

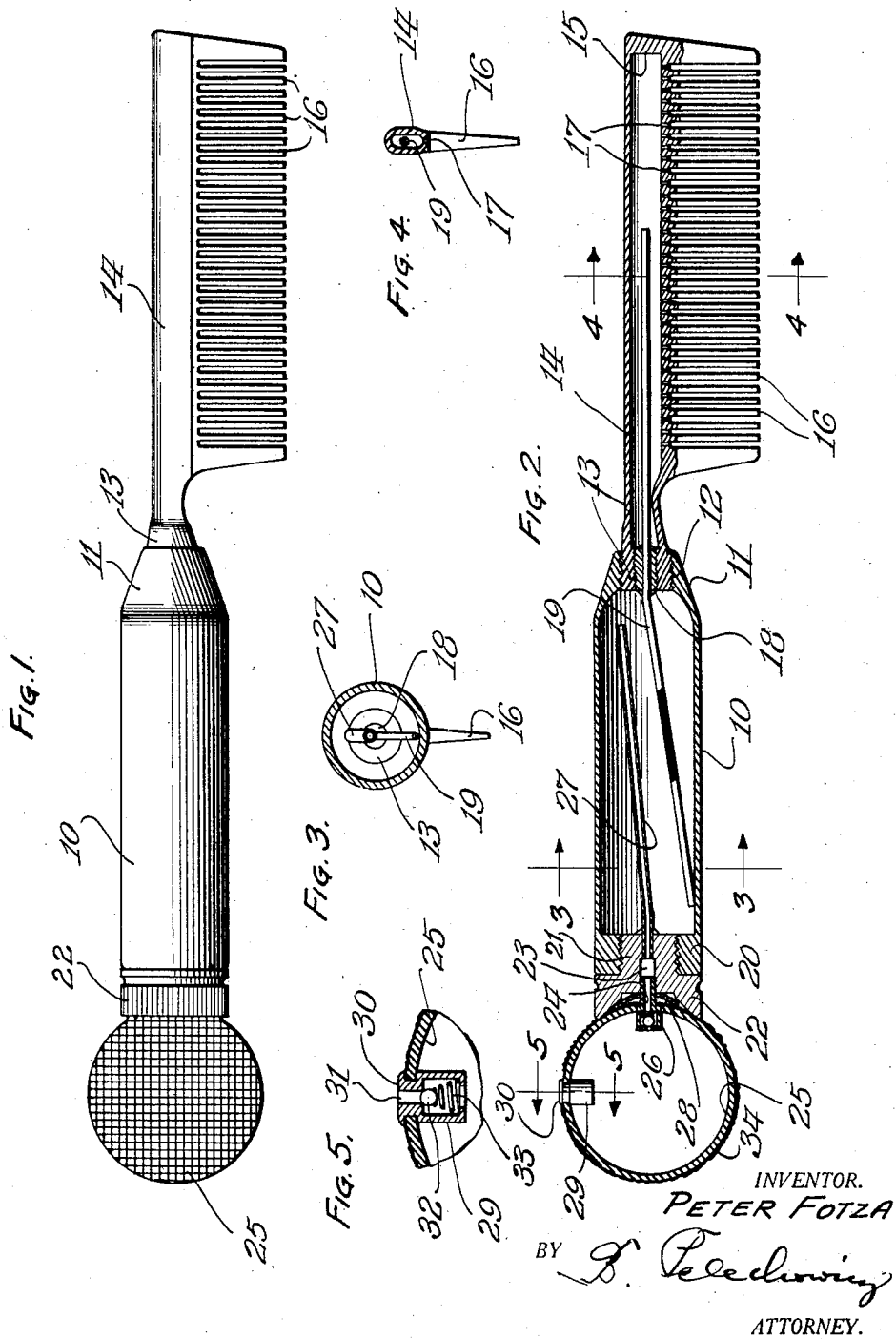
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FOUNTAIN COMB

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UNITED STATES PATENT OFFICE

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FOUNTAIN COMB

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The present invention relates to combs and has for its main object the provision of a comb through which water may be caused to flow at will for the purpose of moistening the hair.

A further object of the present invention is the provision of a comb of the character indicated which may have a handle constituting a reservoir for water, with means carried by the handle to cause air pressure in the handle for the purpose of forcing the water to enter the comb proper in which the water may be evenly distributed for flowing there-through upon the hair.

A still further object of the present invention is the provision of a comb of the character indicated wherein the distribution of water in the comb and the pressure of air upon the water may be had through the medium of a series of tubes suitably positioned.

With the above general objects in view and others that will appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claims.

In the drawing forming a part of this application and in which like designating characters refer to corresponding parts throughout the several views,

Fig. 1 is a side elevational view of the comb;

Fig. 2 is a longitudinal cross-sectional view through the device;

Fig. 3 is a transverse cross-sectional view on line 3—3 of Fig. 2;

Fig. 4 is a transverse cross-sectional view on line 4—4 of Fig. 2; and

Fig. 5 is a cross-sectional view through a check valve on line 5—5 of Fig. 2.

Referring in detail to the present drawing there is shown therein a tubular casing 10, which in addition to serving as a handle for the comb also serves as a reservoir for water. The forward end of said casing 10 is constricted as at 11 and has a threaded bore as at 12 wherein lug 13 is receivable in threaded engagement therewith. Said lug 13 is inte-

grally formed with and forms a continuation of hollow tubular back 14 of the comb. The opposite end of the tubular back 14 is sealed as at 15. The comb proper further includes a row of comb-teeth 16. The back 14 is also provided with a plurality of vent holes 17, each one of which is positioned between a pair of teeth 16, as clearly seen on Fig. 2, for the purpose of causing the water to flow between said teeth 16, as will be hereinafter described.

Receivable within the threaded bore made in lug 13 is a threaded plug 18 which constitutes a stopper preventing the communication between casing 10 and the comb back 14. Longitudinally and centrally passing through said plug 18 is a tube 19 which is frictionally held by said plug 18. One end of said tube 19 enters said comb-back 14 and terminates adjacent its sealed end 15. The other end of said tube 19 is positioned within casing 10 and rests at an incline so that its termination rests upon the wall of casing 10 adjacent the opposite end of said casing 10 and at a point which is in substantial alignment with comb teeth 16.

The other end of casing 10 has an inwardly extending flange 20 with a central threaded bore therein for receiving in threaded engagement therewith a threaded plug 21 which extends centrally of plug or stem 22 which is of the same diameter as the diameter of casing 10.

Said stem 22 and plug 21 are provided with a longitudinal central bore 23, portion of which is threaded to receive in threaded engagement with stem 22 a threaded nipple 24 which is rigidly affixed to rubber ball 25 which communicates with check-valve 26 affixed on the inner periphery of said ball 25.

Mounted upon said plug 21 and held therewith in a frictional engagement is tube 27 which communicates with bore 23. Said tube 27 remains within casing 10 and may be positioned at an incline, its free end remaining adjacent the constricted end 11 of casing 10 and adjacent the upper portion of the periphery of said casing 10 when the device is in an operative position shown on Fig. 2.

The outer free end of stem 22, adjacent

ball 25, is scooped to substantially conform to the outline of ball 25. Washer 28 of substantially semi-spherical formation, positioned upon nipple 24, is interposed between stem 22 and ball 25 for protecting the latter while the same is affixed to said stem through the medium of nipple 24.

It is observed that check-valve 26 permits the inflow of air therethrough on pressing of ball 25 for forcing air through nipple 24, bore 23 and tube 27 into casing 10. Ball 25 is provided with another check-valve including valve casing 29, and stem 30 by means of which the valve is mounted upon ball 25. Vent 31 is provided in said stem for permitting the passage of air into ball 25. Valve ball 32 and coil spring 33 by means of which ball 32 is normally pressed towards vent 31 for closing the same, completes the structure of said check-valve.

It will be apparent that on applying manual pressure to ball 25 check valve 26 opens while check valve 29 closes. On releasing the manual pressure upon rubber ball 25 check-valve 26 will close while check-valve 29 will open to permit the inflow of air there-through to fill rubber ball 25.

To strengthen the rubber ball 25, and to protect it from wear due to constant handling, fabric netting 34 may be provided for said rubber ball 25.

To adapt the device for operation casing 10 is completely filled with water on removing plug 21. Manual pressure applied to rubber ball 25 will force the air into said casing 10 through tube 27. The air exerting pressure upon the water in said casing 10 forces the same through tube 19 into the hollow tubular back 14 of the comb. There the water completely fills said back 14, and since the vent holes 17 are of rather small diameter water has the tendency to remain within said tubular back 14 due to lack of atmospheric pressure and adhesion.

Thus, the water will not readily flow through said vent holes 17 unless the water either contacts with the hair while the same passes in between teeth 16 and contacts with said vent holes 17 or unless there is shaking of the comb to disturb the water within the comb proper, which will be of the usual occurrence under the normal use of the device, or unless pressure is increased within the tubular hollow back 14 of the comb on forcing some more water thereto by applying pressure upon ball 25. From this it follows that the flow of the water upon the hair through vent holes 17 is fairly regulated. Furthermore, the amount of water desired to flow upon the hair will be at will of the operator and not due to any chance.

Since the free end of tube 19 within casing 10 contacts with the inner periphery of casing 10 at a point which is in alinement with teeth 16, and since that point is at the bot-

tom of the casing 10 while the device is in normal use, it is possible to exhaust practically every drop of water from casing 10 before the same is refilled.

It is also observed that the water will not be permitted to flow from casing 10 to back 14 unless pressure of air is created within casing 10 through the medium of ball 25 and tube 27. This is due to the fact that the free end of tube 19 remaining within casing 10 is far removed from the point of juncture between said casing 10 and back 14 and also due to the fact that tube 19 within casing 10 remains at an upper incline upon which water cannot normally travel unless forced to do so by pressure. The water will not normally pass through tube 19 from casing 10 to back 14 regardless as to the position of the tube 19 with respect to the level of water within casing 10, because casing 10 is normally sealed from the outside atmosphere, for the reason that suction would be created within casing 10 were even a small amount of water normally to pass through tube 19 to back 15 without being forced by extraneous means such as air pressure created within casing 10 through the medium of ball 25 and tube 27.

Although the device herein described is referred to as adapted for moistening the hair by water, the same may be adapted to use for any liquid such as oil, shampoo or hair dressing.

While there is described herein a preferred embodiment of the present invention it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What I claim as new is:

1. A fountain comb comprising a hollow back, teeth projecting from said back, said back being provided with vent holes between said teeth, a casing mounted upon said back, said casing constituting a handle for the comb and being adapted to receive hair dressing liquid, and means for creating pressure upon said liquid within said casing for forcing said liquid into said back.

2. A fountain comb comprising a hollow back, teeth projecting from said back, said back being provided with vent holes between said teeth, a casing mounted upon said back, said casing constituting a handle for the comb and being adapted to receive hair dressing liquid, a seal between said back and said casing preventing communication therebetween, a tube mounted within the seal, one end of said tube extending within said back and terminating adjacent the end thereof which is opposite from that adjacent said seal, the other end of said tube extending within said casing and terminating adjacent the end thereof which is opposite from that adjacent said seal, and means for creating pressure upon said liquid within said casing

for forcing said liquid into said back through said tube.

3. A fountain comb comprising a hollow back, teeth projecting from said back, said back being provided with vent holes between said teeth, a casing mounted upon said back, said casing constituting a handle for the comb and being adapted to receive hair dressing liquid, a seal between said back and said casing preventing communication therebetween, a communicating means set within said seal, the outlets of said communicating means being at a comparative distance from said seal, and means for creating pressure upon said liquid within said casing for forcing said liquid into said back through said communicating means.

4. A fountain comb comprising a hollow back, teeth projecting from said back, said back being provided with vent-holes between said teeth, a casing mounted upon said back, said casing constituting a handle for the comb and being adapted to receive hair dressing liquid, a seal between said back and said casing preventing communication therebetween, a tube mounted within said seal, one end of said tube extending within said casing, the free termination thereof resting upon the periphery of the casing adjacent the opposite end thereof and at a point which is in alinement with said teeth, and means for creating pressure upon said liquid within said casing for forcing said liquid into said back through said teeth.

5. A fountain comb comprising a hollow back, teeth projecting from said back, said back being provided with vent-holes between said teeth, a hollow handle mounted at one end of said back, said handle being adapted to receive hair dressing liquid, a plug positioned at said last named end of said back for preventing communication between said back and said handle, a tube mounted within said plug providing a communication between said back and said handle, the portion of said tube remaining within said handle being at an incline, the free end of said tube reaching adjacent the opposite end of said handle and resting upon the wall thereof at a point which is in alinement with said means, and pneumatic means for creating pressure upon said liquid within said handle for forcing said liquid into said back through said tube.

6. A fountain comb comprising a hollow back, a casing mounted upon said back, said casing constituting a handle for the comb and being adapted to receive hair dressing liquid, and means for creating pressure upon said liquid within said casing for forcing said liquid into said back, said back being provided with passages permitting the liquid to pass outwardly therefrom.

7. A fountain comb comprising a hollow back, teeth projecting from said back, a cas-

ing mounted upon said back, said casing constituting a handle for the comb and being adapted to receive hair dressing liquid, a seal between said back and said casing preventing communication therebetween, a communicating means set within said seal, the outlets of said communicating means being at a comparative distance from said seal, and means for creating pressure upon said liquid within said casing for forcing said liquid into said back through said communicating means, said back being provided with passages for permitting said liquid to pass outwardly therefrom.

In testimony whereof I affix my signature.

PETER FOTZA.

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