No. 830,372. PATENTED SEPT. 4, 1906.

A. SCHARER.

HAIR WAVING DEVICE.

APPLICATION FILED AUG. 25, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

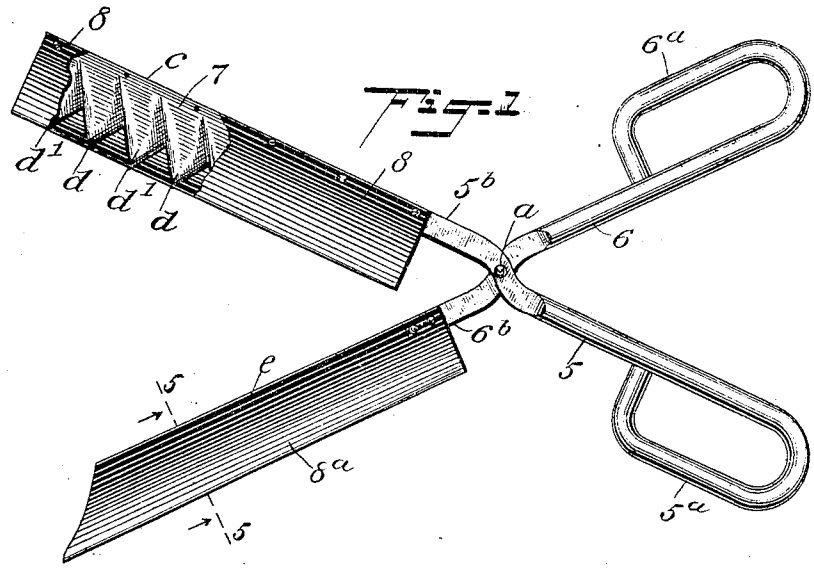


Fig. 2.

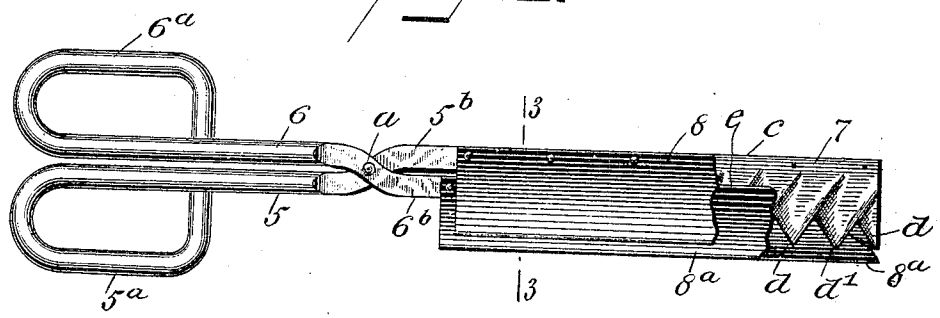


Fig. 3.

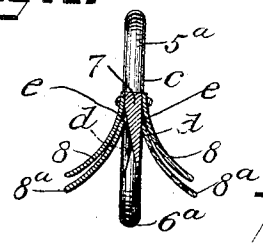


Fig. 5.

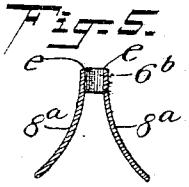
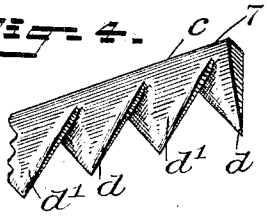


Fig. 4.



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2 SHEETS—SHEET 2.

Fig. 6.

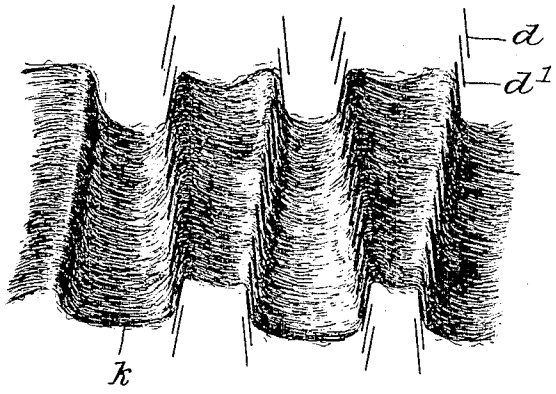
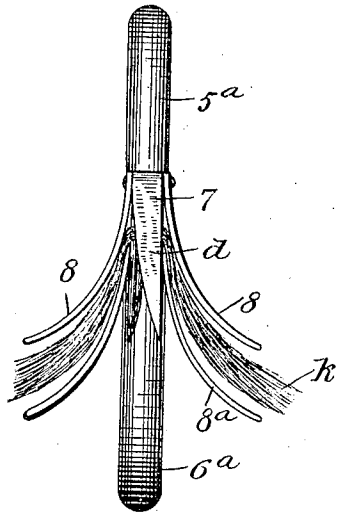


Fig. 7.



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ARNOLD SCHARER, OF NEW YORK, N. Y.

HAIR-WAVING DEVICE.

No. 830,372. Specification of Letters Patent. Patented Sept. 4, 1906.

Application filed August 25, 1905. Serial No. 275,746.

To all whom it may concern:

Be it known that I, ARNOLD SCHARER, a citizen of the Republic of Switzerland, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Hair-Waving Device, of which the following is a full, clear, and exact description.

This invention relates to a class of tonsorial instruments employed for giving human hair an undulating or wave-like appearance, and more particularly for producing on the front portion of a woman's hair the flat wave known as the "Marcel" style for hair-dressing. The Marcel wave is unique in conformation in that it gives the forebands of the hair a zigzag undulation laterally and without protrusion, the waves on successive bands being reversed in order.

The devices heretofore employed for producing the Marcel coiffure have been found unsatisfactory in service, they being either imperfect in operation, difficult to manipulate for use on one's own hair, or liable to cut or otherwise injure the hair when successively used.

The object of my present invention is to provide novel features of construction for a hair-waving instrument which will produce the Marcel wave in reversed order when two of said instruments are used successively, said mainly similar tools being extremely simple, well adapted for self-application to the hair, enabling the quick and reliable production of the peculiar coiffure, and that will avoid injury to the hair or person of the user.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of the improved instrument broken away to expose the teeth of a novel comb which constitutes the main feature of the invention. Fig. 2 is a side view of a nearly similar instrument, broken away and exposing a comb the teeth of which trend in an opposite direction from the teeth on the comb shown in Fig. 1. Fig. 3 is a transverse sectional view of details shown in both instruments, taken substantially on the line 3 3 of Fig. 2. Fig. 4 is a detached perspective view of an end portion of a comb that is a dominant feature of the invention, and Fig. 5 is a transverse sectional view on the line 5 5 in Fig. 1. Fig. 6 represents a lock of hair which has been waved with the device, and in this view the teeth are represented diagrammatically, so as to indicate how they operate to produce the wave. Fig. 7 is an end view of the device and showing the hair passing therethrough.

The nearly similar instruments represented in Figs. 1 and 2 have each two handle members 5 6, that are respectively provided with a bowed end portion 5^a 6^a for convenient manipulation of the complete instrument, the handle members 5 having each a limb 5^b extended in alinement therewith, said limbs being flattened and bent into S form edgewise near the respective handle member 5^a. There is a short flat limb 6^b formed on the handle member 6^a and bent edgewise similarly to the bend on the limb 5^b, and these bent portions on the limbs 5^b 6^b for each instrument are lapped together and pivoted where they cross each other, as shown at *a*, thus disposing the short limbs 6^b below the respective limbs 5^b, as is shown in Figs. 1 and 2.

Referring to Fig. 1, it will be seen that a comb 7 is formed integral with or is secured upon the limb 5^b, said comb, which for effective service is preferably formed of metal that may be heated without oxidation, being provided with a straight back edge *c*, from which extend two sets of teeth *d d'*. The teeth *d d'* are essentially similar in form, they having V shape edgewise and an equal length, thus disposing their angular points in a plane parallel to the back edge *c*. The inner surfaces of the teeth *d d'*, which are adjacent, slope laterally toward their points, so that the teeth *d* occupy a plane parallel with the teeth *d'* and slightly spaced therefrom at their angular points, the teeth in one set alternating with those in the other set. As indicated in the drawings, the teeth *d* of one set are separated from those of the other set by spaced notches that are diagonal to the plane of the back edge *c* and also trend diagonally from one side of the comb-body to the other side of the same, giving an oblique trend to all the teeth of the comb. In other words, the teeth overlap each other and are inclined to the direction in which they extend as a row. Upon the opposite sides of each limb 5^b a wing-plate 8 is secured, these plates, of similar shape, diverging toward their free edges, which extend somewhat

below the points of the comb-teeth, as shown clearly in Fig. 3, and it will be seen that the space between each wing-plate and the side surfaces of the comb-teeth opposite thereto gradually converges toward the back bar of the comb. Upon each side of the short limb 6^b on each instrument a wing-plate 8^a is secured by one end thereof and thence extends straightaway from the limb which serves to space apart the upper straight edges of said wing-plates in parallel planes. It will be seen that the bow members 5^a 6^a enable an operator to grasp the instrument and manipulate the same freely, so that the comb 7 may be passed between the upper edges *e e* of the wing-plates 8^a and the latter be caused to pass between the wing-plates 8, as clearly shown in Fig. 3.

As already mentioned, the instruments shown in Figs. 1 and 2 are duplicates with but a single exception, this difference consisting in giving the oblique trend to the teeth on one comb a direction directly opposite from that given the teeth on the other comb, this being necessary to enable the production of waves on successive bands of hair kinked in opposite directions, that is a peculiarity of the Marcel wave.

In use, assuming that the instruments are heated a proper degree, the hair is brushed smoothly, and the first band to be operated upon, which is adjacent to the central parting of the hair at the front, is passed between the opened instrument so that it will be disposed at right angles to the comb. The wings 8 are now closed toward the wings 8^a, and sufficient pressure is applied to cause the subdivided portions of the band of hair to be compressed within the spaces between the comb-teeth, and as the adjacent sides of said teeth trend obliquely to the plane of the comb-back it will be seen that the hair band will be correspondingly waved and when released from the instrument will present a zigzag undulatory appearance in accord with the style of coiffure desired. The instrument first applied is placed over the source of heat to renew its heat, and the other one is in a like manner applied upon the next band of hair in sequence, which will produce a waved appearance, the undulations of which are in diagonally opposite directions from those of the waves first produced on the fore band of hair. Having completed the operation of waving the hair on one side of the parting, the same method of manipulating the improved instruments will produce duplicate waves on the other side of said parting, thus finishing the hair-waving operation. It will be seen that with a little practice the instruments may be self-applied and the hair be waved quickly and satisfactorily by their means.

In Fig. 6, K represents a lock of hair in connection with several rows of teeth, indicating the different applications to the lock and representing how the adjacent applications of the device are made with combs having their teeth arranged in reversed order, so as to produce a reversed wave.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A hair-waving instrument, embodying two handle-bars that are crossed and pivoted together where they lap, a comb having angular teeth and extended from one handle-bar, diverging wings on the sides of the comb, and extensions on the other handle-bar between which the comb passes when the handle-bars are closed toward each other.

2. A hair-waving instrument, embodying two handle-bars, looped members on the ends of said bars, limbs on the handle-bars that are bent and crossed at the bends, a pivot passed through said bends, a comb formed on one of said limbs and having angular teeth that trend diagonally to the straight back of said comb, two wing-plates attached to the said comb and diverging therefrom so as to produce equal spaces between the comb-teeth and free side edges of said wing-plates, and two spaced wing-plates secured by the ends thereof on the other limb and projected therefrom in parallel planes, thus permitting the comb to pass between said wing-plates when the wing-plates on the respective limbs are closed toward each other.

3. A hair-waving instrument, embodying two handle members having bowed ends thereon, a long limb and a short limb extended from the handle members having **S**-shaped bends that are lapped and pivoted together, a comb formed on said long limb having **V**-shaped teeth separated from each other by diagonal cuts and arranged in adjacent parallel lines at their points, two wing-plates projecting downward and outward from the respective sides of the comb-back, and two similar wing-plates disposed substantially parallel to each other, and permitting the comb-teeth to pass between them when the handle members are closed.

4. In a hair-waving instrument of the character described, in combination, a comb having angular teeth that are separated by diagonal spaced cuts which trend laterally and obliquely to the plane of the comb-back, and a member coöperating therewith to force the hair between said teeth.

5. In a hair-waving instrument of the character described, a comb having **V**-shaped teeth separated by diagonal cuts trending in parallel planes, and disposed obliquely in two adjacent rows, in combination with a member operating to press the hair against said teeth.

6. In a hair-waving instrument of the character described, a comb having angular teeth separated by diagonal cuts, wings de-

pending from the back of the comb at each side thereof, said wings diverging toward their free edges, and a coöperating member adapted to force locks of hair against said teeth and said wings.

7. In a hair-waving instrument, of the character described, the combination with two supporting-limbs adapted for rocking movement on each other, of a comb on one of said limbs having angular teeth the adjacent edges whereof are oblique to each other, depending divergent wings on the sides of the comb, and spaced wings on the other of said limbs, between which the comb passes when the pairs of wings are closed toward each other.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ARNOLD SCHARER.

Witnesses:
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EVERARD B. MARSHALL.