July 4, 1939. R. J. CRAWFORD 2,164,387

HAIR CURLING DEVICE

Filed Aug. 11, 1938

Fig. 1.

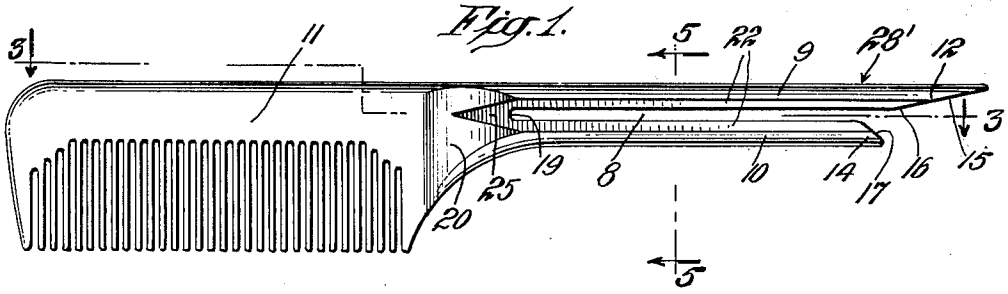



Fig. 2.

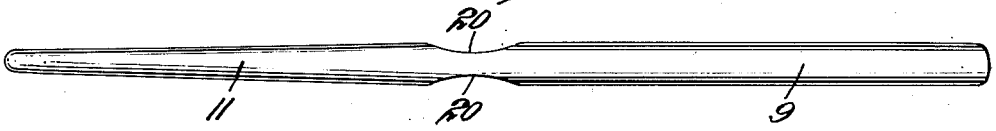



Fig. 3.

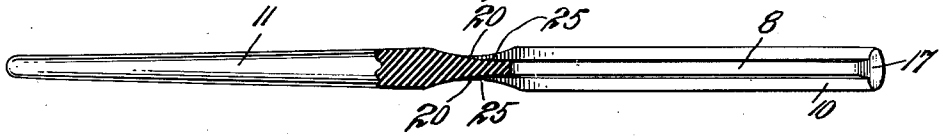
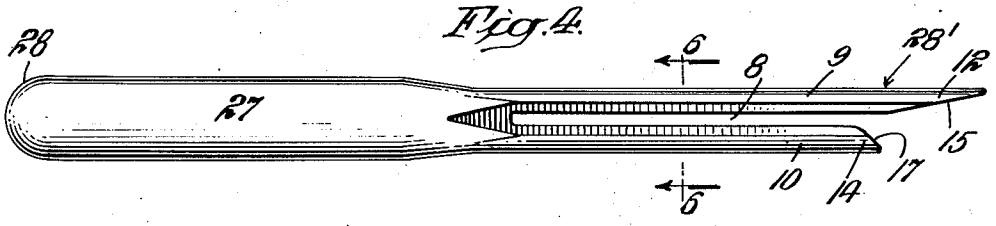



Fig. 4.



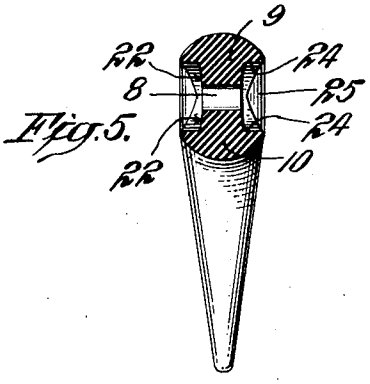




Fig. 5.

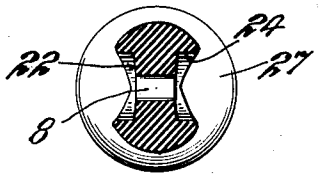



Fig. 6.

INVENTOR
ROBERT J. CRAWFORD
BY
English & Studwell
ATTORNEYS

Patented July 4, 1939

2,164,387

# UNITED STATES PATENT OFFICE

2,164,387

## HAIR CURLING DEVICE

Robert J. Crawford, Jersey City, N. J., assignor to American Hard Rubber Company, New York, N. Y., a corporation of New York

Application August 11, 1938, Serial No. 224,284

4 Claims. (Cl. 132—35)

The invention relates to an improvement in devices for forming curls or ringlets in hair, and more particularly to an improvement in such devices especially adapted for forming without the application of heat, cylindrical, tightly wound curls arranged to lie close to the head and which are temporarily held in position (until the setting of the hair dressing lotion) by mechanical means.

One object of the invention is to produce an improved hair curling device of this class by means of which curls of the desired shape and size may be more accurately and expeditiously formed than by the use of such devices as heretofore constructed. A specific object of the invention is to so construct the hair-receiving end of the device that the requisite quantity of hair, that is, number of strands making up the tress or curl, may be readily picked up by the operator and slid into the curling device without liability of bunching or jamming the hair. Further objects of the invention are to provide the improved hair curling device with means to facilitate the placing or binding of the usual pliable metal clip or curler about the newly formed tress or curl, and also with means to facilitate the forming of the curl. To these ends the invention consists in an improved hair curling device hereinafter fully described and particularly pointed out in the appended claims.

In the accompanying drawing illustrating the invention, Fig. 1 is a side elevation of the improved hair curling device shown connected with a comb; Fig. 2 is a top plan of the parts shown in Fig. 1; Fig. 3 is a longitudinal section taken along the line 3—3 of Fig. 1; Fig. 4 is a side elevation of the improved curling device shown connected with a handle of usual form; Fig. 5 is a transverse section taken on the line 5—5 of Fig. 1; and Fig. 6 is a transverse section taken on the line 6—6 of Fig. 4.

In its essential features the improved hair curling device comprises an elongated, substantially cylindrical bifurcated bodkin and handle means for holding and manipulating the prongs or jaws of the bodkin in forming the curls. The handle means may take the form of a comb, as shown in Fig. 1, or it may be simply a handle of usual construction, as shown in Figs. 4 and 6.

In the form of the invention shown in Fig. 1, the improved hair curling device comprises an elongated, substantially cylindrical bodkin divided by the longitudinal slot 8 into two prongs or jaws 9 and 10, and a handle in the form of a comb 11 connected with the inner end of the bodkin. It will be noted that the slot 8 divides the bodkin into two prong members which are of substantially the same cross section, as seen in Fig. 5. The outer free ends of the prongs, however, are of unequal length, the outer end 12 of the prong 9 extending a considerable distance beyond the outer end 14 of the prong 10. The inner surfaces of the ends 12 and 14 of the prongs are bevelled or flared from the outer end of the slot 8 outwardly to the extremities of the prongs, and it will be noted that the bevel 15 of the prong 9 terminates inwardly at the point 16 which is substantially in the transverse plane of the extremity of the prong 10. In this connection it will also be noted that the bevel 15 is long and of slight taper, whereas the bevel 17 is relatively short and of sharp taper. The reason for this arrangement is to facilitate the selective lifting of a lock or strand of hair of the requisite portions and sliding it into the slot 8, the bevel 15 acting as the selecting and lifting member and the bevel 17 acting in conjunction therewith to direct or guide the selected quantity of hair into the slot 8. Moreover, the relatively large surface of the bevel 15 affords means for spreading the selected hair strands into proper thickness to enter the slot 8, thereby avoiding bunching or crowding of the hair at the entrance of the slot.

To facilitate the turning of the bodkin with the selected tress or lock of hair in the slot 8 to form the desired curl, the inner end of the bodkin at substantially the closed end 19 of the slot 8 and at the inner end of the comb 11, is grooved, as shown at 20, to provide finger-receiving or gripping recesses whereby the device as a whole may be more conveniently and firmly gripped and thereby more readily turned during the curl-forming operation.

In forming curls of some types, for example, cylindrical curls which are arranged to lie close to the head, and be kept in that position, it has been found desirable to place a binding or curl-holding means about the curl until the dressing lotion which is applied to the hair before the curling thereof has had opportunity to set. The improved hair curling device of the present invention provides means for more readily placing a curl holding metal strip about the newly-formed curl. To this end the bodkin is provided longitudinally adjacent the two edges of the slot 8 with a groove which is substantially flat, as shown at 22 in Fig. 5, and is provided with substantially vertical edges, as indicated at 24. At its inner end at the point where the metal strip-receiving groove enters the recess 20 it curves outwardly, as indicated at 25 in Fig. 3, so as to direct the

end of the metal strip outwardly, thereby facilitating taking hold of it and bending it backwardly upon the curl which has just been formed.

The form of the invention shown in Figs. 4 and 6 is exactly the same with respect to the bodkin part of the improved hair curling device as the form of the invention shown in the other figures, and this form of the invention differs from the other only with respect to the handle which is here shown as a cylindrical member 27 having a rounded outer end 28.

In using the improved hair curling device to produce the desired curl and hold it temporarily, the device is grasped by the handle portion, either the comb 11 shown in Fig. 1 or the handle 27 shown in Fig. 4. The outer bevelled end of the prong 9 with the back 28' thereof toward the head, is first slipped under the chosen quantity of hair strands to constitute the desired tress or curl. This action may take place relatively close to the head or at a convenient point away. The relatively long and slight bevel 15 of the outer end 12 of the prong 9 facilitates the selection of the requisite quantity of hair and the directing of it into the slot 8, the bevel 17 acting to assist the strands of hair into the slot 8. The device is now drawn along the length of the selected tress of hair, away from the head, until the prongs are almost at the extreme ends of the hair strands. A thin pliable metal strip slightly smaller in cross section than the grooves 24 and long enough to extend outwardly from both ends of the slot 8 is now pressed into either side of the hair curling device thereby forcing down the strands of hair into one of the corners of the groove 22, and is held in place by one of the fingers as the operator begins to turn or roll the device toward the head in order to form the curl, the prongs with the metal strip in the groove being entirely enclosed by the tress of hair by the action of rolling the latter to form the curl. When the device has been turned or rolled close to the head, the exposed ends of the pliable metal strip are then bent outwards and then inwardly toward and over each other to enclose tightly the rolled lock of hair, thus retaining the curl in its rolled condition. The two prongs of the bodkin are now withdrawn by pulling them transversely of the strands of hair, that is, longitudinally of the cylindrical curl, thereby leaving the curl locked in the bent metal strip and resting against the head. The newly formed curl rotates backwards slightly in such a way that the metal strip lies against the head and is not exposed to view.

It will have been observed that since the middle portion of the pliable metal strip was wound with the bodkin in the center of the curl, whereas the outer exposed ends of the strip were bent over upon one another on the outside of the curl, the curl will be entirely enclosed at one point by the metal strip, by which it will be held firmly in position until the setting of the hair dressing lotion.

Having thus described the invention, what I claim as new is:

1. A hair curling device comprising an elongated, substantially cylindrical bodkin slotted longitudinally into two prongs, a handle at the inner closed end of the prongs, the outer free ends of the prongs being bevelled from the outer end of the slot outwardly to the ends of the prongs, one of said prongs being longer than the other, said bodkin being grooved adjacent the slot and on both sides thereof to provide a substantially flat, longitudinal recess to receive a flat elongated curl holder, and the inner ends of the bodkin and the handle being grooved transversely to provide a finger-receiving recess.

2. A hair curling device comprising an elongated bodkin slotted longitudinally into two prongs, and a handle for the bodkin, the outer ends of the prongs being of unequal length and being bevelled on their inner surfaces, said bodkin being provided adjacent the longitudinal edges of the slot with a groove for receiving a flat elongated curl holder, and the point of junction between the inner end of the bodkin and the inner end of the handle being provided with a finger-receiving recess.

3. A hair curling device comprising an elongated bodkin slotted longitudinally into two prongs, and a handle for the bodkin, the outer free ends of the prongs being of unequal length and being bevelled from the outer end of the slot outwardly to the ends of the prongs, and the inner ends of the slotted part of the bodkin and the inner end of the handle being provided with a transverse finger-receiving recess.

4. A hair curling device comprising an elongated bodkin slotted longitudinally into two prongs and a handle for the bodkin, the outer ends of the prongs being beveled on their inner surfaces, said bodkin being grooved adjacent the slot and on both sides thereof to provide a substantially flat longitudinal recess to receive a flat elongated curl holder.

ROBERT J. CRAWFORD.