Nov. 28, 1933. L. V. ARONSON 1,937,005

SOAP DISPENSING SHAVING BRUSH OR THE LIKE

Filed May 24, 1932 2 Sheets-Sheet 1

Fig. 1.

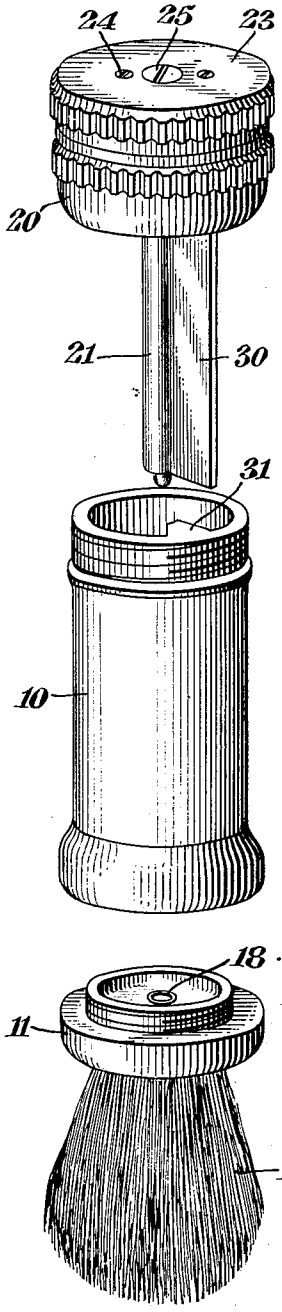
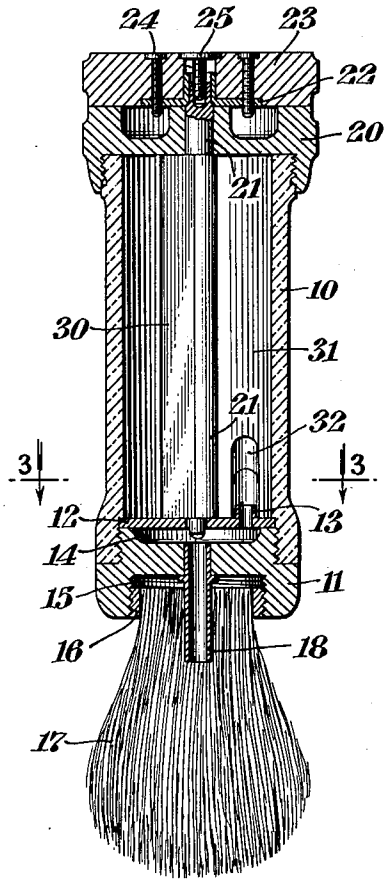


Fig. 2.



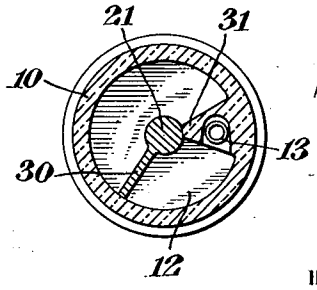


Fig. 3.

INVENTOR
Louis V. Aronson
BY
Ward, Crosby & Neal
ATTORNEYS

Nov. 28, 1933. L. V. ARONSON 1,937,005

SOAP DISPENSING SHAVING BRUSH OR THE LIKE

Filed May 24, 1932 2 Sheets-Sheet 2

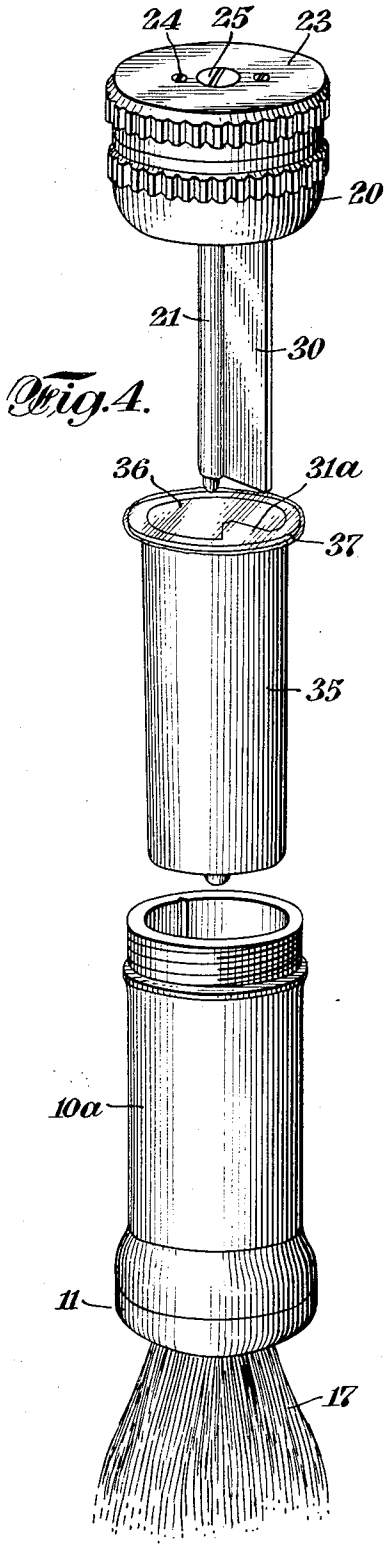


Fig. 4.

Fig. 5.

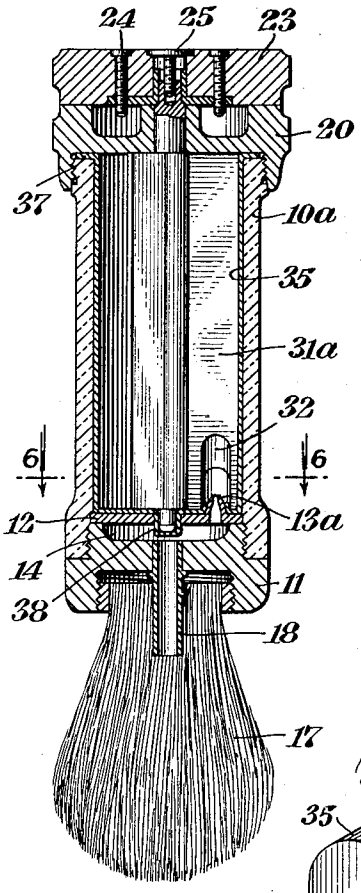


Fig. 7.

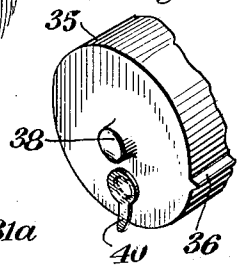
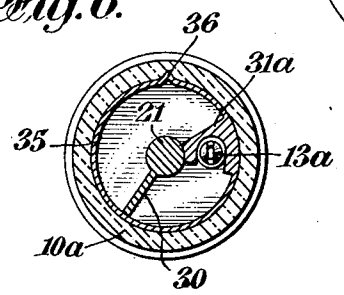


Fig. 6.



INVENTOR
Louis V. Aronson
BY
Ward, Crosby & Neal
ATTORNEYS

Patented Nov. 28, 1933 1,937,005

UNITED STATES PATENT OFFICE

1,937,005

SOAP DISPENSING SHAVING BRUSH OR THE LIKE

Louis V. Aronson, Newark, N. J., assignor to Art Metal Works, Inc., a corporation of New Jersey

Application May 24, 1932. Serial No. 613,193

17 Claims. (Cl. 15—133)

This invention relates to improvements in dispensing devices for shaving brushes or the like.

Among the objects of this invention are the provision of an improved handle that may be used as a container for the material to be used on the brush, for example for soap in case the brush is used for shaving, and having provision by means of which the soap or the like may be fed into the brush when desired; provision of means for facilitating the use of capsules or refillers in handles and the dispensing of material therefrom; and the construction of devices facilitating assembly and disassembly of the parts for the purpose of cleaning and replacement of parts.

Other objects will appear from the following description taken in connection with the drawings, in which

Fig. 1 is a disassembled view of a shaving brush and a handle used as a container and including dispensing means constructed according to a preferred embodiment of the invention;

Fig. 2 is a vertical central section of the assembled shaving brush;

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

Fig. 4 is a view similar to Fig. 1 showing in addition a soap capsule;

Fig. 5 is a central vertical section of the invention shown in Fig. 4 when the parts are assembled;

Fig. 6 is a section on the line 6—6 of Fig. 5; and

Fig. 7 is a bottom end view of a modified form of capsule or refiller.

The handle of the brush, constructed in accordance with the embodiment of the invention shown in Figs. 1, 2 and 3, comprises a hollow barrel 10 which is preferably made of any suitable transparent material, such as transparent bakelite or the like, in order that the user may readily ascertain by inspection the amount of soap left in the handle. The handle also preferably comprises a lower closure member 11 which may be made of the same material as the barrel 10 and may be threaded in the barrel 10 to securely clamp a plate 12 against a shoulder on the barrel 10, as clearly shown in Fig. 2. The plate 12 may be made of chromium plated metal and may be provided with a short tube 13 providing a passage-way for the soap from the barrel 10 to a recess 14 in the upper end of the closure member 11. The recess 14 is preferably circular, so that the tube 13 may communicate therewith in any angularly rotated position of the closure member 11 with respect to the barrel 10, thus avoiding the necessity of accurately choosing the dimensions of parts.

The lower end of the closure member 11 may be provided with a threaded recess 15 to receive a threaded member 16 in which the brush 17 is set. The member 16 may be made of bakelite, hard rubber or any suitable material. The member 11 also may be provided with a tube 18 of metal or, if desired, flexible material such as rubber through which the soap from the recess 14 may be dispensed into the brush. The free end of the tube 18 may be extended to any desired position within the brush.

On the upper end of the barrel 10 is a cap 20 which is preferably secured thereto by a threaded connection and which may be made of the same material as the barrel 10. This cap is provided with a central opening providing a bearing for the upper end of a shaft 21, the lower end of which rotates in the plate 12. The extreme upper end of the shaft projects through the cap 20 and may be of any suitable cross sectional shape engaging a correspondingly shaped opening in a metallic plate 22 which may be secured to a manipulative member 23 by screws 24, or the like. The upper side of the cap 20 may be provided with an annular recess, as shown, into which the ends of the screws 24 project. The manipulative member 23 is held in position for rotation on the cap member 20 by means of a screw 25 whose head abuts a shoulder in a recess in the member 23 and which is threaded into the shaft 21, holding the shaft and the manipulative member 23 together. The manipulative member 23 may be made of the same material as the barrel 10.

The shaft 21 is provided with a vane or paddle 30, the upper end of which may function to hold the cap 20 assembled with the shaft and the manipulative member, or the shaft may be enlarged providing shoulders abutting the cap 20 and plate 12 as shown in Fig. 2. These shoulders provide against the egress of soap around the ends of the shaft.

The shaft and vane or paddle may, if desired, be of the same material as the barrel 10. Preferably the vane or paddle and shaft are cast or formed as a single piece of metal which is preferably chromium plated. The vane or paddle 30 extends radially from the shaft, as indicated in Fig. 3, and into close fitting engagement with the inner surface of the barrel 10 and functions upon rotation in the direction indicated in Fig. 3 to force the soap against a vane 31 fixed on the barrel and preferably made integral therewith. As

shown in Fig. 3, the free edge of the fixed vane 31 is curved to conform to the shaft 21, the two parts being in close contact to prevent any of the soap from being forced between these parts.

As pressure is applied to the soap by movement of the shaft, as indicated in Fig. 3, the soap is forced into a recess 32 in the fixed vane 31 near its base which receives the upper end of the tube 13 so that the vane or paddle 30 may be moved into contact with the fixed vane 31, and practically all of the soap in the handle may be forced out into the brush for use.

The modification shown in Figs. 4, 5 and 6 includes generally the same parts as the modification shown in Figs. 1 to 3. In this modification the handle is filled by sliding a capsule or refiller 35 which contains a quantity of soap into the barrel 10. After the capsule or refiller is in position its cover, such as 36 which may be a sheet of cellophane or any equivalent material suitably secured in sealing relation thereto, is removed. The shaft 21 and vane or paddle 30 are then inserted into the capsule 35 in the same way in which the shaft and vane or paddle are inserted in the barrel in the modification shown in Figs. 1, 2 and 3.

The plate 12 in this instance may be provided with a pointed puncturing tube 13*a* which punctures the lower end of the capsule or refiller, thereby providing for feeding the soap out of the capsule or refiller into the recess 14 as in the first modification described. The tube 13*a* is located in a recess 32 in the fixed vane 31*a* which, in this modification, may be secured to or made integral with the capsule or refiller 35. The capsule or refiller 35 is preferably provided with a rib 36 which is seated in a groove in the barrel 10*a* to accurately locate the recess 32 in the vane 31*a* with respect to the puncturing tube 13*a*. This rib also prevents rotation of the capsule or refiller as the vane or paddle 30 is rotated for dispensing the soap to the brush.

The upper end of the capsule or refiller is preferably flanged, as at 37, by means of which it may be secured in position in the barrel 10*a*. The lower end of the capsule or refiller is preferably provided with an extension 38 which receives the lower end of the shaft 21 and enters an opening in the plate 12. The extension 38 acts as a lining for the lower end of the shaft 21 and avoids the necessity of puncturing the lower end of the capsule as the end of the shaft is inserted in the plate 12.

As shown in Fig. 7, the lower end of the capsule or refiller 35 may be provided with a perforation closed by a removable tab 40 thereby avoiding the necessity of a perforating tube 13*a*. The capsule or refiller 35 may be made of any suitable transparent material. It is also within the province of my invention to make all of the handle parts and the capsule or refiller 35 when employed, of non-transparent material and to provide the cap 20 and manipulative member 23 with scale marks or the like to indicate the amount of soap in the handle.

The exposed parts such as the barrel 10, closure member 11, cap 20 and manipulative member 23 may be made of semi-transparent bakelite of any desired color of solid or mottled effect. The parts 11, 20 and 23 are preferably of slightly larger diameter than the barrel 10 and are preferably provided on their peripheries with means facilitating manipulation. The materials specified as preferable provide a device which is not affected by the material dispensed and which may be readily cleaned.

While the principles of this invention have been described with reference to the embodiments shown in the drawings, and with reference to a particular use, it is to be understood that the several features of the invention may be embodied in different forms for different uses, that it is not the intention to limit the claims to the particular embodiments disclosed, and that any terms imported from the specification into the claims are to be considered as words of description rather than of limitation.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. A hollow handle for a brush, radial vanes within said handle relatively rotatable about a common axis to cooperatingly apply pressure on material within said handle, and means located exteriorly of said handle for effecting relative rotation of said vanes for dispensing material to said brush.

2. A handle for a brush including means for securing a brush thereto, said handle being provided with a chamber for receiving material to be dispensed to the brush, a passage-way between said chamber and said brush, a radial stationary vane in the chamber of said handle, a cooperating movable radial vane or paddle in the chamber of said handle, and means accessible from the exterior for operating said movable vane or paddle.

3. A handle for a brush including means for securing a brush thereto, said handle being provided with a chamber for receiving material to be dispensed to the brush and a passage-way between said chamber and said brush, a radial vane fixed on the wall of the chamber of said handle, a cooperating movable vane or paddle mounted movably in said handle, and means accessible from the exterior for operating said movable vane or paddle.

4. In a handle for a brush comprising a hollow barrel, a closure member for one end of the barrel provided with means for mounting a brush and with a passage-way from the interior of the barrel to said brush, a cap for the upper end of said barrel, a radial stationary vane within said hollow barrel, a shaft supported in said cap and in contact with the inner edge of said stationary vane, a vane or paddle fixed on said shaft, and means located exteriorly of said cap for rotating said shaft and vane or paddle carried thereby.

5. A handle for a brush including a hollow barrel, a closure member for the lower end of said barrel provided with means for mounting a brush, said closure member being also provided with a circular recess in its upper surface, a plate secured to said barrel by said closure member in position to cover said recess, said plate being provided with a central shaft receiving opening and a laterally disposed opening establishing communication between said barrel and said recess, said closure member being provided with a passage-way between said recess and said brush, a radial stationary vane in said barrel provided with a recess disposed in alignment with said opening in said plate, a cap member for the upper end of said barrel, a shaft supported in said cap member and said plate and bearing against the inner edge of said stationary vane, a vane or paddle on said shaft, and a manipulative member secured to said shaft for rotating said shaft and paddle and dispensing material to said brush.

6. A handle for a brush including means for mounting a brush thereon and provided with a passage-way leading from the interior of the handle to said brush, a stationary vane on the interior of said handle, a cap for the upper end of said handle, a shaft having a bearing in said cap and having an enlarged portion bearing against the lower surface of said cap, a vane or paddle fixed on said shaft, a disk-like manipulative member having a driving engagement with said shaft, and means for securing said manipulative member, cap and shaft together.

7. In combination with a hollow handle for a brush provided with means for supporting a brush and with a passage-way leading from the interior of the handle to the brush, a cap for said handle, a rotatable shaft supported in said cap and provided with a vane or paddle, means located exteriorly of the cap for operating said shaft, a capsule or refiller adapted to be slid into said handle and to be secured therein against rotation, and a stationary vane on the interior of said capsule for cooperation with said movable vane or paddle.

8. In combination with a hollow handle for a brush provided with means for supporting a brush and with a passage-way leading from the interior of the handle to the brush, a cap for said handle, a rotatable shaft supported in said cap and provided with a vane or paddle, means located exteriorly of the cap for operating said shaft, a capsule or refiller adapted to be slid into said handle and to be secured therein against rotation, and a radial vane supported by the wall of said capsule for cooperation with said movable vane or paddle.

9. In combination with a hollow handle, means for supporting a brush on one end of the handle, a cap mounted on the other end of the handle, a paddle supported in said cap, means located exteriorly of said handle for operating said paddle, a capsule or refiller provided with a fixed vane for cooperation with said paddle, a lateral recess in the lower end of said vane on said capsule, a perforating device in said handle for establishing communication between the interior of said capsule and a brush on said handle, and means on said capsule and said handle for causing the proper alignment of said perforating device with the recess in said vane on said capsule as said capsule is slid into said handle.

10. A dispensing device comprising a container provided with a cylindrical receptacle, a radial vane projecting from the inner surface of said container, and a rotatable radial paddle cooperable with said vane.

11. A dispensing device comprising a container provided with a cylindrical receptacle, a radial vane immovable with respect to said container, and a radial movable paddle cooperable with said vane.

12. A dispensing device comprising a container provided with a cylindrical receptacle, and relatively movable cooperating vanes operable on material within said receptacle for ejecting the same through an aperture in said container.

13. A refiller capsule comprising a receptacle for material to be dispensed, and a radial vane fixed to the inner surface of said receptacle, one end of said vane being provided with a passage-way providing for the passage of material within the receptacle to a portion of the end wall within the confines of said vane, said portion of said end wall being of perforable material.

14. A refiller capsule comprising a receptacle for material to be dispensed, a radial vane fixed to the inner surface of said receptacle, one end of said vane being provided with a passage-way providing for the passage of material within the receptacle to a portion of the end wall within the confines of said vane, said portion of said end wall being of perforable material, and means on said refiller for controlling the position of said refiller within a container to align said perforable portion with a perforating device.

15. A handle for a brush including means for securing a brush thereto, said handle being constructed of transparent material and being provided with a cylindrical receptacle, an inwardly extending radial vane rigid with the wall of said receptacle, and a cooperating vane or paddle movably mounted within said receptacle.

16. A handle for a brush including a barrel, a closure member threadedly engaging one end of said barrel and provided with means for mounting a brush and a passage-way leading from the interior of said barrel into said brush, a radial vane integral with said barrel, a cap threadedly engaging the free end of said handle and provided with a shaft bearing, a shaft mounted in said bearing, a vane or paddle integral with said shaft, and a manipulative member secured to the end of said shaft substantially in contact with the outer face of said cap, said parts being constructed of transparent material and said closure member, cap and manipulative member being of larger diameter than said barrel and being provided with means facilitating manipulation.

17. A refiller capsule comprising a cylindrical receptacle for receiving material to be dispensed, and a radial vane within said receptacle and immovably secured thereto, said vane being of a depth substantially equal to the length of the radius of said receptacle to constitute a barrier for said material under pressure.

LOUIS V. ARONSON.