

April 16, 1968

W. A. BEASLEY
SHAVING BRUSH DEVICE
Filed Oct. 19, 1965

3,378,331

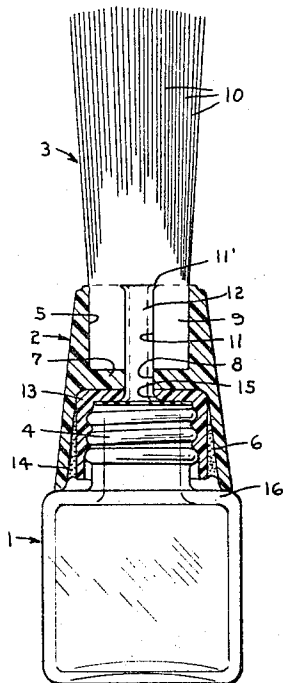


Fig-1

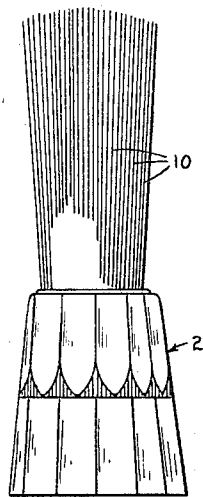


Fig-2

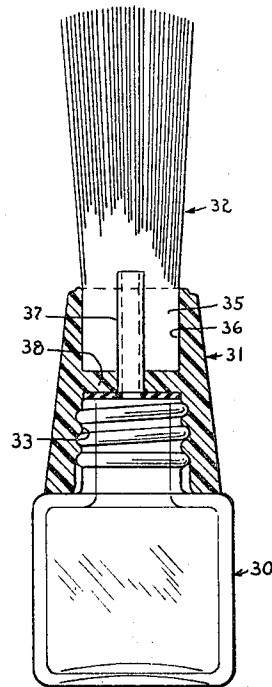


Fig-3

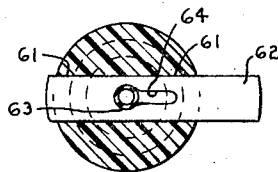


Fig-5

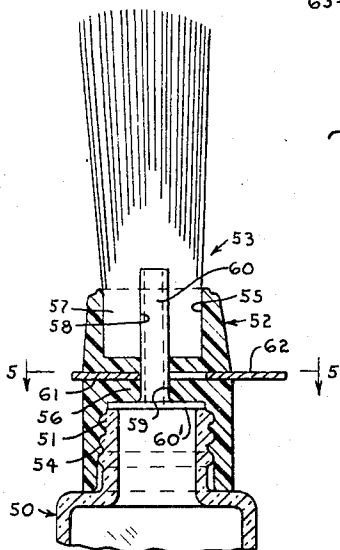


Fig-4

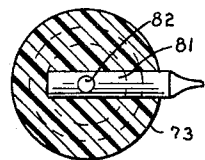


Fig-7

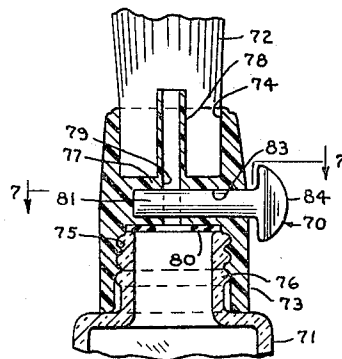


Fig-6

INVENTOR.
WELDON A. BEASLEY
BY
Charles A. Penfold
ATTORNEY

1

3,378,331

SHAVING BRUSH DEVICE

Weldon A. Beasley, Gary, Ind., assignor to Miracle Products, Incorporated, Gary, Ind., a corporation of Indiana

Filed Oct. 19, 1965, Ser. No. 497,733
1 Claim. (Cl. 401-286)

ABSTRACT OF THE DISCLOSURE

The invention is directed primarily to a unique mode of securing a brush head and an internally threaded cup in end sockets of a body by means of a tubular element having upset ends and the use of a mass of cement surrounding the cup whereby to additionally assist in securing the cup in place.

The subject invention relates generally to shaving equipment and more particularly is directed to a shaving brush device.

One of the important objects of the invention is to provide a brush device comprising a relatively small container for liquid soap and a relatively small body structure which generally constitute continuations of one another whereby the device may be held substantially in the palm of a hand to facilitate its manipulation.

A significant object of the invention is to provide a brush device in which the body structure is provided with a socket at its fore end for receiving a brush unit and a rear socket which is preferably provided with internal threads for threadedly receiving and engaging a container for the liquid, with a partition or common wall between the sockets having an opening or passage therein through which the liquid may flow outwardly from the container between the bristles of the brush unit.

Another object of the invention is to provide a brush device in which the partition or common wall between the sockets, above referred to, is preferably provided with an opening and a tube is secured in the opening for extension through a head of the brush or bristle unit whereby to facilitate flow of the liquid from the container between the bristles. This tube also serves to prevent the liquid from disintegrating the cement utilized in securing the brush unit to the body of the device and/or the material of which the head of the bristle unit is comprised.

A further object of the invention is to provide a modified form of brush device which is provided with a resiliently flexible tube for conducting the liquid to the bristles, including manually operable means carried by the body whereby the tube may be distorted in a manner whereby to prevent flow of fluid therethrough.

Other objectives of the invention reside in providing a brush device which offers advantages with respect to manufacture and assembly, utility, durability, and sanitation.

Additional objects and advantages of the invention will appear after the description hereinafter set forth is considered in conjunction with the drawings annexed hereto.

In the drawings:

FIGURE 1 is a side elevational view of one embodiment of the invention, with certain portions in section for the purpose of illustrating details of construction;

FIGURE 2 is a side elevational view of the body and brush or bristle unit illustrated in FIGURE 1;

FIGURE 3 is a side elevational view of a modified form or embodiment of the invention, with portions in section to illustrate details of construction;

FIGURE 4 is a side elevational view of a third modification or embodiment of the invention, with portions in section to illustrate details;

2

FIGURE 5 is a horizontal section taken substantially on line 5-5 of FIGURE 4;

FIGURE 6 is a partial vertical section taken through a fourth modification of the invention; and

FIGURE 7 is a transverse section taken substantially on line 7-7 of FIGURE 6.

Referring first to the embodiment illustrated in FIGURES 1 and 2 of the drawing, there is disclosed a container generally designated 1, a body generally designated 2, and a brush unit 3.

The container may be designed and constructed as desired and made from any material suitable for the purpose, such as glass or plastic. The container preferably has a predetermined diameter and axial length and includes a reduced externally threaded portion 4.

The body 1 may also be designed and constructed as desired, but is preferably molded from a suitable plastic material. More specifically, it is tapered or generally frusto-conical in shape so that it is wider at its rear end than at its fore end. It is preferably provided with a cylindrical socket 5 at its fore end and with a somewhat larger and tapered cylindrical recess or socket 6 at its rear end. These sockets are separated by a partition or wall 7 which is common to both sockets and is provided with a centrally disposed axial opening 8.

The brush unit 3 may be designed and constructed in various ways, but as illustrated herein, it preferably comprises a solid head 9 and a multitude of elongate bristles or members 10 having inner ends which are molded or otherwise permanently embedded or anchored in the head so that the bristles extend longitudinally forward of the head and the body 2. The brush unit may be secured to the body in any mode desired, but this is preferably accomplished by cementing and sealing the head of the unit in the front socket 5 as clearly shown. The head of the bristle unit is preferably provided with a longitudinally extending opening 11 which is aligned with the opening 8 provided in the partition, and these openings may constitute a passage through which liquid from the container may flow outwardly into the bristles. However, as shown, a tube 12 is preferably extended and secured through the openings in the partition and opening in the head of the bristle unit, for the purpose of conducting liquid from the container to the bristles.

The rear socket or recess 6 of the body is preferably tapered as shown and an inner internally threaded socket or cup 13 is preferably anchored therein by means of cement 14, or other suitable means. This threaded socket is preferably made from a resiliently flexible plastic and adapted to detachably receive the threaded reduced extremity 4 of the container and its base wall is provided with an aperture 15 which is axially aligned with the tube 12. This aperture and the fore end of the brush head 9 are preferably countersunk as indicated at 11' for receiving the flanged or upset ends of the tube 12 whereby to assist in permanently securing the brush unit 3, socket 13 and body 2 together.

Attention is directed to the fact that the largest cross-sectional dimension of the body 1 approaches that of the diameter of the container so that the body and the container more or less constitute continuations of one another and a peripheral edge of the body and an annular edge or shoulder portion 16 of the container may intimately engage one another whereby to afford stability between the body and container and provide a sealed or a liquid-tight connection therebetween and thereby prevent leakage of the liquid. The relative sizes of the body and container are preferably such that the body and container may be substantially confined in the hand of a user whereby to facilitate manipulation of the device. An inner edge portion 17 of the inner socket 13 may also

3

engage the shoulder 16 of the container whereby to prevent leakage between the container and body. Also, if desired, an imperforate gasket (not shown) may be seated in the inner socket 13 for engagement with an end of the reduced portion 4 of the container for preventing flow of the liquid to the bristles. Provision of the latter, for example, offers an advantage when the device is packed in suitcase for travel.

Referring now to FIGURE 3 of the drawing, there is disclosed a container generally designated 30 which substantially corresponds to the container 1, above referred to, a body 31 and a brush unit 32. This embodiment of the invention is substantially similar to that illustrated in FIGURES 1 and 2, except for several factors, one of which is that the body is provided with a rear integral molded threaded socket 33, as distinguished from utilizing a separate threaded socket such as 13. A head 35 of the brush unit 32 is secured in a socket 36 at the fore end of the body and a tube 37 extends through a partition 38 and the head in a mode similar to that above described. The tube may project forwardly of the head 35 whereby to improve the flow of the liquid to the bristles and at the same time assist in preventing clogging at the point of discharge. It will be observed that in this embodiment a gasket 34 may be placed in the socket 33 for engagement with the end of the container so as to prevent flow of liquid to the bristles. This seal is utilized during travel so as to retain all of the liquid in the container.

Referring to the structure illustrated in FIGURES 4 and 5, there is shown a container generally designated 50 provided with a reduced externally threaded portion 51, a body 52 and a brush unit 53. The body is provided with a rear inner internally threaded socket 54, a socket 55 at its fore end, with a partition or common wall 56 between the sockets.

The brush unit includes a head 57 and bristles extending from the head. The head is provided with longitudinally extending opening 58 which is axially aligned with an opening 59 provided in the partition 56.

An elongate resiliently flexible tube 60 extends through aligned openings in the partition and head of the brush unit and an inner flanged end 60' thereof is located between the partition and reduced end 51 of the body as shown. The body is preferably provided with a transverse slot 61.

An elongate manually operable member 62, preferably in the form of a relatively narrow planar element is slidably mounted in the slot 61 and is preferably provided with an aperture 63 and a longitudinally extending slot 64 which intersects and extends radially from the aperture as best shown in FIGURE 5. When the element is in the position illustrated in FIGURES 4 and 5, the tube will extend through the aperture 63 so that liquid may freely flow from the container to the bristles, but when the element is moved to the left of the position shown, the tube will become distorted and move into the radial slot 64 in a manner whereby to collapse the tube and thereby prevent flow of the liquid from the container to the bristles. This manually operable means constitutes a way of controlling the flow of the liquid and preventing its escape from a container, which means is different from that in which a gasket is employed.

Referring to FIGURES 6 and 7 of the drawing, there is shown a modified structure whereby a manually operable element, generally designated 70, may be utilized to control the flow of fluid from a container 71 to a brush unit 72. More particularly, the structure shown also includes a body 73, preferably constructed from a molded plastic, provided with a socket 74 at its fore end and an internally threaded socket 75 at its rear end. The socket 75 is adapted to threadedly receive a reduced externally threaded portion 76 of the container 71. The body also

4

includes a partition or wall 77 between the sockets 74 and 75 and this wall is provided with a forwardly extending integral tube 78 which is disposed in concentric relation to the socket 74. The brush unit 72 has a head which is cemented or otherwise secured in the socket 74 and is provided with a centrally disposed axial aperture which receives the tube 78, as shown.

The partition or common wall 77 is also provided with an aperture 79 which constitutes a continuation of the tube 78 so that fluid may flow from the container to the bristles.

If desired, an apertured gasket 80 may be seated in the rear socket 75 for engaging the inner end of the reduced portion 76 of the container so as to prevent leakage between the container and the body.

The manually operable element 70 includes a shank 81 provided with a transverse opening 82. The body 73 is provided with a transverse cylindrical recess 83 and rotatably receives the shank 81. The element 70 is provided with a manually engageable portion 84 whereby to facilitate rotation of the element so that the opening 82 in the shank 81 may be brought into registry with the axial aperture 79 in the body so that fluid may flow from the container through the tube and to the bristles or to a position in which the axis of the opening is disposed transverse or out of registry with the longitudinal axes of the tube 78 and aperture 79 whereby to prevent flow of fluid from the container to the bristles.

Having thus described my invention, it is obvious that various modifications may be made in the same without departing from the spirit of the invention and, therefore, I do not wish to be understood as limiting myself to the exact forms, constructions, arrangements, and combinations of parts herein shown and described.

I claim:

1. A device of the kind described comprising a body having a fore end provided with a socket, a brush unit having an apertured head disposed in said socket and bristles carried by said head and extending forwardly therefrom, said body also having a partition provided with an opening and a rear extremity provided with a rear socket, an internally threaded cup disposed in said rear socket for detachably receiving a container for liquid and having an end wall provided with an opening, a mass of cement surrounding said cup assisting to secure it in said rear socket, and a tube extending through said aperture in said head and through said openings and having upset ends for permanently securing said head and said cup in said sockets.

References Cited

UNITED STATES PATENTS

1,220,020	3/1917	Smith	132—81
1,611,151	12/1926	Jembrzycki	401—278
1,937,005	11/1933	Aronson	401—135
1,937,006	11/1933	Aronson	15—555 X
2,092,400	9/1937	Miller	251—7
2,106,377	1/1938	Lomas	15—604 X
2,236,625	4/1941	Marsh et al.	401—277
2,698,452	1/1955	Ostow	401—183
2,702,396	2/1955	Starszer	132—81
2,750,615	6/1956	Brazeman	132—80
2,889,848	6/1959	Redmer	251—7 X

FOREIGN PATENTS

529,882	6/1955	Italy.
34,286	11/1934	Netherlands.

70 CHARLES A. WILLMUTH, *Primary Examiner*,
EDWARD L. ROBERTS, *Examiner*,