

FIG. 1

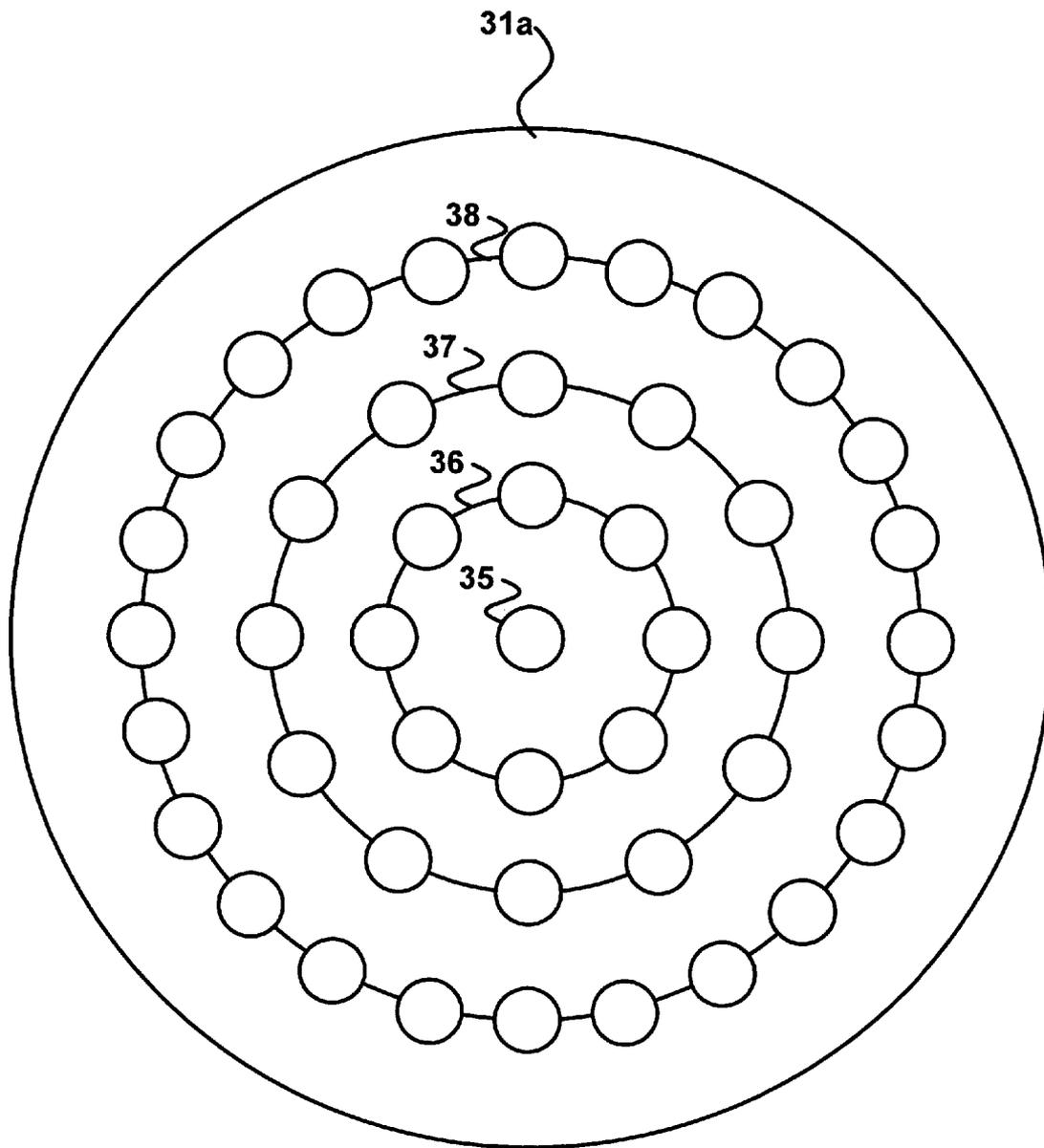


FIG. 2

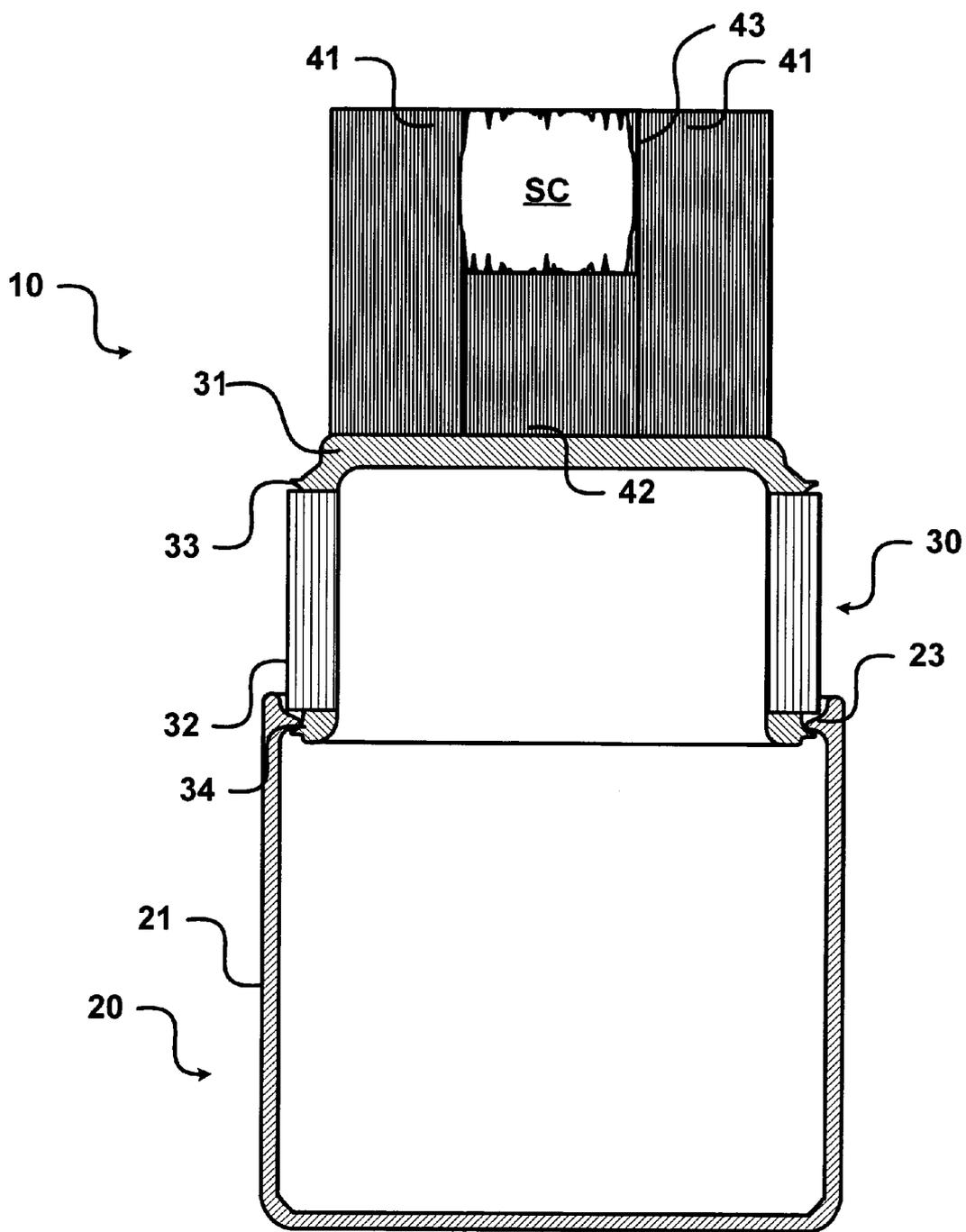


FIG. 3

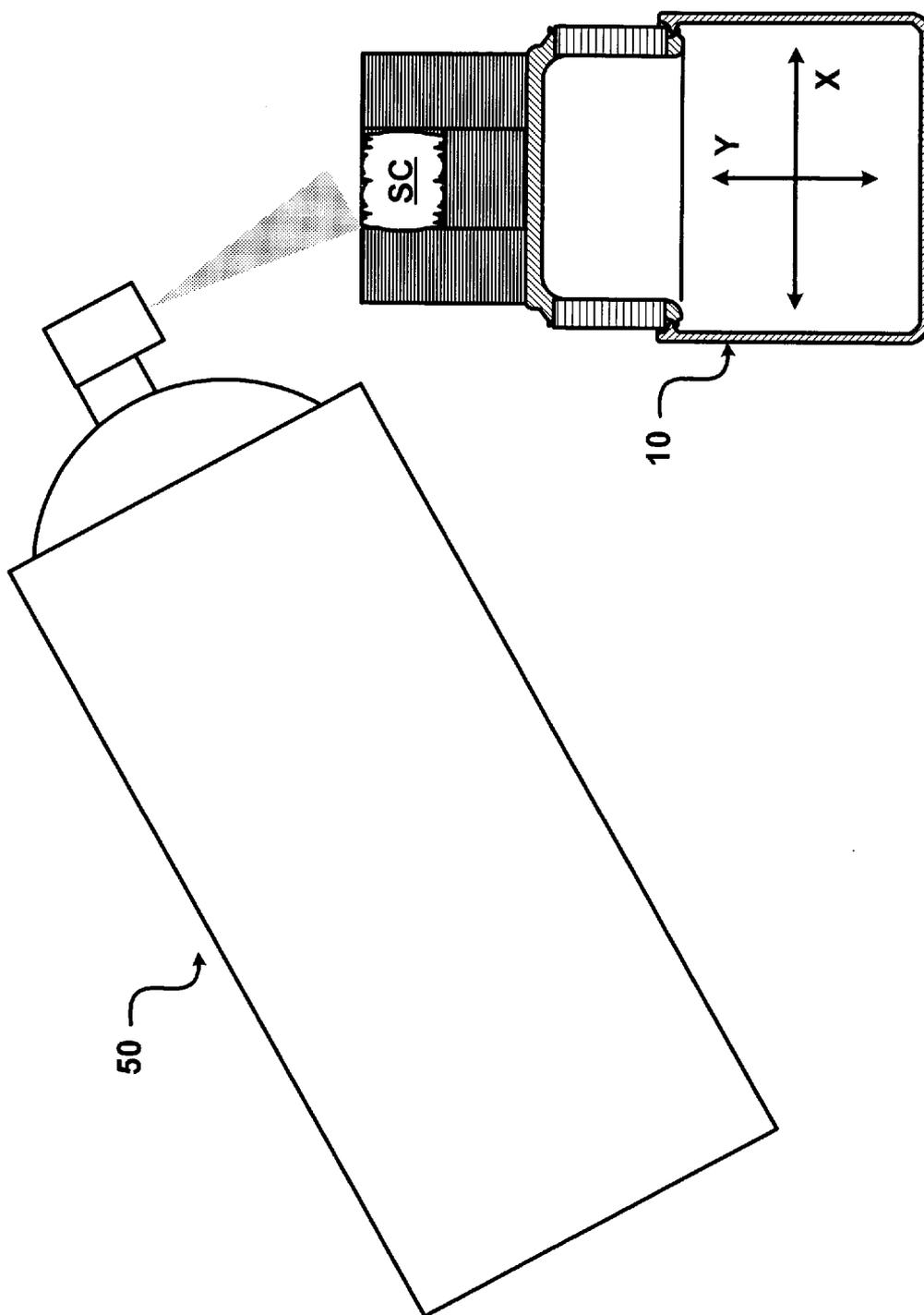
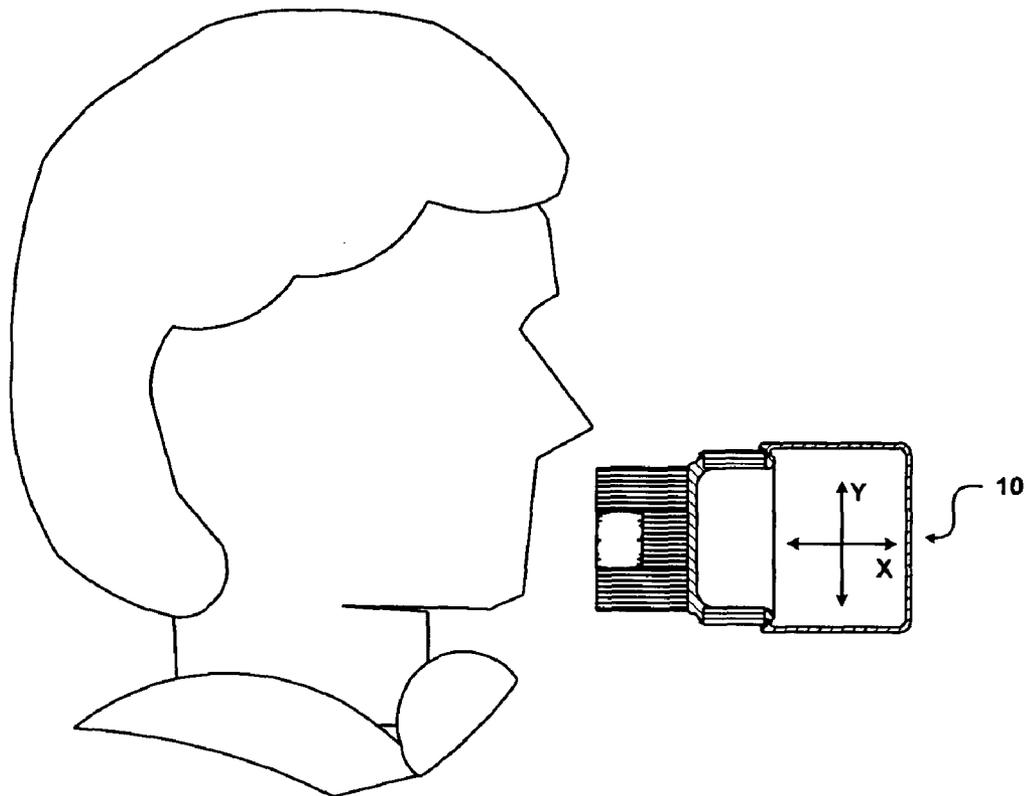


FIG. 4



USER

FIG. 5

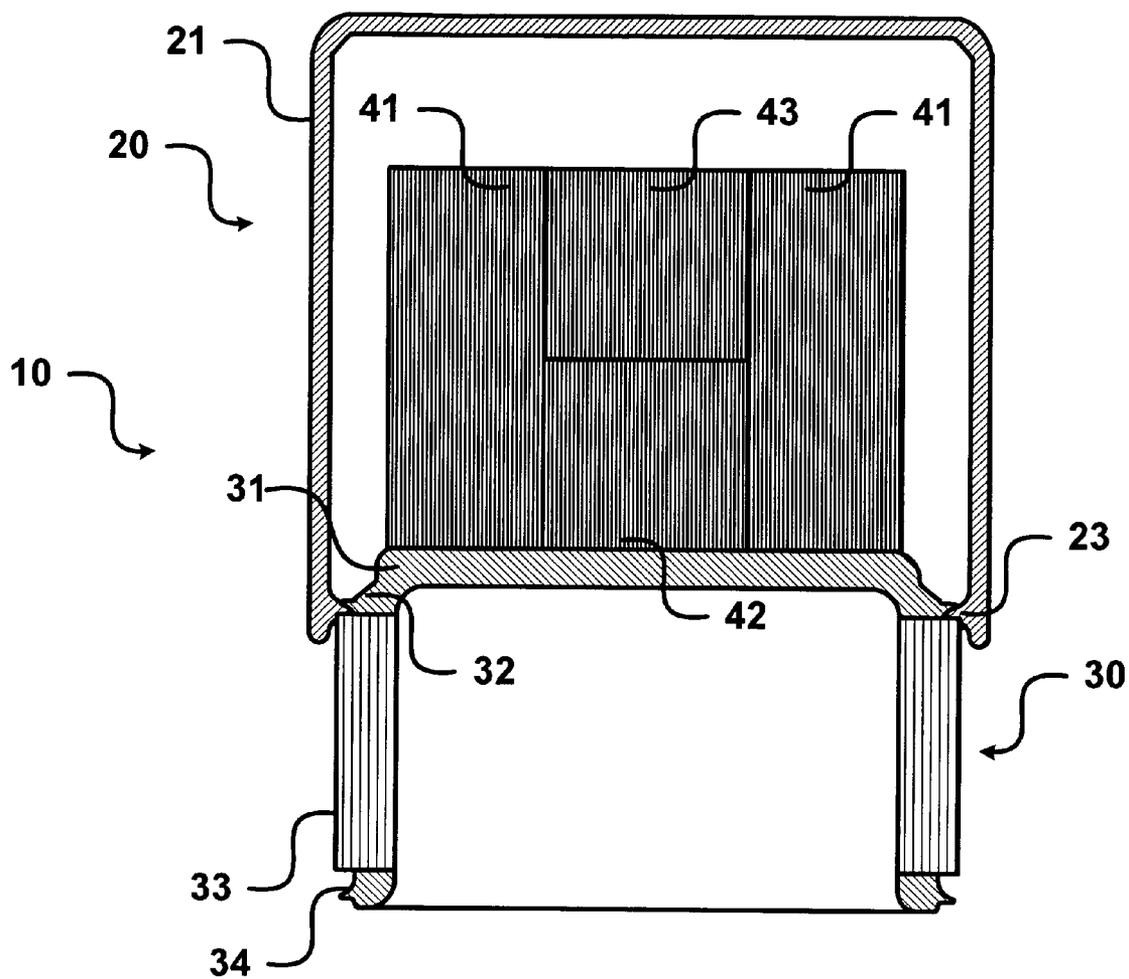


FIG. 6

SHAVING BRUSH HAVING A CAVITY FOR SHAVING CREAM

FIELD OF THE INVENTION

[0001] In general, the invention relates to shaving brushes. More specifically, the invention relates to a shaving brush incorporating a technique for accepting shaving creams (i.e., shaving gels, shaving foams, shaving soaps, etc.) within the shaving brush.

BACKGROUND OF THE INVENTION

[0002] Shaving creams for both males and females are known in the art for lubricating and softening body hair (e.g., facial hair, underarm hair, hair on legs, etc.) to enable a smooth shave of the body hair by a razor blade, a knife blade, or any other type of blade. Shaving brushes as known in the art are used to lather and apply a shaving cream onto an area of the body in preparation for a comfortable shave of that particular body area. While known shaving brushes adequately lather and apply a shaving cream onto an area of the body, there is a need to improve upon current shaving brushes.

SUMMARY OF THE INVENTION

[0003] The present invention provides an improved shaving brush having a cavity for accepting a shaving cream in preparation for applying the shaving cream to a particular area of the body.

[0004] One form of the present invention is a shaving brush comprising a bristle base and a plurality of brush bristles. The brush bristles extend from a surface of the bristle base, wherein a height of a first set of brush bristles is designed to be greater than a height of a second set of brush bristles to at least partially define a cavity for accepting a shaving cream.

[0005] In a further form of the present invention, the shaving brush includes a cap operable to be adjoined to the bristle base to define a shaving handle assembly and a storage case assembly. In the shaving handle assembly, the cavity of the brush bristles is exposed to allow an acceptance of the shaving cream within the cavity, and the bristle base and the cap serve as a handle. In the storage case assembly, the brush bristles are inserted through an opening of the cap, and the bristle base and the cap serve as a storage case.

[0006] The foregoing forms and other forms, features and advantages of the invention will become further apparent from the following detailed description of the presently preferred embodiment, read in conjunction with the accompanying drawings. The detailed description and drawings are merely illustrative of the invention rather than limiting, the scope of the invention being defined by the appended claims and equivalents thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 illustrates a cross-sectional side view of one embodiment of an unassembled shaving brush in accordance with the present invention;

[0008] FIG. 2 illustrates a top view of one embodiment of a brush bristle arrangement in accordance with the present invention;

[0009] FIG. 3 illustrates a cross-sectional side view of a shaving handle assembly of the shaving brush illustrated in FIG. 1;

[0010] FIGS. 4 and 5 illustrate an exemplary operation of the shaving handle assembly of the shaving brush illustrated in FIG. 1; and

[0011] FIG. 6 illustrates a cross-sectional side view of a storage case assembly of the shaving brush illustrated in FIG. 1.

[0012] The drawings illustrated in FIGS. 1-6 are not drawn to scale, but to facilitate an understanding of various principles of the present invention.

DETAILED DESCRIPTION OF THE PRESENTLY PREFERRED EMBODIMENT

[0013] FIG. 1 illustrates a shaving brush 10 of the present invention, which employs a cap 20, a bristle base 30, and brush bristles 40.

[0014] Cap 20 includes a hollow cylindrical body 21 having an opening 22. An annular rib 23 extends along an inner surface of body 21 adjacent opening 22. Cap 20 is preferably made from plastic, but can be made from other suitable material such as, for example, wood, metal or rubber. In practice, the dimensions and shape of cap 20 are dependent upon commercial implementation(s) of shaving brush 10, and are therefore without limit.

[0015] Bristle base 30 includes a hollow cylindrical body 31 having a serrated ribs 32 extending along an outer surface of body 31. An annular rib 33 extends along the outer surface of body 31 adjacent a top end of ribs 32. An annular rib 34 extends along the outer surface of body 31 adjacent a bottom end of ribs 32. Bristle base 30 is preferably made from plastic, but can be made from other suitable material such as, for example, wood, metal or rubber. In practice, the dimensions and shape of bristle base 30 are also dependent upon commercial implementation(s) of shaving brush 10, and are therefore without limit.

[0016] Brush bristles 40 upwardly extend from a top surface of body 31. Brush bristles 40 include an outer layer of brush bristles 41 and an inner core of brush bristles 42. A height h_1 of brush bristles 41 is designed to be greater than a height h_2 of brush bristles 42 to thereby define a cylindrical cavity 43 above brush bristles 42 and extending along an inner diameter of brush bristles 41. Preferably, cavity 43 is formed in accordance with the following equation [1]

$$h_1 = 2(h_2) \tag{1}$$

[0017] Brush bristles 40 are preferably made from nylon or animal's hair (e.g., a boar's hair), but can be made from other suitable material. In practice, the dimensions and shape of brush bristles 40 are also dependent upon commercial implementation(s) of shaving brush 10, and are therefore without limit.

[0018] FIG. 2 illustrates one arrangement of bristles holes on a top surface 31a of body 31 for attaching brush bristles 40 to bristle base 30. The arrangement includes a center hole 35 and a bristle ring 36 of eight (8) holes for conventionally attaching brush bristles 42 (FIG. 1) to body 31. The arrangement further includes a bristle ring 37 of thirteen (13) holes and a bristle ring 38 of twenty-five (25) holes for conventionally attaching brush bristles 41 (FIG. 1) to body 31. In

practice, the number of bristle rings and the number of holes per each bristle ring are also dependent upon commercial implementation(s) of shaving brush 10, and are therefore without limit.

[0019] In one alternative embodiment, center hole 35 and bristle ring 38 are used for conventionally attaching brush bristles 41 to body 31, and bristle rings 36 and 37 are used for conventionally attaching brush bristles 42 to body 31. The resulting cavity would have an annular shape as compared to the cylindrical shape of cavity 43 (FIG. 1). In practice, the number of cavities and the shape of each cavity are also dependent upon commercial implementation(s) of shaving brush 10, and are therefore without limit.

[0020] FIG. 3 illustrates a shaving handle assembly of shaving brush 10, which is defined by an adjoining of cap 20 to a bottom end of bristle base 30. In this assembly, cavity 43 is exposed to a user of shaving brush 10 whereby cavity 43 can be filled with shaving cream ("SC") as shown, and serrated ribs 32 and body 21 serve as a shaving handle for rotating shaving brush 10 in a circular or swirling motion during a lathering of the shaving cream contained with cavity 43 onto an area of a body (e.g., a beard). Additionally, serrated ribs 32 provide a gripping surface of the shaving brush 10 during the lathering of the shaving cream onto the area of the body. Concurrently or alternatively, cap 20 can include one or more serrated ribs extending along an outer surface of body 21.

[0021] FIGS. 4 and 5 illustrate an exemplary operation of the shaving handle assembly of shaving brush 10. First, as illustrated in FIG. 4, shaving brush 10 is placed in a loading position to accept shaving cream within cavity 43 via an aerosol can 50. In this loading position, a longitudinal axis of cavity 43 is vertical as indicated by the y-axis. Second, as illustrated in FIG. 5, shaving brush 10 is placed in a lathering position in order to apply the shaving cream within cavity 43 to the face of the user. In this lathering position, a longitudinal axis of cavity 43 is horizontal as indicated by the x-axis.

[0022] The exemplary operation of the shaving brush assembly of shaving brush 10 as illustrated in FIGS. 4 and 5 highlights the retention of shaving cream SC within cavity 43 despite cavity 43 being horizontal, particularly when cavity 43 is formed in accordance with equation [1] herein. This is one unique advantage of the present invention over the known shaving brushes.

[0023] In an alternative embodiment, bristle base 30 can be exclusively designed to serve as the handle whereby cap 20 is set-aside during a loading of shaving cream SC within cavity 43 and the subsequent application of the shaving cream SC onto a user of a shaving brush of the present invention.

[0024] In another alternative embodiment, a designed handle can be adjoined to bristle base 30 whereby cap 20 is again set-aside during a loading of shaving cream SC within cavity 43 and the subsequent application of the shaving cream SC onto a user of a shaving brush of the present invention.

[0025] FIG. 6 illustrates a storage case assembly of shaving brush 10, which is defined by an adjoining of cap 20 to a top end of brush base 30. In this assembly, brush bristles

40 are inserted within the opening 22 of body 21, and body 21 and body 31 serve as storage case for brush bristles 40.

[0026] Referring to FIGS. 3 and 6, the adjoining of cap 20 to the bottom end of brush base 30 is accomplished by a conventional snapping of rib 23 over rib 34, and the adjoining of cap 20 to the top end of brush base 30 is accomplished by a conventional snapping of rib 23 over rib 33. Alternatively, other techniques can be employed to adjoin cap 20 to either end of brush base 30. In one alternative embodiment, conventional screwing threads in lieu ribs 23, 33 and 34 extend along the inner surface of body 21 and the outer surface of body 31 whereby cap 20 can be screwed onto the top end or the bottom end of body 31. In another alternative embodiment, conventional prongs and holes in lieu of ribs 23, 33 and 34 are formed on the inner surface of body 21 and the outer surface of body 31, respectively, whereby cap 21 can be snapped onto the top end or the bottom end of body 31. In practice, the actual technique implemented for adjoining cap 20 to brush base 30 in the shaving handle assembly and the storage case assembly is dependent upon the commercial implementation(s) of shaving brush 10, and is therefore without limit.

[0027] The present invention may be embodied in other specific forms without departing from its essential characteristics. The described embodiments are to be considered in all respects only as illustrative and not restrictive. The scope of the invention is, therefore, indicated by the appended claims rather than by the foregoing description. All changes that come within the meaning and range of equivalency of the claims are to be embraced within their scope.

I claim:

1. A shaving brush, comprising:

- a bristle base;
- a first set of brush bristles extending from said bristle base; and
- a second set of brush bristles extending from said bristle base,

wherein a height of said first set of brush bristles is designed to be greater than a height of said second set of bristles to at least partially define a cavity for accepting a shaving cream.

2. The shaving brush of claim 1,

wherein said first set of brush bristles form an outer layer of brush bristles; and

wherein said second set of brush bristles form an inner core of brush bristles.

3. The shaving brush of claim 1, wherein the height of the first set of brush bristles is at least twice the height of said second set of brush bristles.

4. The shaving brush of claim 1, wherein said bristle base includes means for attaching said first set of bristle brushes and said second set of bristle brushes to said bristle base.

5. The shaving brush of claim 1, further comprising:

- a cap operable to be adjoined to said bristle base to define a shaving handle assembly for exposing said cavity to a user of said shaving brush,

wherein said bristle base and said cap serve as a shaving handle.

6. The shaving brush of claim 5, wherein said bristle base and said cap includes means for adjoining said cap to said bristle base.

7. The shaving brush of claim 5, wherein at least one of said bristle base and said cap includes means for gripping said shaving brush.

8. The shaving brush of claim 1, further comprising:

a cap having an opening operable to be adjoined to said bristle base to define a storage case assembly having said first set of brush bristles and said second set of brush bristles being inserted through said opening of said cap,

wherein said bristle base and said cap serve as a storage case.

9. The shaving brush of claim 8, wherein said bristle base and said cap includes means for adjoining said cap to said bristle base.

10. The shaving brush of claim 8, wherein at least one of said bristle base and said cap includes means for gripping said shaving brush.

11. A shaving brush, comprising:

a bristle base;

a first set of brush bristles extending from said bristle base; and

a second set of brush bristles extending from said bristle base,

wherein a height of said first set of brush bristles is designed to be greater than a height of said second set of bristles to at least partially define a cavity for accepting a shaving cream; and

a cap having an opening operable to be adjoined to said bristle base to define one of a shaving handle assembly and a storage case assembly,

wherein the shaving handle assembly for exposing said cavity to a user of said shaving brush, and said bristle base and said cap serve as a shaving handle, and

wherein the storage case assembly involves an insertion of said first set of brush bristles and said second set of brush bristles through said opening into said cap, and said bristle base and said cap serve as a storage case.

12. The shaving brush of claim 11,

wherein said first set of brush bristles form an outer layer of brush bristles; and

wherein said second set of brush bristles form an inner core of brush bristles.

13. The shaving brush of claim 11, wherein the height of the first set of brush bristles is at least twice the height of said second set of brush bristles.

14. The shaving brush of claim 11, wherein said bristle base includes means for attaching said first set of bristle brushes and said second set of bristle brushes to said bristle base.

15. The shaving brush of claim 11, wherein said bristle base and said cap includes means for adjoining said cap to said bristle base.

16. The shaving brush of claim 11, wherein at least one of said bristle base and said cap includes means for gripping said shaving brush.

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