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W. C. SIMPSON

FOUNTAIN COMB

Filed Aug. 18, 1927

Fig. 1.

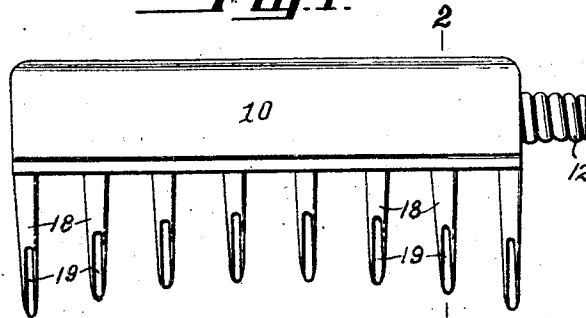


Fig. 2.

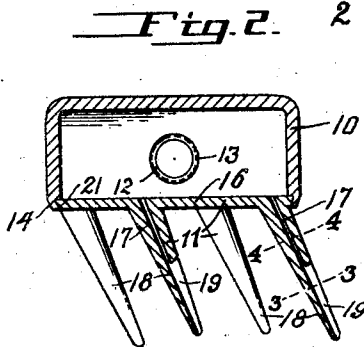


Fig. 5.

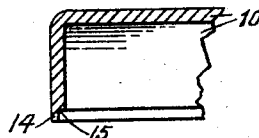
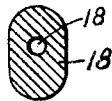


Fig. 3. Fig. 4.



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FOUNTAIN COMB.

Application filed August 18, 1927. Serial No. 213,925.

This invention relates to fountain combs, and especially to an improved and simplified form of comb for cleansing the scalp and the hair of the user.

5 The main object of this invention is to provide a fountain comb which is thoroughly practical from the standpoints of both manufacturer and user, and to improve upon the invention shown in my pending appli-
10 cation Number 108,344 which was filed May 11, 1926, and allowed February 12, 1927, entitled "Water comb." One difficulty with the device shown in said pending application is the difficulty of molding or otherwise
15 forming the device without excessive manufacturing costs, and this will be understood by persons who are accustomed to mold such devices, especially in view of the fact that the "spoon-shaped" teeth have end portions
20 which are wider than the remaining portions of such teeth, and also because of the teeth being inclined while being integral with the bottom and vertical walls, which latter are not inclined, so the difficulty of molding the
25 bottom with its inclined teeth integrally with the vertical walls is obvious.

Therefore, a further object of this invention is to provide the device with inclined spoon-shaped teeth which are integral with
30 the bottom of the fountain or liquid receptacle, which bottom has its rear edge beveled or inclined to correspond with the inclination of the teeth, so the construction of the molds and the operation of molding is greatly
35 simplified and facilitated so the devices can be molded by persons of comparatively little experience and skill in the art of molding, and so the devices can be manufactured at a comparatively low cost.

40 Another object of the invention is to provide a device of this character with an improved form of spoon-shaped tooth which is not only tapered to provide maximum strength and ability to penetrate the hair of
45 a person's head, but also facilitates the quick and easy removal of the mold in which is formed the piece including the teeth, at the same time provided with a passage there-
50 through from the interior of the liquid receptacle to the interior of the concavity of the spoon-like or spoon-shaped tooth.

A further object is to provide an improved and simplified form of fountain or receptacle which can be cast, forged or pressed, in
55 a single piece, of malleable or yieldable ma-

terial, in such shape that it can be permanently and intimately united with the teeth-carrying bottom or plate without the employment of any external fastening means, by simply pressing the bottom flanges or continuous flange inward around and against
60 the beveled or under-cut ends and front and rear edges of said plate.

The object of inclining the teeth forward is to raise the hair from the scalp and at the
65 same time direct streams of water or other liquid onto the scalp in such direction that the water or other liquid is forced forward or in the same direction of movement of the
70 teeth through the hair in the operation of combing.

A further object is to provide a comb of this character of which the points of the teeth are arranged in an arcuate relation
75 both laterally and longitudinally, so they conform to the curvatures of the scalps of the users, or more nearly conform than if the teeth were arranged with their points in straight lines or in a common plane.

Other objects and important features are pointed out or implied in the following details of description in connection with the
80 accompanying drawings in which:

Figure 1 is a front view of a fountain comb constructed in accordance with this in-
85 vention.

Figure 2 is an enlarged sectional view along the line 2-2 of Figure 1.

Figure 3 is an enlarged sectional view along the line 3-3 of Figure 2.

Figure 4 is a sectional view along the line
90 4-4 of Figure 2.

Figure 5 is a fragmental sectional view showing a part of the upper member of the receptacle before the lower securing flange
95 is pressed inward, or in its original form as taken from the mold.

Referring to these drawings in detail, in which similar reference characters correspond to similar parts throughout the several views, the invention consists in the details of construction and arrangement which
100 are explained as follows:

In the simplified form shown, the device consists of three separately formed parts 10,
105 11 and 12, the part 10 being an inverted cup formed with an inlet opening 13 into which the pipe-connection 12 is screwed or otherwise removably secured so as to be replaced
110 by a plug or valve (not shown) if so desired.

However, this part 12 is an ordinary hose connection such as is insertable in a rubber tube or the like which is adapted to be connected with a water faucet or other source of liquid supply for filling the fountain or container 10—11.

The part 10 has the lower edges of its walls formed with flanges or extensions 14 which are bendable inward and which combine with shoulders 15 to form grooves in the lower edges of said walls, and the purposes of these parts 14 and 15 will presently be explained.

The separately formed container bottom 11 includes a plate 16 having downwardly tapered openings 17 therethrough, these tubular openings extending into the comb teeth 18 so the latter are tubular at their upper ends, while their lower ends and middle parts are substantially spoon-shaped or U-shaped in cross section, as indicated at 19. In other words, the lower ends and middle parts of the comb teeth have acute edges 20 which move against the hair so as to remove dandruff, dust and other foreign substances from the hair and direct such foreign substances into the channel 19, so the water, which passes through the openings or channels 17, carries such foreign substances away. The channels 19 are open at their front sides and extend from the middle to the lower parts of the teeth. All four edges of the plate 16 are beveled or undercut as indicated at 21, and as the rear sides of the teeth 18 have the same inclination as these beveled edges 21. All the teeth are parallel while being forwardly and downwardly inclined, and this makes easy and simple the method of molding these parts 11, and of drawing them from the molds while leaving the molds whole and complete so that a large number of other members 11 can be cast or molded therein.

The forward and downward inclination of the teeth 18, with respect to the bottom of the container has several advantages which will presently be explained. The teeth 18 are staggered with respect to one another, as shown in Figure 2, and while these drawings show only a few teeth which are spaced considerably with respect to one another, it should be understood that there may be any appropriate number of such teeth, spaced according to the desires of the manufacturer and the demands of the public.

It should be understood that when the parts 10 and 11 have been molded or otherwise formed, the part 11 has its beveled edges inserted in the grooves in the lower edges of the walls of the part 10, and then the flanges, which form the relatively thin extensions of said walls, are pressed inward, by any appropriate means, so they extend under said beveled edges and prevent them from moving with respect to said walls. It also should be understood that any appropriate cementing

or anti-leaking substance may be applied in said grooves or on the beveled edges, thereby making the joint water-tight around the plate which constitutes the bottom of the receptacle or reservoir.

In using this device, the user may either fill the device and then close the filling opening, or may attach the connection 12 to a faucet by means of a flexible tube or hose, and then use the device substantially the same as an ordinary comb, causing the teeth to penetrate the hair, then drawing the device forward while pressing the teeth against the scalp. The water or liquid will wet the scalp and the roots of the hair, thereby loosening dandruff and the like, and the inclined teeth will raise the dandruff from the scalp, while the jets or small streams of water are directed in the forward direction against the dandruff etc. which is thus loosened, thereby carrying the dandruff etc. forward and upward, the inclination of the hair assisting in directing the water upward after it strikes the scalp. In this explanation it should be understood that the term "upward" means toward the free ends of the hair, or away from the scalp, so that if the head of the user is held down over a bowl or bathtub, the force of gravity also directs the water towards the ends of the hair, thereby facilitating the cleansing of the scalp and hair.

While I have described this form of the invention specifically, I do not intend to limit my patent protection to the exact construction and arrangement here shown and described, for the invention includes various changes in form and arrangement within the scope of the inventive ideas as implied and claimed.

What I claim as my invention is:

1. A fountain comb including teeth which are tubular at their upper ends and substantially spoon-shaped at their lower ends, the middle and lower end portions of the teeth being substantially U-shaped in cross section substantially as shown.

2. A fountain comb including teeth which are tapered and forwardly and downwardly inclined and provided with a passage through which liquid may flow, the middle and lower end portions of the teeth being substantially U-shaped in cross section substantially as shown.

3. A fountain comb including teeth which are tapered and forwardly and downwardly inclined and which are tubular at their upper ends and substantially U-shaped in cross section at their lower ends and middle parts.

4. As an article of manufacture, a fountain comb including two separately formed parts, one of said parts being an inverted cup-like member provided with yieldable flanges on the edges of its walls, the other of said members being a plate formed with water-conducting teeth extending from its lower face, said

plate having edges fitting against said flanges, the said flanges being turned under said edges, substantially as shown. 20

5 5. As an article of manufacture, a fountain comb including two separately formed parts, one of said parts being an inverted cup-like member with yieldable flanges on the edges of its walls, the other of said members being a plate formed with water-conducting teeth
10 extending from its lower face, said plate having edges which are beveled or under-cut from the upper face to the lower face of said plate, the said flanges being bent inward against said under-cut edges, said teeth being forwardly and downwardly inclined in a plane
15 substantially parallel with the bevel-surface of one of said edges.

6. A fountain comb including a plurality

of teeth, each of which is tubular from its upper end to its middle portion and which includes a channel which is open at its front side and extends from the middle to the lower or working end of the tooth, substantially as shown.

7. A fountain comb including a container 25 having a substantially level bottom provided with teeth which are tapered and forwardly and downwardly inclined with respect to said bottom of the container, said teeth being substantially parallel with one another and of 30 different lengths and having their ends arranged in a curve, substantially as shown and specified.

In testimony whereof I affix my signature.

WILLIAM C. SIMPSON.