July 7, 1931. W. G. FRAZIER 1,813,615

SHAVING BRUSH

Filed Feb. 25, 1929 2 Sheets-Sheet 1

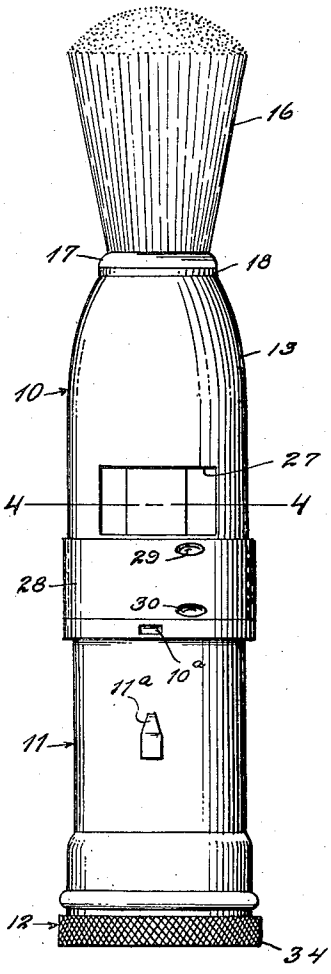


Fig. 2.

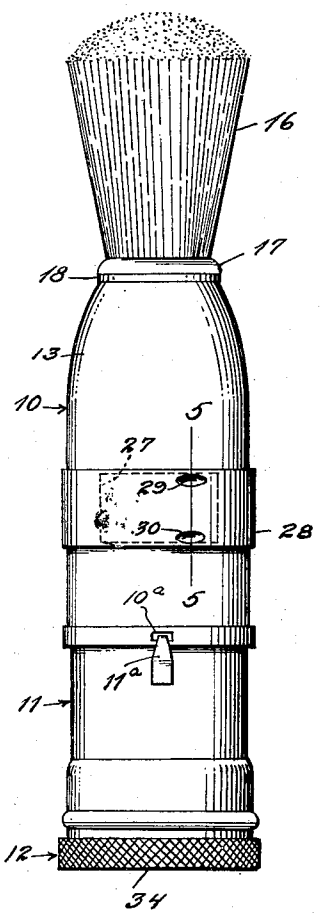


Fig. 1.

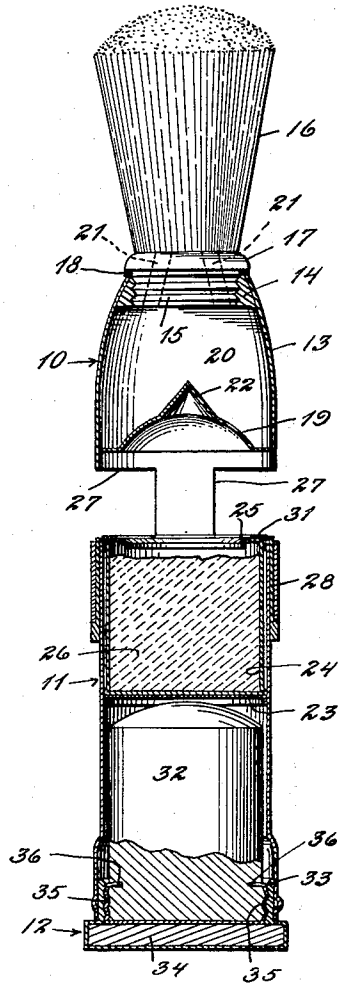


Fig. 3.

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SHAVING BRUSH

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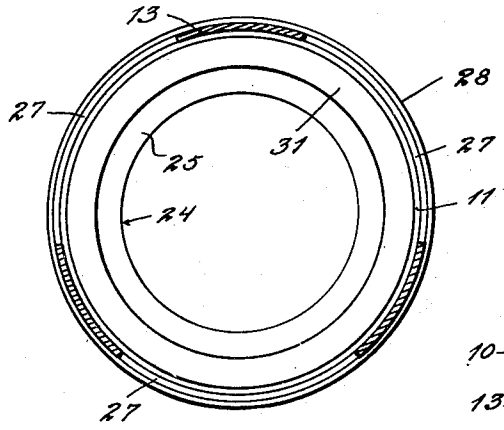


Fig. 4.

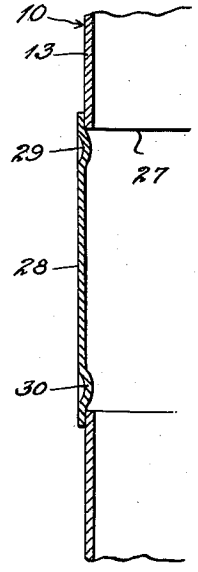


Fig. 5.

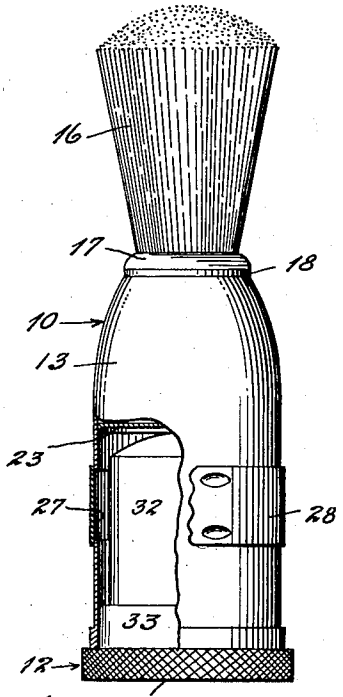


Fig. 7.

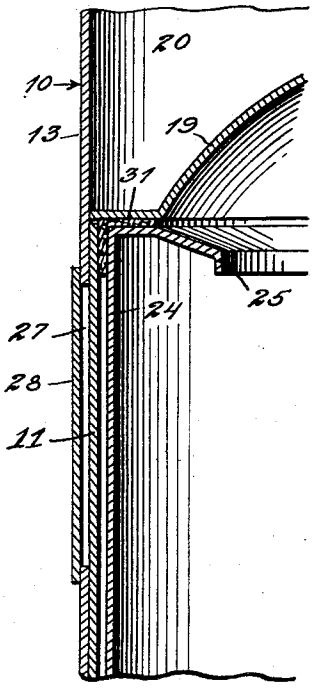


Fig. 6.

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Patented July 7, 1931 1,813,615

UNITED STATES PATENT OFFICE

WILLIAM G. FRAZIER, OF PHILADELPHIA, PENNSYLVANIA

SHAVING BRUSH

Application filed February 25, 1929. Serial No. 342,590.

The invention relates to toilet accessories, particularly to shaving kits or outfits, and has for its general object the provision of a self-contained kit having means for heating water for shaving purposes, the brush being of the fountain type whereby water may be applied initially to the face and subsequently for working up lather with the utmost ease and without any necessity for a large supply of water or for any dipping operation.

An important object of the invention is to provide a fountain shaving brush having associated therewith a water reservoir, self-contained means for applying heat to the reservoir for heating the water to a comfortable and proper temperature, together with a self-contained supply of soap in solid or stick form, these various elements being so arranged or disposed relatively to one another as to insure the maximum convenience and saving of time in use, the entire kit being of particular benefit to traveling men and others dwelling or working in places where the usual facilities are not available.

A more specific object of the invention is to provide a device of this character in which the heating feature involves the employment of a solidified alcoholic or other similar fuel, such as that known commercially as "Sterno", this particular substance being preferred as it does not run and will therefore not leak out of the container provided for its reception and storage.

Another object of the invention is to provide a combination device in which the heating unit may be omitted, if desired, and the space normally occupied thereby used to accommodate the stick or cake of soap.

Another object is to provide a device of this character having ventilating openings for admitting air necessary to support combustion of the fuel and equipped with means for closing the openings and sealing the joints to prevent evaporation of the volatile material from the fuel when the device is not in use but is simply being carried about, or for preventing drying out of the cake or stick of soap in the event that the heating unit is omitted and replaced by the soap and the holder therefor.

The invention further contemplates the provision of various details and refinements in the construction whereby efficiency will be insured, it being furthermore a feature that the entire device will have a neat and attractive appearance and be of such dimensions and proportions as not to be clumsy.

An additional object is to provide a kit of this type which will be simple and inexpensive to manufacture, easy to adjust, assemble or disassemble as the case may be, positive in action, efficient and durable in service, and a general improvement in the art.

To the attainment of the foregoing and other objects and advantages, the invention preferably consists in the details of construction and the arrangement and combination of parts to be hereinafter more fully described and claimed, and illustrated in the accompanying drawings in which:

Figure 1 is a side elevation of the complete device in closed position,

Figure 2 is a similar view showing the ventilating openings uncovered and the device extended to permit operation of the heating means,

Figure 3 is a vertical or longitudinal section,

Figure 4 is a cross sectional view taken on the line 4—4 of Figure 2,

Figure 5 is an enlarged detail section taken on the line 5—5 of Figure 1 to show the movable ring retaining means,

Figure 6 is an enlarged fragmentary detail section with the device in closed position, this view illustrating the sealing gasket at the top of the fuel holder and its cooperation with the bottom of the boiler or reservoir,

Figure 7 is a side elevation of the device with the air supply openings closed and with the heating unit removed and replaced by the cake or stick of soap in its holder.

Referring more particularly to the drawings I have shown the device as comprising three main parts indicated as a whole by the numerals 10, 11 and 12, all of which will be described and the relationship explained with particularity. The part 10 may be described briefly as a combined boiler or

reservoir and brush holder and it comprises a metallic shell 13 preferably constricted at one end where it is provided with an interiorly located collar 14 within which is detachably mounted the base portion 15 of a brush 16. In the present instance the detachable connection is shown as consisting of screw threads but it should be distinctly understood that any other quick detachable connection may be provided, the exact detail being immaterial. It is preferable that the base 15 have an outstanding flange 17 overlying the constricted end of the shell or body to provide abutment means for a sealing gasket 18. Intermediate the ends of the shell 13 there is provided a transverse partition 19 defining a chamber 20 thereabove adapted to be filled, partially or entirely, with water to be used for shaving purposes. As it is intended that the brush be of the fountain type, the base thereof is shown as provided with a plurality of holes 21 so that the water within the compartment 20 may feed through the brush when the device is properly tilted from the vertical or upstanding position shown. The diameter of these openings is a detail which may be varied but must necessarily be such as to insure a proper passage of water to the brush.

The water within the compartment or reservoir 20 is intended to be heated by means of a heating unit contained within the part or section 11, and in order to insure rapid heating of the water the partition member 19 is preferably of upwardly convexed or dome shape as indicated with its very center preferably more abruptly curved upwardly as shown at 22. However, this might be varied if found advisable.

The part 11, which as mentioned above contains the heating unit, is simply a metallic shell member substantially cylindrical in form and provided intermediate its ends with a partition 23 above which is located and upon which rests a can or other similar suitable receptacle 24 containing so-called solidified alcohol or its equivalent. This can is preferably of the friction top type, though the top is not shown, so that it may be readily put up for sale as replacements when needed. By making this can of the friction top type it will necessarily have an inturned flange 25, which flange will serve to prevent the running out of any of the fuel, indicated at 26, in the event that any portion of the fuel may be more or less liquid as is frequently the case at the top of a freshly opened can of such material.

The part 11 telescopes within the part 10 and the latter is formed with a circumferential series of openings 27 to permit the insertion of a lighted match for igniting the fuel when the part 11 is pulled down to uncover the openings 27, and to permit the admission of air necessary to support combustion of the fuel. While in some instances it might be omitted, I prefer to provide a ring 28 slidable upon the part 10 and adapted to be moved into or out of obstructing relation to the openings 27. As it might not be advisable to have the fit of this ring so snug that it would remain in a selected position, I may provide catch means for holding it in place. Insofar as any specific means of this type is concerned, it is apparent that various expedients might be resorted to though in actual practice it will probably suffice to form the ring with a number of indentations which will define humps 29 and 30 on the inner surface adapted to engage respectively against the upper and lower edges of certain of the openings 27. The material from which the ring is constructed is intended to be resilient so that when a positive pressure is applied to the ring either longitudinally of the body or rotatably with respect thereto the humps 29 and 30 will ride out of the openings 27 and permit the ring to be slid down into the position shown in Figure 2 to uncover the openings 27. These openings are uncovered only when the device is made ready for use when it is desired to light the fuel and in such case the part 11 is slid down out of obstructing relation to the openings. Ordinarily the parts 10 and 11 may be held closed by a spring catch 11^a on the latter cooperating with a slot or depression 10^a in the former.

It is highly desirable to prevent evaporation of the volatile ingredients in the solid fuel, not only for reasons of economy but also to avoid the odor thereof from permeating clothing or the like in a traveling bag or trunk in which the device may be stowed away while not in use. Clearly, the partition 23 prevents any escape in one direction. To provide sealing means at the top of the part 11, I preferably employ a gasket 31 of fireproof material, such for instance as asbestos, which fits over the top edge of the fuel container 24, the gasket being angular in cross section with its lower edge clamped between the container 24 and the part 11, the upper portion of the gasket extending inwardly toward the center of the device. When the entire device is not in use and the part 11 is shoved tightly into its collapsed relation to the part 10, this gasket 31 will fit snugly between the edge of the container 24 and the partition 19 which constitutes the bottom of the boiler or water reservoir 20.

The part 12 constitutes the closure for the end of the part 11 and is constructed as a holder for a cake or stick of soap 32 which may be of a type already in common use for shaving purposes or which may be specially made but which is intended to be standardized so as to be readily obtainable when replacement is necessary. This part 12 is simply a short cylindrical shell section 33

with a preferably weighted base 34 which may be knurled, milled or otherwise constructed and which may, if desired, be of somewhat greater diameter than the part 11 so as to be readily grasped, and possibly under some circumstances turned. The shell section 33 simply fits telescopically within the section 11 and any desired means may be provided for retaining the soap 32 in place. In the present instance this means is represented as comprising a ferrule 35 having a bayonet slot or threaded connection within the shell section 33 and having prongs 36 biting into the soap. These soap cakes or sticks are intended, preferably, to be put up with the ferrule 35 as a permanent part thereof.

As mentioned above, the part 11 is substantially cylindrical, though not truly so, the preferred construction being that the lower end thereof be expanded slightly so as to have the same internal diameter as the lower or open end of the part 10. The reason for this is that the external diameter of the shell section 33 should be of the same diameter as the inside of the open end of the part 10. By this construction it is clear that the part 12 may be inserted either within the bottom of the part 11 or within the bottom of the part 10. In the latter instance the heating unit or part 11 with the fuel container therein would be discarded. The length of the various parts must necessarily be properly proportioned to permit this interchangeability. If the heating unit be omitted as just mentioned then of course there is no provision for heating the water within the reservoir or compartment 20 and the device then becomes simply a fountain brush and soap kit. The most desirable manner in which to employ the device is of course to make use of all the sections, the alternative arrangement being mentioned simply to bring out the adaptability.

In the use of the device, it is first necessary to either slide or turn the ring 28 to disengage the humps 29 and 30 from within the openings 27, and then move the ring downwardly out of obstructing relation to the openings 27, as shown in Figure 2. The operator then grasps the parts 10 and 11 and separates them to a sufficient extent that the part 11 is at or below the lower edges of the openings 27. The solidified fuel 26 is then exposed and may be easily ignited by inserting a lighted match through one of the openings. Before doing this it is intended that the brush be unscrewed from the collar 14 and the desired quantity of water poured within the compartment or reservoir 20, subsequently to which the brush is replaced. After the fuel has burned a very short time, the length depending upon the quantity and temperature of the water, but ordinarily being only in the neighborhood of a minute or two, the water will be heated to the proper degree to be comfortable on the face and to be suitable for working up a lather. As soon as the heating has been carried out to the desired extent, the operator then simply presses down upon the part 10 so that it will telescope over the part 11, the latter then closing the openings 27. As no air can then reach the burning fuel, the flame dies out almost instantly. The ring 28 may or may not at this time be reengaged over the openings 27. The operator then grasps the device in his hand and rubs the brush over his face. Owing to the provision of the holes or passages 21 the heated water within the compartment or reservoir 20 will flow into and saturate the brush and be transferred thereby on to the face. After the face has been properly wetted, the operator grasps the base 34 of the soap holder and pulls it and the soap as a unit out of the part 11. The soap cake or stick is then rubber over the face until the desired quantity adheres thereto, after which the soap and its holder are reinserted within the part 11. Again using the brush the user works the soap into a lather which of course softens the beard in the well known manner and puts it in condition for shaving.

From the foregoing description and a study of the drawings it will be apparent that I have thus provided a very simply constructed and easily operated and adjusted device which will be of great benefit and convenience and which on account of its compactness and unitary nature will recommend itself particularly where the usual facilities are lacking there being, however, no restriction in this respect as the device is really more convenient than the usual equipment even though of the best. It is believed that the construction, operation and advantages will be readily apparent to one skilled in the art without further explanation.

While I have shown and described the preferred embodiment of the invention, it should be understood that the disclosure is merely an exemplification of the principles involved as the right is reserved to make all such changes in the details of construction as will widen the field of utility and increase the adaptability of the device provided such changes constitute no departure from the spirit of the invention or the scope of the claims hereunto appended.

Having thus described the invention, I claim:

1. In a device of the character described, a reservoir member constituting a handle and carrying a fountain brush, a member telescopically connected with the reservoir member and extensible with respect thereto and containing heating means, and a soap holding member removably mounted within the second named member and constituting a closure therefor.

2. In a device of the character described,

the combination of a reservoir member adapted to contain water and carrying a fountain brush, a second member telescopically connected with the reservoir member and containing a fuel holder, and air admission means adapted to be uncovered when the reservoir member and the second member are moved relatively apart, the second named member normally constituting a closure for said air admission means to prevent evaporation or leakage of the fuel.

3. In a device of the character described, the combination of a reservoir member adapted to contain water and carrying a fountain brush, a second member telescopically connected with the reservoir member and containing a fuel holder, air admission means adapted to be uncovered when the reservoir member and the second member are moved relatively apart, a partition within the second member forming a seat for the fuel holder and defining a compartment, and a third member telescopically engaged within the second member and carrying soap in cake form received within said compartment.

4. In a device of the character described, the combination of a member formed at one end portion to define a water reservoir and carrying a detachably mounted fountain brush communicating with the reservoir, the other end of said member having air admission openings therein, a second member telescopically engaged with the first member and movable to cover or uncover said openings, a fuel holder within said second member, and means carried by one end of the second member at the fuel holder adapted to seat against the bottom of the reservoir to form a seal.

5. In a device of the character described, the combination of a member formed at one end portion to define a water reservoir and carrying a detachably mounted fountain brush communicating with the reservoir, the other end of said member having air admission openings therein, a second member telescopically engaged with the first member and movable to cover or uncover said openings, a fuel holder within said second member, means carried by one end of the second member at the fuel holder adapted to seat against the bottom of the reservoir to form a seal, and a partition within the second member supporting the fuel holder and defining a closure.

6. In a device of the character described, a member formed to provide a water reservoir and carrying a fountain brush communicating therewith, said member having air admission openings therein in non-communicating relation to the reservoir, a second member telescopically engaged with said member, a partition within the second member defining a compartment at the lower end thereof and constituting a seat, a removable fuel holder within the second member resting upon said seat, a soap cake holder telescopically removably engageable within the second member and received in said compartment, and a ring movably mounted on the first member and adapted to cover or uncover said openings.

7. A shaving accessory comprising a member having a transverse partition therein defining a reservoir, a fountain brush mounted on said member and receiving water from said reservoir, said member serving as a handle, said member having air admission openings spaced from said partition and in non-communicating relation to the reservoir, a second member movably connected with said first named member and movable to cover or uncover said openings, a fuel holder mounted within the second named member and occupying a portion of its interior, a closure cap detachably connected with the second named member, and means detachably mounted in said cap for carrying a cake of soap accommodated within the remaining portion of the second named member.

In testimony whereof I affix my signature.

WILLIAM G. FRAZIER.