional view taken along the line 9-9 of Figure 8.

Figure 10 is a view similar to Figure 2, showing in longitudinal section a brush embodying the features of Figures 3, 6 and 8, and

Figure 11 is a detail view showing a modified arrangement of the ferrule on the bristle-knot, the ferrule being partly in elevation and partly in section.

Referring now to the drawings, there is shown a lather or shaving brush having a handle from an end of which projects a body or knot of bristles 2. As shown in Fig. 2 the handle 1 is desirably shaped for convenient grasping by the fingers and is provided with a cavity 3, one end of said handle being preferably solid, as indicated at 4, while the opposed end 5 is open to the cavity 3. This open end of the handle is adapted to receive and hold the bristle body and provides for the introduction of the cementing material which in part goes to make up the brush in a manner to be hereinafter described.

Adjacent its open end the handle 1 is threaded internally, the threads 6 being formed in the wall surrounding the cavity 3, preferably for only a portion of its depth, say about half way down. A ring or ferrule 7, Figs. 4 and 5, is so formed as to be adapted for screwing into the threads 6 of the handle. This ferrule is assembled on the knot 2, as shown in Fig. 5, and is firmly affixed thereto, as will be further described, and forms the means of connection between the knot 2 and the handle 1, when the parts are assembled as shown in Fig. 2.

In order that the assembly of the knot and its ferrule may be clearly understood, there follows a brief description of the steps in the formation of this unit. Referring now to Fig. 4, a predetermined quantity of bristles of appropriate length is bunched with their natural or flag ends 8 preferably formed in a dome-like shape, and the butt ends 9 desirably trimmed. The bristle-knot so formed is placed within the ferrule 7 and the latter is temporarily placed at a slight distance from the butt end of the bristle body, as shown in Fig. 4. It is usual in brushes of this type to cement together the butt ends of the bristles, preferably with a bonding material which is resistant to the action of water and the substances used for producing a lather. A material commonly used for this purpose is one basically rubber. The treatment may be readily accomplished by a dipping process, in which case the cementing agent seeps between and about the bristle ends for a predetermined distance, as is shown at 10 in Fig. 4. After withdrawal the material is allowed to attain a more or less dried condition, at which time the ferrule 7 is drawn over the coated portion to a position substantially as shown in Fig. 5, leaving a definite projection 11 of the butt end extending past the outer rim of the ferrule 7, for a purpose to be further disclosed. This shifting of the ferrule is preferably accomplished before the cementing agent is completely dry, i. e., while it is still somewhat tacky. The assembled knot and ferrule is next subjected to a vulcanizing or other suitable treatment which

permanently hardens the coated end of the knot fixedly in the ferrule.

The next step is the placement of a suitable quantity of a plaster-like substance or cementitious material 12, such as a form of plaster of Paris or the like, in the cavity 3 in the handle, filling only a portion of the cavity, as shown in Fig. 5. The ferrule of the bristle-knot is then threaded into the handle and the assembled brush is inverted to allow the plaster-like substance, which is more or less plastic, to seep between the projection 11 of the bristles and the surrounding part of the handle, bonding thereto as well as to the flat end of the knot and to the wall of the cavity 3, including some of the threaded portion 6. This plaster-like material is allowed to harden and becomes, with the knot and handle, a firm, unitary structure. Due to the slight irregularity in the circumferential surface of the portion of the bristle-knot which projects beyond the ferrule and due to the slight outward flare of this portion, the plaster-like material provides a quite effective lock between the bristles and the handle.

To insure a firmer union between the ferrule and the bristle-knot, the ferrule 7 may be coated on its inner surface with the same material, indicated at 7a in Fig. 3, as is used in cementing the bristle-butts. After suitably drying this coating in the ferrule, the latter may be placed on the knot in the same manner as hereinbefore described. The purpose of this treatment is to insure the presence of the cementing material in the threads of the ferrule to bond with the cementing material on the bristle-knot butt during the vulcanizing process. By this step bonding or cementing material of the type with which the butt end of the bristle-knot is impregnated will extend into and substantially fill the threads 6 and thereby more positively lock the bristle-knot in the ferrule.

If it is desired to further mechanically lock together the component parts of the brush, one or more grooves 13 may be made in the butt end of the knot, as shown in Figs. 6 and 7, and a like groove or keyway 14, Figs. 8 and 9, may be formed along a portion of the inner face of the handle 1, but terminated, preferably, short of the end 5. It will be apparent, as illustrated by Fig. 10, that the hardened plaster will form keys 15 and 16, respectively, in the grooves referred to above, and thus more positively prevent the unthreading of the knot from the handle. In lieu of the straight grooves and projections illustrated for locking the handle, the plaster-like mass and the bristle-knot together, other forms of interlocking depressions and projections might be employed.

In some applications of the invention it may be found desirable to insure further the firm retention of the knot by and in the ferrule. For this purpose, as shown in Fig. 11, one or more small indentations 17 may be made in the ferrule 7, after its final assembly and processing with the knot 2, resulting in the formation of one or more projections or burrs interlocking with the cemented bristles.

While an illustrative form of brush embodying the invention has been disclosed in considerable detail and certain modifications have also been

disclosed, it will be understood that various other changes or modifications may be made without departing from the general spirit and scope of the invention. The terms and expressions employed herein are to be regarded as terms of description and not of limitation.

What I claim is:

1. A shaving brush which comprises a handle having a cavity completely closed at one end by an integral part of the handle, the opposite end of said cavity being closed by a bristle unit including a ferrule, said bristle unit having the butt end of the bristles projecting beyond the ferrule and flaring outwardly therefrom, a bonding agent uniting the butts of the bristles and said ferrule, said ferrule and handle having inter-engaging threads, and a mass of plaster-like material in said cavity around the projecting butt end of the bristles for firmly retaining the bristle unit in the handle, said mass of plaster-like material and the butt end of the bristles having inter-locking projected and indented formations.

2. A shaving brush which comprises a handle having a cavity completely closed at one end by an integral part of the handle, the opposite end of said cavity being closed by a bristle unit including a ferrule, said bristle unit having the butt end of the bristles projecting beyond the ferrule, a bonding agent uniting the butts of the bristles and said ferrule, said ferrule and handle having inter-engaging threads, and a mass of plaster-like material in said cavity around the projecting butt end of the bristles for firmly retaining the bristle unit in the handle, said mass of plaster-like material and the butt end of the bristles having an inter-locking groove and projection.

3. A shaving brush which comprises a handle having a cavity completely closed at one end by an integral part of the handle, the opposite end of said cavity being closed by a bristle unit including a ferrule, said bristle unit having the butt end of the bristles projecting beyond said ferrule, a bonding agent uniting the butts of the bristles and said ferrule, said ferrule and handle having inter-locking threads, and a mass of plaster-like material for firmly retaining the bristle unit in the handle, said handle and said mass of plaster-like material having an interlocking key and keyway extending at least in part in an axial direction.

4. A shaving brush which comprises a handle having a cavity closed at one end by a part of the handle, the opposite end of said cavity being closed by a bristle unit including a ferrule having screw-thread formations on its inner and outer surfaces, said bristle unit having the butt end of the bristles projecting beyond said ferrule and flaring outwardly therefrom, and a bonding agent uniting the butts of the bristles and said ferrule, said bonding agent impregnating and stiffening the projecting portion of the butt end of the bristles and also filling the depressions formed by the threads on the inner surface of said ferrule, said handle having threads adjacent the outer end of said cavity for receiving the threads on the outer surface of said ferrule.

BARNETT BUDDISH.

RUBBERSET

TRADE MARK

Bristles gripped in hard rubber

Brought to you by:

www.oldschoolshavingbrushes.com

