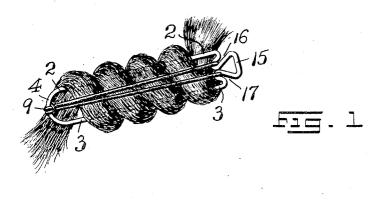
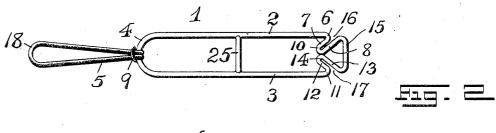
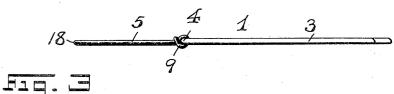
No. 756,838.

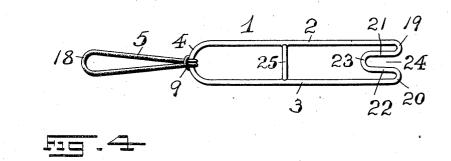
# A. DREÉS. HAIR WAVER. APPLICATION FILED MAY 12, 1903.

NO MODEL.









WITNESSES

D. B. Macufel -

INVENTOR:

Albertine Drees,

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## STATES PATENT OFFICE.

### ALBERTINE DREÉS, OF NEWARK, NEW JERSEY.

#### HAIR-WAVER.

SPECIFICATION forming part of Letters Patent No. 756,838, dated April 12, 1904.

Application filed May 12, 1903. Serial No. 156,731. (No model.)

To all whom it may concern:

Beit known that I, Albertine Dreés, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jer-5 sey, have invented certain new and useful Improvements in Hair-Wavers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

My present invention has reference to im-15 provements in hair-wavers; and the primary objects of the present invention are to provide a neat, simple, and strong device of the character hereinafter set forth for the purposes of waving or curling the hair and which is in 20 the nature of an improvement of the hair waver and curler described and claimed by me in a previous application for Letters Patent, filed May 16, 1902, Serial No. 107,616.

A further object of my present invention is 25 to provide a hair-waver comprising a pair of side members and connecting end members, all arranged to provide a resilient device having an open space between the side members over which the hair is arranged to permit of 30 a free circulation of air between the strands of hair to prevent sweating and heating, the device being also made with a reinforcing or strengthening means between the said side members to prevent the device from being 35 bent out of shape when in constant use.

With these various objects in view the invention consists in the novel construction of hair-waver hereinafter more fully set forth; and, furthermore, the invention consists in 40 the general arrangements and combinations of the parts, all of which will be described in detail in the accompanying specification and then finally embodied in the clauses of the claim.

The invention is clearly illustrated in the 45 accompanying drawings, in which-

Figure 1 is a perspective view of my novel form of hair-waver, illustrating its applica-

the hair-waver, and Fig. 3 is a side view of 50 the same. Fig. 4 is a plan view of a slightlymodified form of construction of hair-waver, but still embodying the principles of my present invention.

Similar characters of reference are em- 55 ployed in all of the hereinabove-described views to indicate corresponding parts.

Referring to the said drawings, the hairwaver is indicated by the reference character 1, the device represented in the several fig- 6c ures of the drawings comprising a pair of side bars or members 2 and 3, which are approximately parallel to each other and are connected by suitable end members, preferably of the shape and construction herein shown. In the 65 construction represented in Figs. 1, 2, and 3 one of the end members is shown as a curved closing end member 4, to which is suitably attached a flexible holding-band 5, of rubber or any other suitable material. The op- 70 posite closing end member of the device 1 consists, essentially, of a curved part 6, forming a part of the side bar 2, and a pair of approximately parallel members or portions 7 and 8, which are connected by the curved 75 part 10. Connected with the side bar 3 is a curved part 11, and 12 and 13 indicate another pair of approximately parallel members or portions, which are connected by the curved part 14. Connected with the free ends of the So respective members 8 and 13 is a connecting bar or member 15. These several parts are all arranged substantially as illustrated in Figs. 1 and 2, the device being provided at this end with the inwardly-extending mem- 85 bers forming a pair of reentrant angles 16 and 17 for the reception of the loop 18 of the holding-band when the strands of the hair have been wound over the side bars 2 and 3 and said loop 18 has been sprung over the con- 90 necting bar or member 15, as represented in Fig. 1 of the drawings. The said band 5 is attached to the said member 4, as at 9, as clearly indicated in the drawings.

Instead of providing the hair-waver with 95 two reëntrant angles in the manner of the contion to the hair for producing a wave when removed therefrom. Fig. 2 is a plan view of device may be made with but one reentrant anstruction represented in said Figs. 1 and 2 the

gle, as illustrated in Fig. 4 of the drawings. The device represented in the said Fig. 4 comprises a pair of side bars 2 and 3, which are connected at the one end by the rounded closing member 4, as hereinabove stated; but the bars or members 2 and 3 are made at their respective opposite ends with inwardly-curved loops 19 and 20. Extending from each of said loops in a direction toward the end member 4 are a pair of approximately parallel and straight members 21 and 22, which are united by means of a connecting-loop 23, so as to provide the reentrant angle 24, substantially as illustrated.

The complete hair-waver is preferably made in one continuous and seamless piece, being struck up in a suitable die, or it may be cast in a suitable mold and may be made from any

suitable metal.

The hair-waver when made in the manner of my invention produces a neat device which can easily be manipulated by the person in winding or placing the hair about the side bars 2 and 3 before retiring, the device hav-25 ing great resiliency, so that it can be pressed against the head without discomfort to the wearer. Furthermore, a hair-waver is the result which comprises a pair of approximately parallel side members connected at 30 leach end by rounded end members to avoid sharp and dangerous points or projections, the device being provided with a comparatively large open space bounded by the respective members over which the hair is arranged, and is prevented from heating or sweating, since a free circulation of air is permitted through the strands of hair to accomplish, finally, a fluffy and loose wavy appearance and condition of the hair when the device is removed. 40 That the said side members 2 and 3 may retain their approximate straight and paral-

lel relation to each other a reinforcing or stiffening means may be arranged between the said bars or members 2 and 3, the said device 45 being preferably a suitable connecting bar or member 25, which has its respective ends integrally connected or otherwise secured to portions of the said side bars 2 and 3, substantially as illustrated in Figs. 2 and 4.

I am fully aware that some changes may be made in the construction and in the arrangements and combinations of the various parts without departing from the scope of my present invention. Hence I do not limit my in-55 vention to the exact arrangements and combinations of the parts as herein described and as illustrated in the accompanying drawings, nor do I confine myself to the exact details of the

construction of the said parts. Having thus described my invention, what

L claim is-

1. A hair-waver, comprising, a pair of side members and closing end members at the respective ends of said side members, all being

integrally connected and arranged to provide 65 an open space between said members, and a reinforcing means extending at an angle across said open space and having its ends integrally connected with said side members, substantially as and for the purposes set forth.

2. A hair-waver, comprising, a pair of side members and closing end members at the respective ends of said side members, all being integrally connected and arranged to provide an open space between said members, and a 75 centrally - disposed cross-bar extending at an angle across said open space having its ends integrally connected with the said side members, substantially as and for the purposes set forth.

3. A hair-waver, comprising, a pair of side members and closing end members, a flexible band attached to one of said end members, a reëntrant angle at the other end member, all being integrally connected and arranged to 85 provide an open space between said members, and a reinforcing means extending at an angle across said open space and having its ends integrally connected with said side members, substantially as and for the purposes set forth. 90

4. A hair-waver, comprising, a pair of side members and closing end members, a flexible band attached to one of said end members, a reëntrant angle at the other end member, all being integrally connected and arranged to 95 provide an open space between said members, and a centrally-disposed cross-bar extending at an angle across said open space having its ends integrally connected with the said side members, substantially as and for the pur- ico poses set forth.

5. A hair-waver, comprising, a pair of side members 2 and 3, a closing end member 4 at the one end of the waver, and a reentrant angle at the other end of the waver, all being in- 105 tegrally connected and arranged to provide a hair-waver having closed ends and formed with an open space between said closed ends and the side members over which the hair is arranged to provide a free circulation of air between the 110 strands of hair to prevent heating or sweating, the said reentrant angle extending into the said open space between the said side members, and adapted to exceive a holding-band for retaining the hair in a flat body when rolled 115 over the side members, substantially as and for the purposes set forth.

6. A hair-waver, comprising, a pair of side members 2 and 3, a closing end member 4 at the one end of the waver, and a reëntrant an- 120 gle at the other end of the waver, all being integrally connected and arranged to provide an open space between said closed ends and the side members over which the hair is arranged to provide a hair - waver having closed ends 125 and formed with a free circulation of air between the strands of hair to prevent heating or sweating, the said reëntrant angle extend-

ing into the said open space between the said side members, and a holding-band attached to the said closing end member 4, and a loop on said band adapted to be sprung into said re-entrant angle for retaining the hair in a flat body when rolled over said side members, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 7th day of May, 1903. ALBERTINE DREÉS.

Witnesses:

FREDK. C. FRAENTZEL, GEO. D. RICHARDS.