Nov. 22, 1932. L. S. RICE 1,888,570

FOUNTAIN COMB

Filed May 27, 1932

Fig. 1.

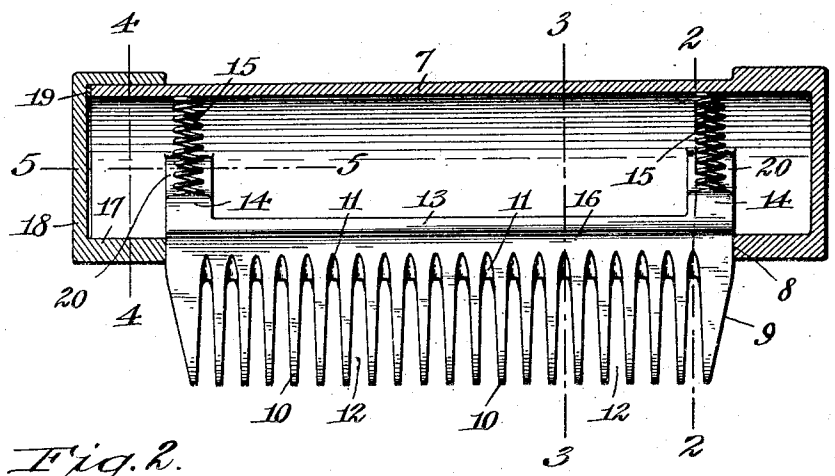


Fig. 2.

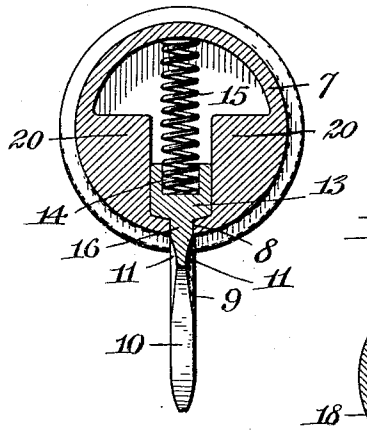


Fig. 3.

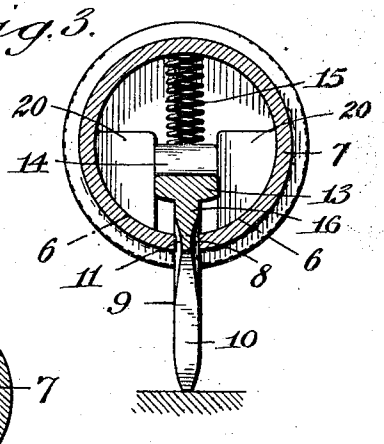


Fig. 4.

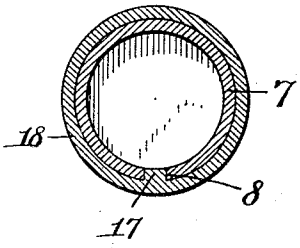


Fig. 5.

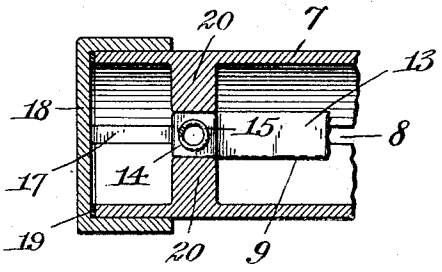
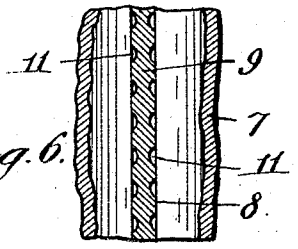


Fig. 6.



Witness:
J. J. Oberst.

Lloyd S. Rice, Inventor.
By Emil Kuehl
Attorney.

Patented Nov. 22, 1932 1,888,570

UNITED STATES PATENT OFFICE

LLOYD S. RICE, OF OAKFIELD, NEW YORK

FOUNTAIN COMB

Application filed May 27, 1932. Serial No. 613,926.

This invention relates to a fountain comb, so termed by reason of the fact that it consists of a liquid container to which a comb is applied and by means of which the liquid is fed along the teeth of the comb in desired quantities to be distributed over and into the hair of a person and also applied to the scalp thereof.

While my invention may be used for moistening the hair and for applying hair dye, it is primarily intended to distribute a liquid through the hair adapted for setting a wave.

In hair-dressing shops, a common mode of applying liquid substances known as "wave set" to hair, is to place the substance in a cup, saucer or other receptacle and dip the comb into the same so as to take up the substance, which is then conveyed to the hair by carrying the comb through space. This results in considerable loss of material in conveying it from the receptacle to the hair by reason of the liquid dripping from the comb. This is not only messy, but annoying to the individual having her hair dressed, due to the liquid dripping onto the face and onto the protecting cover usually applied over one's dress and, furthermore, such methods result in considerably greater waste due to the fact that after passing the comb through the hair of one patron and returning it to the liquid in the receptacle, any liquid remaining after completing the dressing of the hair cannot be used again under sanitary regulations provided in many cities and states.

My invention has for its object to overcome the objection above noted, and to provide a fountain comb, which is simple and inexpensive and by means of which a wave set or other material may be applied to the hair in a considerably shorter period of time than would be possible under present day methods.

Another object of my invention is to provide a fountain comb in which a comparatively large handle is provided so that cramping of the hand of the operator does not occur, the handle serving also as a liquid container.

Another object of my invention is the provision of a fountain comb in which a liquid container is employed and a comb so related thereto that the comb serves as the medium for regulating the feeding of the liquid to the hair.

Another object of my invention is the provision of a fountain comb in which a hollow handle is provided, serving as a liquid container and to which a comb is reciprocably applied which is adapted for movement in the direction of the trend of its teeth, the comb being normally positioned to prevent the discharge of liquid from the handle and under reciprocating movement serve to feed the liquid from the handle in desired quantities, and at the desired times.

A further object of my invention is the provision of a fountain comb, comprising a handle serving as a liquid container and a comb applied to the handle and spring-pressed to cause the comb to normally prevent feeding of liquid from the handle.

A still further object of my invention is the provision of a fountain comb of new and novel construction in which the comb is provided with a head adapted to close a passage in a liquid container serving as a handle for manipulating the device.

With the above and other objects in view, my invention consists in the novel features of construction, and in the arrangement and combination of parts to be hereinafter described and more particularly set out in the appended claims.

In the drawing:

Fig. 1 is a longitudinal section taken through my improved fountain comb.

Fig. 2 is a cross section taken on line 2—2, Fig. 1.

Fig. 3 is a cross section taken on line 3—3, Fig. 1.

Fig. 4 is a cross section taken on line 4—4, Fig. 1.

Fig. 5 is a horizontal section taken on line 5—5, Fig. 1.

Fig. 6 is a longitudinal section taken on line 6—6, Fig. 3.

In the drawing the numeral 7 designates a casing or hollow handle which serves as a liquid container and which has a longitudinal slot 8 therein. This handle may be of any cross sectional formation but I prefer that it be constructed cylindrical in form. It is

closed at one end and open at its other and the slot 8 extends from a point near its closed end to its open end.

9 designates a comb, the teeth 10 of which may be of any desired length and they may be spaced apart any desired distance. The upper or inner ends of these teeth are clearly defined but not separated by space, due to the fact that the material from which the comb is formed is gouged out, as at 11, so as to provide gradually increased depth for the gouged portions or grooves thus formed, the increase being from the side faces of the comb downwardly or outwardly to the spaces 12 between the teeth.

This comb is provided with an enlargement or head 13 at its upper or inner edge extending the full length thereof, and at opposite ends it is provided with upwardly-opening sockets 14 into which fit the lower ends of helical springs 15, the upper ends of which bear against the peripheral wall of the casing 7. These springs serve to press the comb outwardly through the slot 8 in the casing so as to position the head or enlargement 13 of the comb against the inner surface of the wall of the casing at opposite sides of the slot 8 therein. The solid portion or area 16 of the comb between the grooves 11 and the enlargement or head 13 normally lies within the slot 8, the slot being of a width that this solid portion or area firmly bears against the walls of the slot, yet permits movement of the comb inwardly and outwardly through the slot. Said solid portion or area and the head 13 of the comb form what may be termed a valve or closure means to close the slot, and as these portions extend the full length of the comb, substantially the entire length of the slot is closed, excepting only the extreme outer end thereof which, however, is closed by a tongue 17 extending inwardly from a cap or cover 18 placed over the open end of the hollow casing or handle 7. This cap bears against one end of the comb and when positioned on the hollow handle or casing forces the opposite end of the comb against the inner or distant end of the slot 8. To render the cover or cap 18 liquid-proof, a gasket 19 is placed between the same and the open end of the casing or handle 7.

While the comb is guided in its movement by the walls of the slot 8, I prefer to provide lugs 20 within the hollow handle or casing. These lugs are arranged in pairs near each end of the handle or casing, and the lugs of each pair are spaced a distance conforming to the thickness of the enlargement or head arranged along the upper edge of the comb. They thus serve as guides for said enlargement or head. By reason of this construction the comb is arranged to slide inwardly and outwardly in a straight line.

By removing the cap 18 from the hollow handle or casing, wave set or other liquid can be easily poured into said handle or casing, and due to the fact that the comb acts as a valve to close the slot 8 of said handle or casing, this liquid will be retained within the handle or casing after application of the cap or cover thereto. This is particularly true of the liquid substance used for setting waves in hair, since this substance is somewhat heavy and sticky and does not run as freely as water or similar liquids.

When using the device, the handle is taken hold of and the comb forced into the hair of the individual having her hair dressed. When running the comb through the hair, pressure is placed upon the handle to force the comb inwardly, with the result that the enlargement or head 13 of the comb is moved toward the axis of the handle or casing and away from the slot 8, which may be more broadly termed a feeding opening. The solid portion or area 16 of the comb directly underneath the head or enlargement will retain the slot in closed condition, even though the head or enlargement is moved inwardly a short distance, and it will be necessary for this head or enlargement to be moved inwardly a considerable distance until the gouged-out or grooved portions 11 of the comb are forced into the hollow handle or casing, as shown for example in Fig. 3, at which time the liquid will flow out between the walls of these gouged or grooved portions and the walls of the slot 8 and run down the teeth 10 so as to permit of its transfer to the hair.

It is to be noted that as the comb is gradually forced inwardly, the spaces between the walls of the gouged-out or grooved portions 13 and the walls of the slot become gradually enlarged in size so that the quantity of liquid fed is gradually increased, and when the comb is forced inwardly to a point where the spaces 12 between the teeth are moved into the hollow handle or casing, maximum feeding of the liquid results. Under this arrangement, therefore, a regulated feeding of the liquid is assured, this being entirely controlled by the user of the comb. The resistance of the springs is such that the comb may be used without compressing the springs, in which case no feeding of the liquid takes place and the same may be used like an ordinary comb. This is found necessary at times to thoroughly distribute the wave-set liquid through the hair.

It will be readily understood from the construction and operation described that absolutely no waste of material takes place and that the contents of the hollow handle or casing may be used on several patrons without overstepping sanitary regulations now known to exist. The liquid will not in any case run down onto the face of the patron, which is extremely annoying, nor will any of the surroundings be soiled by drippings.

The desired quantity of wave-set liquid can be distributed through and over the hair to assure a perfect wave set, which is highly desirable, since improper distribution of the liquid, when either insufficient or superfluous in quantity, will result in a shortening of the time during which the wave set will be maintained. Moreover, the operators will find it much easier to set waves in the hair and consequently a larger number of patrons can be waited upon over a given period of time.

Having thus described my invention, what I claim is:

1. A fountain comb, comprising a casing having an opening therein and adapted to contain a liquid, a comb extending outwardly through said opening and having means to close said opening and to permit regulation of the flow of liquid through said opening, and means to normally hold said comb in position to close said opening.

2. A fountain comb, comprising a hollow member serving as a handle and adapted to contain liquid, said member having a feed opening, and an outwardly spring-pressed comb normally closing said feed opening and adapted upon pressure inwardly to permit the flow of liquid from said member to the teeth of said comb.

3. A fountain comb, comprising a hollow member serving as a handle, said member having a feed opening therein, a comb extending through said feed opening and having an enlargement at its inner edge adapted to close said feed opening, springs normally holding said comb in projected position to close said feed opening and yieldable under pressure of said comb inwardly to permit of opening said feed opening.

4. A fountain comb, comprising an elongated casing having a slot extending lengthwise therein, means to permit of filling said casing with a liquid, and a comb movable inwardly and outwardly in said slot and provided with means to close said slot and prevent the feeding of liquid therethrough, said comb being movable into said casing to feed the liquid between the teeth of the comb.

5. A fountain comb, comprising an elongated casing having a slot extending lengthwise therein and means permitting the filling of said casing with a liquid, a comb maintained in said slot and movable inwardly and outwardly therein, said comb having closure means to close said slot and to permit of opening the same to any desired extent, and means for maintaining said closure means in closing position.

6. A fountain comb, comprising a cylindrical casing closed at one end and being open at its other and having also a slot extending lengthwise through the wall thereof from a point near its closed end to its open end, a cap closing said open end, a comb slid into said slot from its open end and filling the space between said cap and the distant end of said slot, said comb having a solid portion along its upper end adapted to be normally entered in said slot to completely close the same, said comb being movable inwardly so as to position the inner ends of the teeth thereof in said slot and permit the feeding of liquid from the casing to said teeth for distribution through the hair of a person.

7. A fountain comb, comprising an elongated casing having a slot extending lengthwise therein, means to permit of filling said casing with a liquid, a comb arranged within said slot and having an enlargement at its inner edge coextensive therewith, and a solid portion extending along the full length of said comb directly underneath said enlargement, said enlargement and solid portion forming a closure to close said slot and prevent the feeding of liquid from said casing, and means to normally maintain said comb in slot-closing position.

8. A fountain comb, comprising an elongated casing having a slot extending lengthwise therein, means to permit of filling said casing with a liquid, lugs within said casing arranged in pairs at opposite ends thereof, a comb fitted in said slot and having an enlargement along its inner edge, a solid portion adjacent said enlargement and teeth extending outwardly from said solid portion, said enlargement and solid portion forming closure means for said slot, sockets extending from said enlargement at opposite ends thereof, and springs within said casing having one of their ends fitted in said sockets and their other ends bearing against the wall of said casing.

In testimony whereof, I affix my signature.

LLOYD S. RICE.