July 14, 1953 M. O. DECKER 2,645,231

FOUNTAIN COMB

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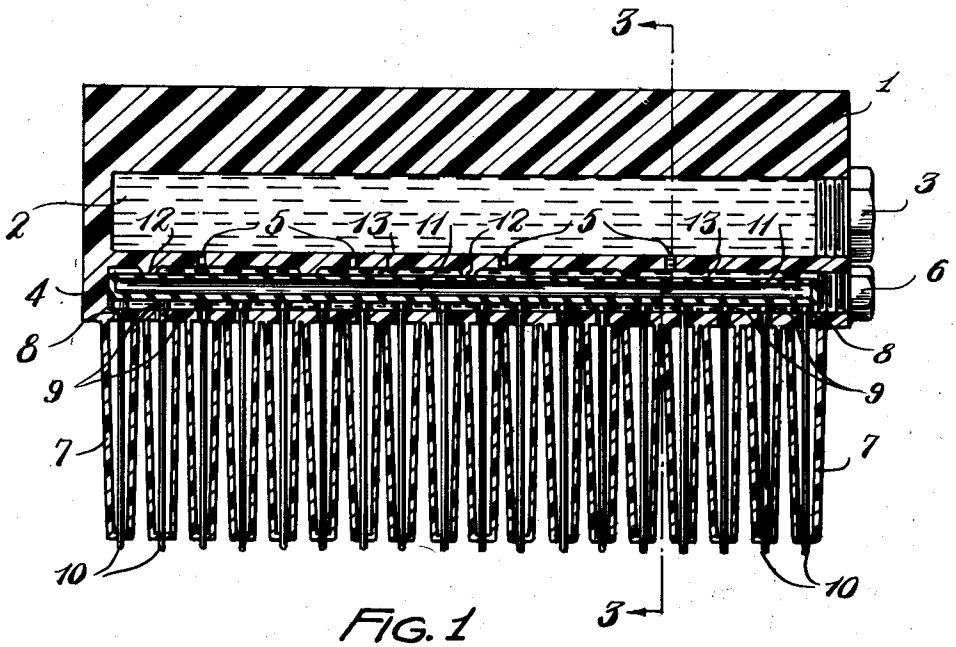


FIG. 1

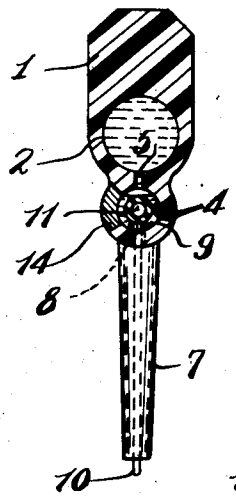


FIG. 3

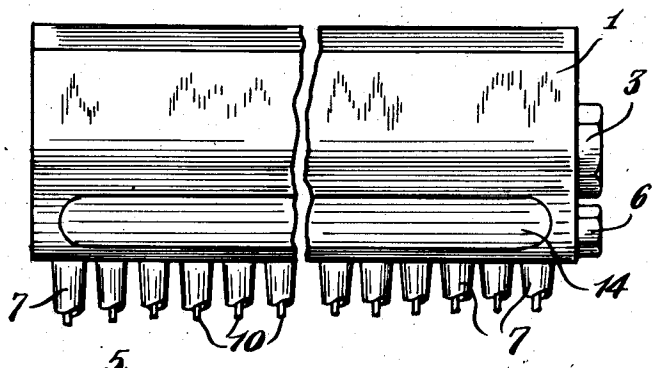


FIG. 2

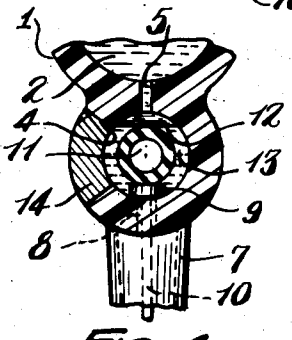


FIG. 4

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FOUNTAIN COMB

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5 Claims. (Cl. 132—13)

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This invention relates to a fountain comb and is especially adapted for the purpose of supplying lanolin or other liquid to the scalp.

The object of my present invention is to provide such a device that may be actuated automatically upon contact of the teeth of the comb with the head of the user, under suitable pressure, so as to thereby feed a suitable quantity of the liquid directly to the scalp.

Another object is to devise such a comb that is of simple construction and may be manufactured and sold at a popular price.

Other objects will appear from the following description when considered together with the accompanying drawing.

Fig. 1 is a longitudinal sectional view of my present device;

Fig. 2 is a side elevation thereof, partly broken away;

Fig. 3 is a view taken on line 3—3 of Fig. 1; and

Fig. 4 is an enlarged view of a part of Fig. 3.

It is to be understood that the present form of disclosure is merely for the purpose of illustration and that there might be various modifications thereof without departing from the spirit of my invention as herein set forth and claimed.

Referring now to the accompanying drawing in detail, the body 1 of plastic or other suitable material is provided with a reservoir 2 for the lanolin in liquid form, or other liquid, this reservoir being closed by the readily removable screw closure 3 at the one end thereof. The body 1 has formed also as an integral part thereof the chamber 4 that has communication with the reservoir 2 through the restricted openings 5 so as to permit feeding of the lanolin or other liquid from the reservoir to the chamber 4. The chamber 4 may be closed by the readily removable closure 6 that is screw-threaded.

The lower side of the body 1 has extending downwardly therefrom the integrally formed teeth 7 which are hollow and each of which has an opening 8 at the upper end thereof for communication with the chamber 4 and has a valve member 9 with its stem 10 extending therethrough in spaced relation thereto so as to permit flow of the lanolin or other liquid. The valve 9 in each instance is adapted to close the corresponding opening 8; and all of the valves 9 are adapted to be normally closed and held closed by the tubular resilient member 11 of rubber or rubber-like material which may have both ends closed. The member 11 is located within the chamber 4 and is adapted to have bearing engagement against the projections 12 on the inner wall of the chamber 4 at points between the openings 5 so as to provide the spaces 13 between the tubular member 11 and the upper inside surface of the chamber 4 for a purpose to be explained. The engagement of the tubular member 11 with the valves 9 will afford spaces also between the member 11 and the inside wall of the chamber 4 at the points between the valves 9, as illustrated in the present drawing. In fact, as indicated, there is space between the member 11 and the wall of the chamber 4 entirely thereabout except for its points of engagement with the projections 12 and the valves 9. This combined space between the member 11 and the wall of the chamber 4 will serve to receive a suitable quantity of the lanolin or other liquid from the reservoir 2 preparatory to its being fed through the valve openings in the manner to be explained.

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The integrally formed valve members 9 and 10 may be made of nylon or other such material that will afford suitable resilience to permit them to be placed in operative position by insertion through the opening in the side of the chamber 4 that may then be closed by the cover 14 which is then sealed in such position by means of a suitable cement about the edges thereof.

With a supply of lanolin or other liquid in the reservoir and upon contact of the ends of the valve stems 10 with proper pressure against the head of the user, the valves 9 may be opened against the tension of the tubular member 11, whereupon some of the liquid will flow out through the hollow teeth 7 from the chamber 4. By placing the ends of the stems 10 in direct engagement with the scalp, the liquid may be supplied in a direct manner to the scalp and hence to the roots of the hair without having to apply it to all of the hair. At the same time, the resilient member 11 will be compressed upwardly against the openings 5 so as to temporarily close the same. Then, upon release of the pressure of the valve stems 10 from engagement with the head of the user, the valves 9 will be automatically closed by action of the resilient member 11; and the downward expansive action of the member 11 will at the same time uncover the openings 5 and thus serve to draw some of the liquid from the reservoir 2 into the chamber 4 to replace that which has just been discharged through the openings 8 and to be ready for delivery out through the openings 8 and the hollow teeth 7 to the scalp when next applied to the head of the user.

Thus the resilient member 11 performs several functions. While it normally tends to hold closed the valves 9, it also permits the valves to be opened against the tension of the member

11 which will then automatically close the same. Also, the member 11 by its compressive and expansive actions in turn, serves as a means of permitting flow of the liquid thereabout and of drawing a suitable quantity of the liquid from the reservoir 2 through the openings 5 into the chamber 4 preparatory to being fed therefrom through the valve openings 8 and down through the hollow teeth 7 and out along the stems 10 which have suitable clearance in the teeth 7 for this purpose, including the point of exit therefrom in each instance. Furthermore, the member 11 may serve as a cushioning means that will automatically compensate for any irregularities in the surface of the head of the user.

It is to be understood that, with my form and arrangement of the reservoir 2, chamber 4, openings 5 and 8, as well as the arrangement of the tubular member 11 within the chamber 4 and the spaces provided thereabout, the manner of operation of the valve stems 10 and the valves 9 carried thereby, and the clearance about each stem 10 in the opening at the lower end of each hollow tooth 7, there may be sufficient means of air communication to permit flow of the lanolin or other liquid in the manner herein contemplated. Also, the lanolin or other liquid may be of such viscosity as to permit flow of the same in the manner as herein provided but without danger of accidental escape of the same past the valves when in closed position.

It is believed that the practical advantages of this invention will be apparent to those who are familiar with the art to which it relates.

What I claim is:

1. A fountain comb comprising a body having a reservoir for a liquid and having a chamber therebelow in communication therewith so as to receive liquid therefrom said body having hollow teeth extending downwardly from said chamber and having individual openings at the upper ends thereof to permit flow of the liquid from said chamber, a valve member extending through each of said hollow teeth and in spaced relation thereto and adapted to control the flow of the liquid through the opening from said chamber, and resilient means within said chamber for normally holding said valve members in closed position, and said valve members each extending normally beyond the outlet end of its hollow tooth and being adapted to be opened by engagement of its outer end with the head of the user and against the tension of said resilient means.

2. A fountain comb comprising a body having a reservoir for a liquid and having a chamber therebelow in communication therewith so as to receive liquid therefrom, said body having hollow teeth extending downwardly from said chamber and having individual openings at the upper ends thereof to permit flow of the liquid from said chamber, a valve member extending through each of said hollow teeth and in spaced relation thereto and adapted to control the flow of the liquid through the opening from said chamber, a resilient rubber-like means within said chamber and normally holding said valve members in position closing said openings, and said valve members each extending normally beyond the outlet end of its hollow tooth and being adapted to be opened by engagement of its outer end with the head of the user and against the tension of said rubber-like means.

3. A fountain comb comprising a body having a reservoir for a liquid and having a chamber therebelow in communication therewith so as to receive liquid therefrom, said body having hollow teeth extending downwardly from said chamber and having individual openings at the upper ends thereof to permit flow of the liquid from said chamber, a valve member extending through each of said hollow teeth and in spaced relation thereto and adapted to control the flow of the liquid through the opening from said chamber, and a cylindrical resilient rubber-like member having slight clearance within said chamber and having engagement with said valve members so as to normally hold the same in closed position, and said valve members each extending normally beyond the outlet end of its hollow tooth and being adapted to be opened by engagement of its outer end with the head of the user and against the tension of said rubber-like member.

4. A fountain comb comprising a body having a reservoir for a liquid and having an integrally formed chamber therebelow in communication therewith so as to receive liquid therefrom, said body having integrally formed hollow teeth extending downwardly from said chamber and having individual openings at the upper ends thereof to permit flow of the liquid from said chamber, a valve member extending through each of said hollow teeth and in spaced relation thereto and adapted to control the flow of the liquid through the opening from said chamber, and a cylindrical resilient rubber-like member having slight clearance within said chamber and having engagement with said valve members so as to hold the same normally in closed position, and said valve members each extending normally beyond the outlet end of its hollow tooth and being adapted to be opened by engagement of its outer end with the head of the user and against the tension of said rubber-like member.

5. A fountain comb comprising a body having a reservoir for a liquid and having an integrally formed chamber therebelow with means of restricted communication therewith so as to receive liquid therefrom, said body having integrally formed hollow teeth extending downwardly from said chamber and having individual openings at the upper ends thereof to permit flow of the liquid from said chamber, a valve member extending through each of said hollow teeth and in spaced relation thereto and adapted to control the flow of the liquid through the corresponding opening from said chamber, and a cylindrical compressible and resilient rubber-like member normally having slight clearance with respect to said means of communication with said reservoir and having engagement with said valve members so as to hold the same normally in closed position, and said valve members each extending normally beyond the outlet end of its hollow tooth and being adapted to be opened by engagement of its outer end with the head of the user and to compress said rubber-like member against said means of communication with said reservoir preparatory to its withdrawing liquid from said reservoir upon release of said rubber-like member.

MOSES O. DECKER.

References Cited in the file of this patent

UNITED STATES PATENTS

Number	Name	Date
665,608	Kotz	Jan. 8, 1901
790,857	Taaffe et al.	May 23, 1905
1,664,168	Harris	Mar. 27, 1928
1,704,959	Ames	Mar. 12, 1929