

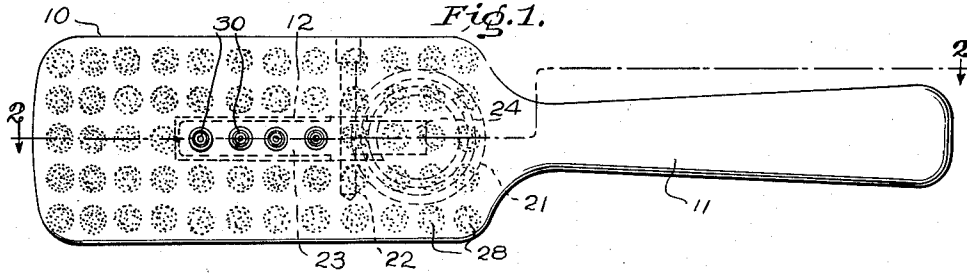
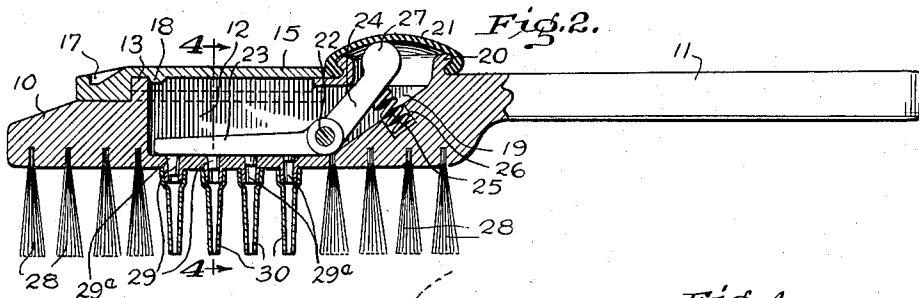
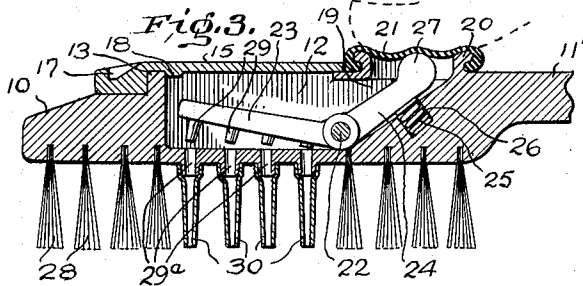
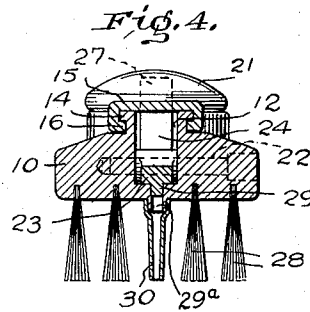
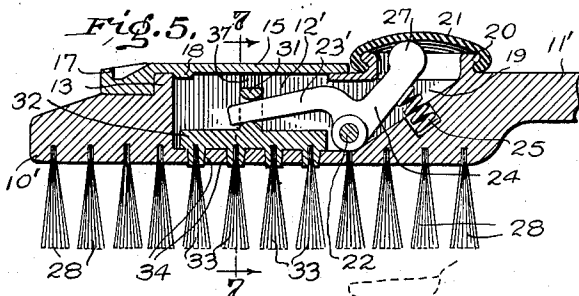
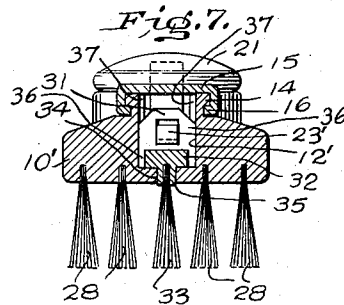
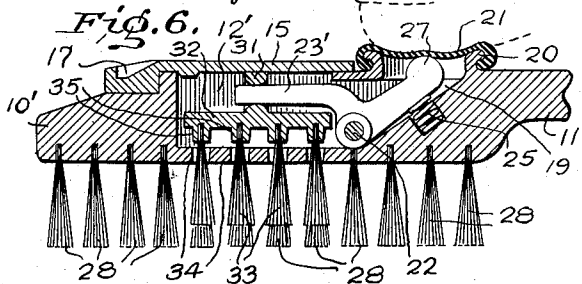
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DISPENSER TYPE HAIR BRUSH

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2,952,026

DISPENSER TYPE HAIR BRUSH

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1 Claim. (Cl. 15-131)

The present invention relates to a dispenser type hair brush and it consists in the combinations, constructions and arrangements of parts herein described and claimed.

Generally there is provided a dispenser type hair brush having a hollow body provided with an integrally formed handle and a plurality of tufts or sets of bristles extending from the bottom face thereof. The top of the body is provided with a sliding cover having a novel latch for maintaining the same in closed position. There is also provided a separate opening to the hollow body which is provided with a flexible closure cap. Within the hollow portion of the body there is mounted for upward movement a member having means for dispensing liquid from the hollow body through the bottom of such body. The member may be one arm of a bell crank lever pivotally mounted within the hollow portion of the body and which lever has the upper end of its other arm bearing against the underside of the flexible cap. A compression spring normally urges this other arm to its uppermost position. Pressure downwardly with the thumb or a finger of the user upon the cap will act to lift the movable member to thereby dispense liquid from the hollow body to the bristle portion of the device. Two novel liquid conducting means for accomplishing this are shown in the accompanying description.

It is accordingly an object of the invention to provide a novel dispenser type hair brush having novel means for dispensing liquids to the bristle portion of the same.

Another object of the invention is to provide a device of the character set forth which is simple in construction, inexpensive to manufacture and yet effective and efficient in use.

Still another object of the invention is to provide, in a device of the character set forth, novel valve means forming a part of the invention.

A further object of the invention is to provide, in a device of the character set forth, novel manual operating means for the aforesaid valve means.

Other and further objects of the invention will become apparent from a reading of the following specification taken in conjunction with the drawings, in which:

Figure 1 is a bottom plan view of an embodiment of the invention,

Figure 2 is a sectional view taken substantially along line 2-2 of Figure 1,

Figure 3 is a fragmentary view similar to Figure 2 but showing certain of the elements therein moved to an advanced position,

Figure 4 is a sectional view taken along line 4-4 of Figure 2,

Figure 5 is a view similar to Figure 2 but illustrating a modified form of fountain hair brush,

Figure 6 is a view similar to Figure 5 but showing the parts advanced from their position in Figure 5, and

Figure 7 is a sectional view taken along line 7-7 of Figure 5.

Referring more particularly to the drawing, there is

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shown therein a dispenser type hair brush having a body 10 provided with an integrally formed handle 11. Within the body 10 there is provided a hollow portion 12 having an upstanding lip 13 at its forward end and a pair of laterally extending guide members 14 along each side of the upper edge thereof. A cap 15 of resilient material is longitudinally slidable upon the guide members 14 by means of a pair of intumed flanges 16. The forward end of the cover 15 is provided with a finger opening 17 and inwardly of the lip 13 the cover 15 is provided with a dependent integrally formed transverse ridge 18 which acts to latch the cover 15 in position when the same is moved to its fully closed position as shown in Figures 2 to 6, inclusive. A passageway 19 extends from the rearward portion of the top of the body 10 downwardly and forwardly to communicate with the opening 12, and an upstanding circular lip 20 is formed in the body 10 at the periphery of the opening 19.

A flexible cap 21 is secured over the lip 20 in any conventional manner and is normally biased to an upwardly extended position as shown in Figures 2 and 5, for example.

A bell crank is pivotally mounted upon a pin 22 located in the rearward portion of the opening 12 and is provided with a forwardly extending arm 23 and an upwardly and rearwardly extending arm 24, the underside of the latter arm being biased upwardly by a compression spring 25 which abuts the underside thereof and whose lower end is mounted in a recess 26 extending from the passageway 19. The upper end of the arm 24 is provided with a rounded head 27 which abuts against the upper side of the cap 21.

The underside of the body 10 is provided with a plurality of tufts of bristles 28 and in that form of the invention illustrated in Figures 1 to 4, inclusive, the forwardly extending arm 23 is provided with a plurality of valve plugs 29 arranged in a row upon its under side. The plugs 29 are progressively longer toward the forward end of the arm 23 and each is adapted to normally engage a valve seat in a liquid dispensing opening 29^a through the underside of the body and thereby close the upper end of a hollow tubular liquid conducting element 30. The liquid conducting elements 30 are preferably formed of yieldable material such as rubber or the like and extend from the body 10 a distance substantially equal to that of the tufts of bristles 28. The elements 30 are so positioned that they are surrounded by and take the place of tufts of bristles in the normal arrangement of bristles upon the bottom of the body 10.

In the operation of this form of the invention, it will be apparent that the hollow portion 12 may be filled with liquid such as hair oil, tints, dyes, dandruff compounds, etc. after which the cover 15 may be moved to a closed position such as shown in Figure 2 whereupon the member 18 will snap over the lip 13 and act to maintain the cover 15 in position. The liquid now in the hollow portion 12 will be kept therein by the valve plugs 29 engaging the valve seats but, when it is desired to dispense a portion of such liquid through the liquid conducting elements 30 while using the brush, it is only necessary to press a finger or thumb upon the flexible cap 21 which will cause a downward movement of the arm 24 and a corresponding upward movement of the arm 23 thereby opening the valves and allowing a portion of the liquid to pass through the liquid conducting elements 30. It will be apparent that the downward pressure upon the cap 21 will also assist in moving the liquid through the elements 30. When pressure is removed from the cap 21, the spring 25 will cause a return of the bell crank to its normal position shown in Figure 2 thus cutting off the supply of liquids to the elements 30.

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In that form illustrated in Figures 5 to 7, inclusive, the arm 23' extends through an eye 31 formed upon the upper side of a vertical slidable valve block 32 which is provided with a series of other spaced tufts of bristles 33 which take the place of the normal tufts of bristles 28 and which extend from valve plugs 35 through a series of liquid dispensing openings 34 in the underside of the body 10' which openings 34 communicate with the hollow portion 12'. The block 32 is guided in its vertical slidable movement by vertically extending ribs 36 on opposite sides thereof engaging into vertical guide slots 37 in the opposite side walls of the hollow portion 12'.

The operation of this form is similar to that above described with the exception that the tufts 33 are mounted in valve plugs 35 formed on the underside of the block 32 and extend through the openings 34 when the valves are open. Thus it can be seen that the tufts of bristles 33 will conduct the liquid dispensed through the openings 34 to the free end portions of said tufts of bristles. Downward pressure upon the cap will, of course, partially open the openings 34 since the valve members 35 will be lifted therefrom and release of pressure upon the cap 21 will cause a return of the valve members 35 into the openings 34 as shown, for example, in Figures 5 and 7.

While there is herein shown in Figures 1 through 4 and described a preferred embodiment of the invention it will be readily apparent to those skilled in the art that many minor modifications may be made without departing from the spirit of the invention or the scope of the appended claim.

What is claimed is:

A dispenser type hair brush comprising a hollow body

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for containing a liquid to be dispensed, a plurality of tufts of bristles affixed to the bottom of said body and extending a spaced distance therefrom, said body having a plurality of liquid dispensing openings extending through its bottom and each provided with a valve seat, a liquid conducting element arranged at each of the openings in said body and extending in the same general direction and substantially the same spaced distance away from said body as said tufts of bristles, a manually movable member mounted in said hollow body above all of the liquid dispensing openings, and a plurality of valve plugs on said movable member and each engageable with a separate valve seat, said liquid dispensing openings being arranged in at least one row, said movable member being in the form of a lever pivoted at one end of said row, said valve plugs being progressively longer in accordance with their distances from the pivotal point of said lever so as to control a like flow of liquid through each of said liquid dispensing openings.

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