Nov. 9, 1965 E. J. HALLNAN 3,216,428

PLURAL COMB UNIT WITH STAGGERED TOOTH ROWS FOR CLEANING AND WAVING HAIR

Filed Oct. 7, 1963

Fig. 1.

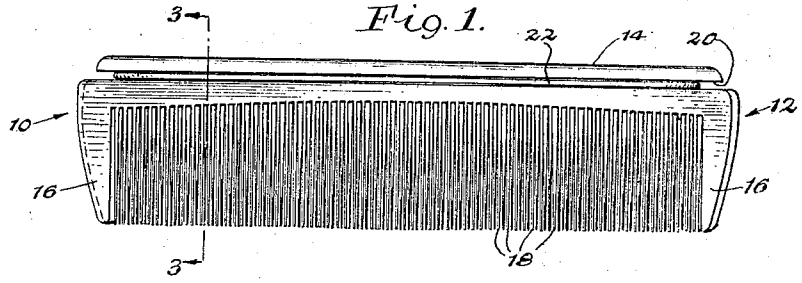


Fig. 2.

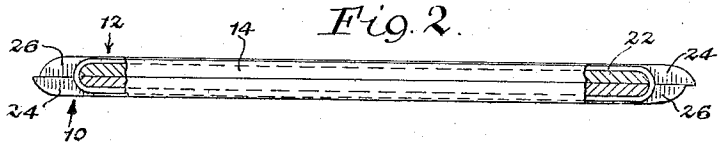


Fig. 3.

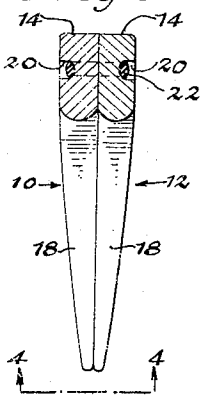
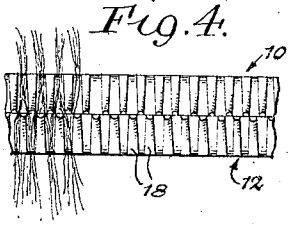


Fig. 4.



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PLURAL COMB UNIT WITH STAGGERED TOOTH ROWS FOR CLEANING AND WAVING HAIR

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This invention relates to combs, more particularly to hairdressing combs of the type having multiple rows of staggered teeth. Hair combs of this type are particularly useful in that they more effectively clean the hair and exercise it, and introduce a tendency to natural waviness in the treated hair; and numerous comb constructions have been previously designed and marketed for this purpose. For example, U.S. Patents 466,496; 1,780,206; 1,994,505; 2,408,142; and 2,626,618 show various prior designs of hair combs for the hereinabove stated purposes. However, all of the prior comb designs have involved definite disadvantages from the standpoint of complications and expense of manufacture; and it is a primary object of the present invention to provide a haircomb as described hereinabove which may be readily and inexpensively fabricated from simple and easily made parts, and yet in addition will provide an improved functional flexibility compared to earlier combs of this type. Other objects and advantages of this invention will appear from the specification hereinafter, and the accompanying drawings wherein:

FIG. 1 is a side elevational view of a comb assembly of the present invention;

FIG. 2 is a top plan view thereof, with portions broken away to show structural features in section;

FIG. 3 is a sectional view, on enlarged scale, taken along the plane of line 3—3 of FIG. 1; and

FIG. 4 is a fragmentary bottom view looking upwardly into the comb construction and showing the mode of passage of hair strands through the comb when it is in operation.

As shown in the drawing herewith, the haircombing device of the present invention comprises a pair of generally identical, separately molded, conventional type hair combs, which are designated generally at **10**, **12** respectively. Each comb comprises essentially a back portion **14**, end portions **16**, **16**, and a row of teeth **18** therebetween. In the case of the present invention the comb members **10**, **12** are identical except that their back portions **14** are each perimetrically grooved as indicated at **20** to accommodate when disposed side-by-side an elastic band as indicated at **22** in encircling relation. Thus, the comb members **10**, **12** are relatively assembled by simply placing them in side-by-side relation and snapping an endless elastic band **22** into encircling position in the grooved portions of the comb members, as shown in FIGS. 1, 2, 3.

However, it is a particular feature of the present invention that the grooves **20—20** formed in the back portion of the comb members are cut inwardly at one end of each comb to a greater depth then at the other end of the comb; whereby, as shown more clearly in FIG. 2 for example, the grooved end portion **24** at one end of each comb is deeper cut than the groove **26** at the opposite end of the same comb. Hence, when the two combs are coupled in side-by-side relation by means of the elastic band **22**, one comb is slightly off-set longitudinally relative to the other comb, whereby the teeth of respective combs are disposed in staggered relationship as more clearly shown for example in FIG. 4. Hence, although the two comb members are individually of the simplest and most inexpensively manufactured types, when arranged in the assembly of the present invention they provide a staggered

tooth type hair comb unit. Thus, it will be clearly apparent that a two-row staggered tooth type comb of structurally simple and rugged form may thus be inexpensively fabricated by the simplest type of manufacturing procedures.

It is another feature of the comb unit of the present invention that by reason of the fact that the two parts are maintained in assembly by means of the elastic band **22**, they are thus disposed in staggered tooth relationship only by means of an elastic restraint device. Hence, the degree of "scrubbing" action imposed upon the hair strands as they are being drawn through the staggered tooth arrangement (as shown in FIG. 4 for example) will be a function of the thickness of the hair strands being operated upon as well as the strength of the elastic band member **22**. In any case the elastic band will be selected so as to "give" to suitable degree whenever the staggered tooth channels may be overloaded; and thus it will be appreciated that the comb unit of the present invention is adapted to function flexibly and elastically, and in otherwise improved manner for the intended purposes. Also, it will be understood that the comb unit of the invention is readily cleanable by removing the elastic band and separately cleaning the individual comb members. Also, although only a pair of combs has been illustrated and described, any preferred number of comb members may be employed to provide the comb unit of the invention.

I claim:

1. A hair comb unit comprising in combination a pair of like comb members disposed in side-by-side relation, each said comb member including a back portion running longitudinally thereof and spaced teeth extending therefrom, the teeth of each comb member being spaced apart by amounts in the order of their widest portions, each back portion and its associated teeth being flat on one side thereof and the two comb members being disposed in face-to-face contact along their flat sides so that the comb members meet at a plane between and parallel to the comb members, said back portions of said comb members being peripherally grooved around the sides and ends thereof, the grooves at the corresponding ends of said comb members being aligned when the teeth of the two comb members are fully staggered to present a continuous and complete tooth row, and an elastic endless band training around said comb unit and disposed within the externally presented grooved portions whereby to elastically maintain said comb members in face-to-face contact and the teeth thereof in said fully staggered relation while being free for limited relative movement along their meeting-plane.

2. The comb unit according to claim **1** wherein the opposite ends of each comb member are identical except for the grooves therein, the groove at one end of each of said comb member being deeper than the groove at the other end by an amount substantially equal to the width of a tooth at the widest point.

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RICHARD A. GAUDET, *Primary Examiner.*