United States Patent

Weber

[15] **3,696,818**

[45] **Oct. 10, 1972**

[54] **HAIR-DRYING COMB**

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[73] Assignee: **Scovill Manufacturing Company,** Waterbury, Conn.

[22] Filed: **April 1, 1971**

[21] Appl. No.: **130,112**

[52] **U.S. Cl.** **132/9**

[51] **Int. Cl.** **A45d 20/00**

[58] **Field of Search** 132/9, 112, 115, 116; 34/96–97; 128/254

[56] **References Cited**

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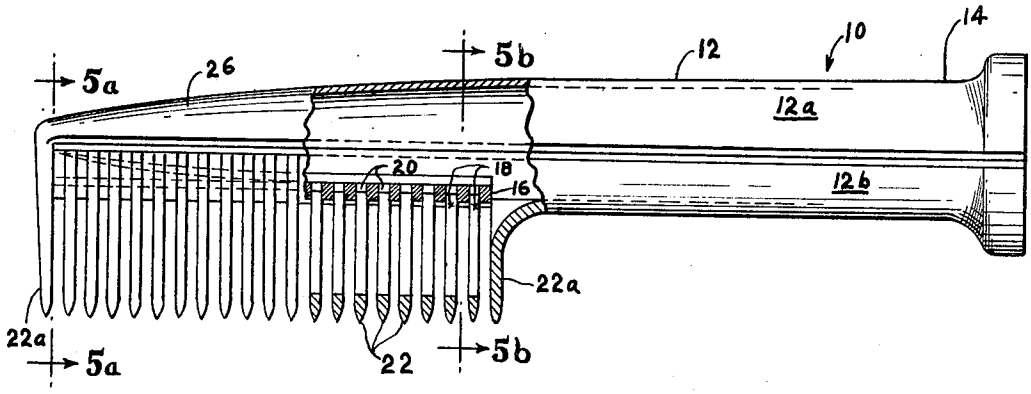
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Assistant Examiner—Gregory E. McNeill
Attorney—Dallett Hoopes

[57] **ABSTRACT**

A hair-drying comb having open teeth is supplied with heated air which flows into the comb housing and through slots aligned with the openings in the teeth. Drying air is thereby directed laterally into the hair held between the teeth.

3 Claims, 8 Drawing Figures



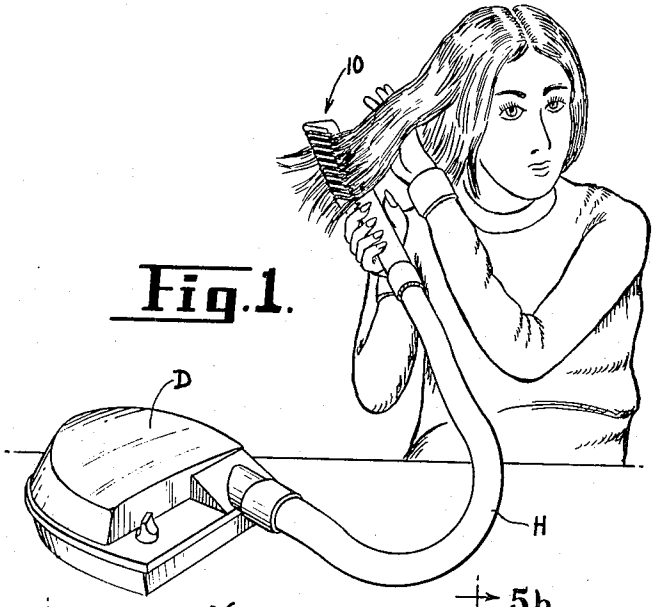


Fig. 1.

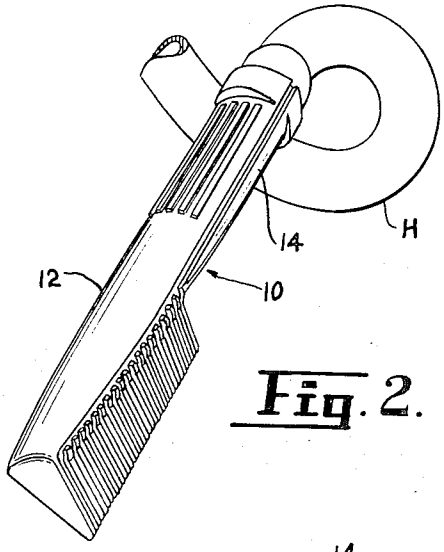


Fig. 2.

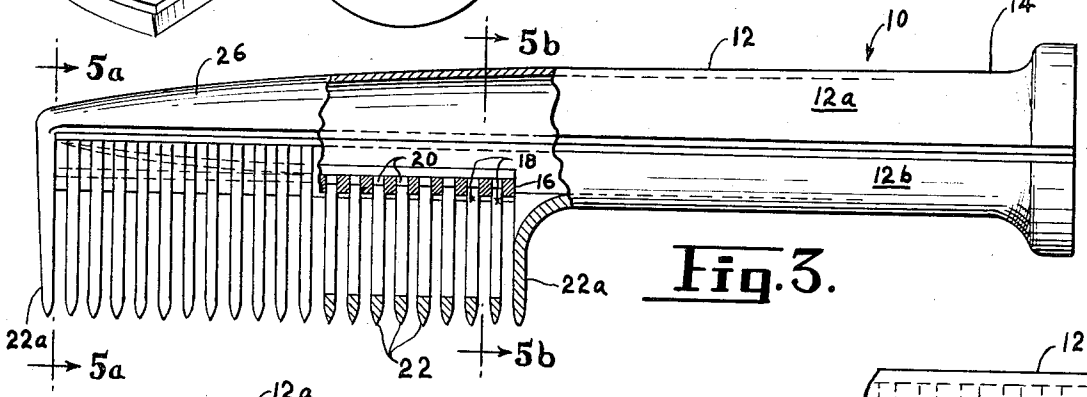


Fig. 3.

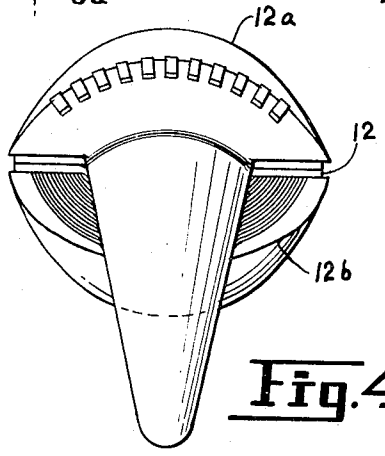


Fig. 4.

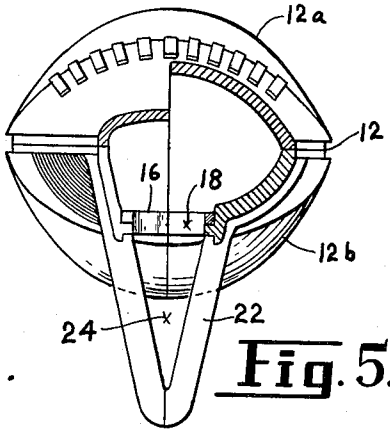


Fig. 5.

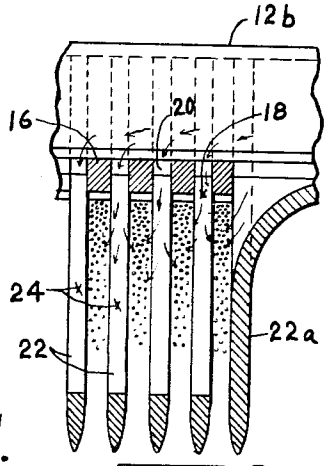


Fig. 6

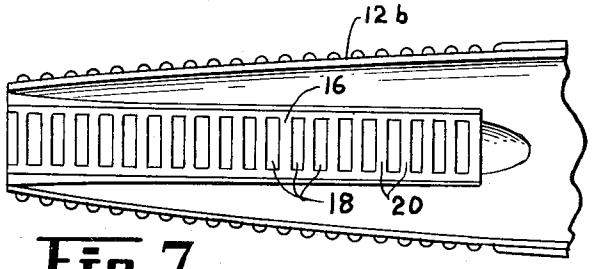


Fig. 7.

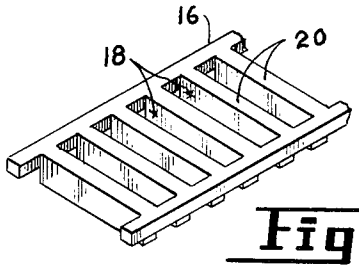


Fig. 8

HAIR-DRYING COMB

This invention relates to a hair-drying comb. More specifically, this invention relates to a comb which is adapted to hold the hair in thin, spaced, parallel stacks and to direct drying air toward the stacks from positions inbetween the stacks.

In the past, there have been many drying combs which deliver heated air or other fluid toward the hair. An example is the comb shown in the old U.S. Pat. No. 1,106,411 wherein heated air is forced through passages in the individual comb teeth to the tips thereof to promote rapid hair drying. Other hand-held devices have included a conventional comb backed by a blower and heater. A number of devices have comprised a comb or brush having a delivery duct to which is supplied heated air through a hose from a portable hair-drying unit.

While a number of aforementioned prior devices represented improvements on the conventional hair-drying device where hot air was blown directly at the surface of the hair, they have always been objectionable for the length of time it has taken to dry the hair when using them. For instance, a woman having long hair has taken forty minutes to an hour using some of the prior devices.

The present invention has for an object primarily to shorten the length of drying time required. It accomplishes this by improving the coupling between the hair drying fluid and the hair so that the individual hair strands are exposed directly to blasts of warm air while the strands are in a thin stack. The result is a reduction of 30 to 50 percent in the drying time as compared with the time of prior art devices.

While the present device is much more effective as a hair drying means and sharply reduces the amount of time required to dry hair, it is simple, rugged, and inexpensive to manufacture.

Other objects of the invention will be apparent from the following specification including the drawings wherein:

FIG. **1** shows in use a hair-drying comb embodying the invention;

FIG. **2** is a perspective view of the preferred embodiment of the comb;

FIG. **3** is an enlarged side elevation of a comb embodying the invention with the central portion broken away;

FIG. **4** is an enlarged end view;

FIG. **5** is an enlarged sectional view, the left half of which is taken on the line **5***a*—**5***a* in FIG. **3**, and the right half of which is taken on the line **5***b*—**5***b* of FIG. **3**;

FIG. **6** is an enlarged sectional view similar to a part of FIG. **3** but showing a portion of the comb in use and indicating the flow of drying air through the thin stacks of hair held by the comb;

FIG. **7** is a fragmentary top view of the lower part of the comb as shown in FIG. **3** with the top removed; and

FIG. **8** is a fragmentary perspective view of the air deflector.

Referring more specifically to the drawings, FIG. **1** shows in use a comb embodying the invention and which is generally designated **10**. It is supplied in the version shown through a hose H by heated air from a conventional portable hair dryer unit D. Such a unit includes air moving means such as a fan and a heating element and blows heated drying air through the hose

H to the comb **10**. It will be noted in the view shown in FIG. **1** that the teeth of the comb **10** are directed upwardly. The comb may also be used with the teeth directed downward provided the hair is held toward the base of the teeth.

FIG. **3** shows that the comb **10** comprises a housing **12** comprising upper half **12***a* and lower half **12***b*, is hollow and is provided with a delivery duct **14** to which the hose H may be attached. Along the lower side shown as in FIG. **3**, the housing is provided with a rectangular opening covered by a deflector plate **16** having a plurality of individually spaced slots **18** (FIG. **8**) and a plurality of bridges **20** between the slots.

A plurality of individual arch-shaped teeth **22** are also provided. In the version shown, the teeth **22** are of V-shape and their ends are attached to the housing in alignment so that they straddle the slots, respectively. It will be noted in FIG. **3** that the individual teeth **22** are aligned with the individual slots **18**, and the bridges **20** between the slots are aligned with the spaces between the teeth.

As shown, the teeth are pointed (FIG. **5**) and streamlined (FIG. **6**) so that strands of hair readily pass between them. The comb is extremely effective at dealing with snarls common in long hair after washing.

The action of the hair dryer when in operation is suggested in FIG. **6**. Because the individual teeth **22** are closed at the bottom, the air which blows downwardly from the slots **18** has to move laterally to escape. With the hair held in thin, parallel, closely spaced stacks by the adjacent teeth, air is forced from positions inbetween adjacent stacks generally perpendicularly toward the thin stacks causing air to actually pass into the thin stack and effect extremely good drying operation. The effectiveness is enhanced by the breadth of the openings **24** in the teeth **22** (FIG. **5**) which holds the hair in the thin stacks for a substantial zone therealong while air is blown toward the stacks simultaneously all along the zone. Of course, this action on the hair progresses along the hair strands as the operator moves the comb outward (FIG. **1**).

It should be noted that for uniformity of air supply from one tooth to the next, the end of the comb (FIG. **2**) may be tapered as at **26** deflecting air toward the slots **18**. If desired or necessary internal baffles may be used inside the hollow housing to further control air flow. To avoid channeling of air to a path of least resistance, the teeth **22***a* at the ends of the row of teeth may be solid, i.e., with no openings **24**.

It should be understood that many variations from the specific arrangement described are envisioned. For instance, the comb may be connected directly to a power handle including a warm-air-producing fan and heater powered by battery or household current.

The comb of the invention is extremely effective in drying and styling hair. It is also remarkably effective in removing snarls. The device is inexpensive, rugged, and easy to produce.

I claim:

1. A hair-drying comb comprising a hollow housing having a delivery duct and a plurality of individual downwardly facing, closely spaced parallel rectangular elongate slots arranged in a row, a plurality of individual generally V-shaped teeth, the teeth having a closed lower end and an open space above the lower

end, the teeth being closely spaced in a row and each being secured at its upper ends to the housing at opposite ends respectively of a slot, so that the slots are aligned with the teeth respectively and the housing structure between the slots are aligned with the spaces between the teeth, the housing adapted to be supplied with a drying fluid through the duct for flow through the slots into the open spaces in the teeth and through the thin stacks of hair held between adjacent teeth.

2. A hair-drying comb as described in claim 1 wherein the housing is closed at one end and the delivery duct is at the other end, and the housing is tapered toward the closed end in the area of the slots.

3. A hair drying comb as described in claim 1 wherein the slots are formed in a rectangular deflector plate comprising an insert in an opening in the housing, the plate having bridges between the slots, respectively.

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