Dec. 17, 1935. M. KIESSLING 2,024,798

HAIR CURLER

Original Filed Aug. 21, 1934

Fig. 1.

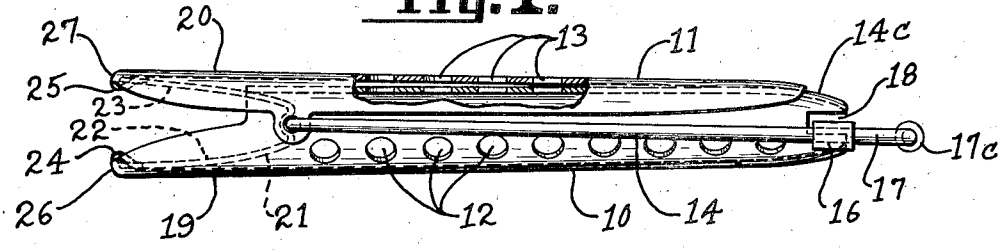


Fig. 2.

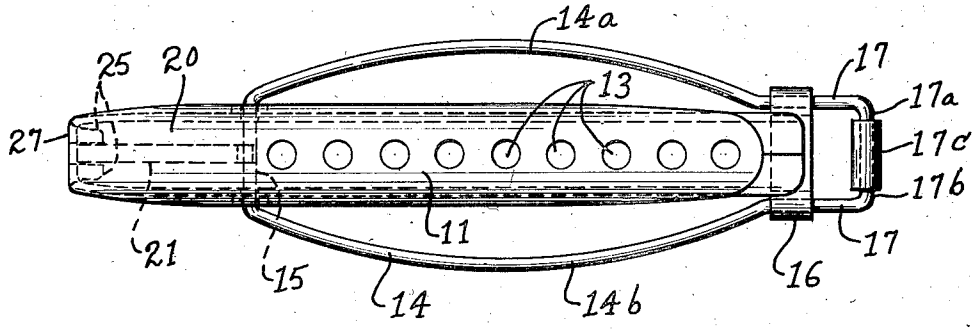
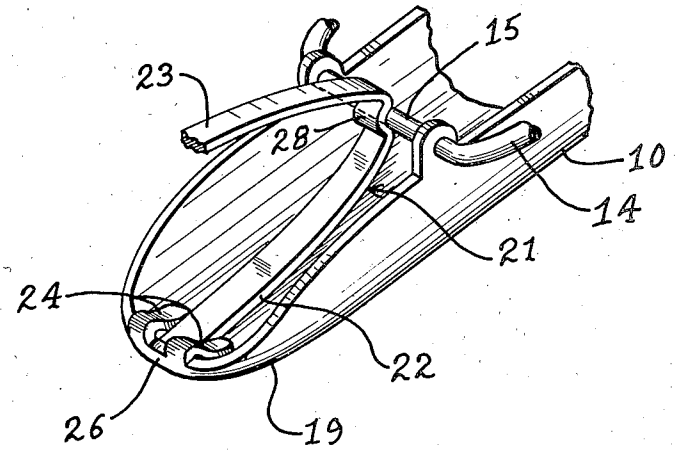


Fig. 3.



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HAIR CURLER

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Original application August 21, 1934, Serial No. 740,791. Divided and this application August 6, 1935, Serial No. 34,897

7 Claims. (Cl. 132—41)

This invention relates to hair curlers, and more particularly to a curler which may be applied to the hair for any desired length of time, as during rest periods, in order to allow the hair to become "set" upon the curling device.

This application is a division of applicant's prior co-pending application, Serial No. 740,791, filed August 21, 1934, for Hair curlers.

One object of this invention is to provide a hair curler comprising a tubular body member to which are pivotally connected a jaw and a locking loop, and in which a portion of said loop is passed through said body member to provide a common fulcrum for itself and the pivoted jaw.

A further object is to provide a hair curler of the above nature in which the body member and jaw are provided with handle sections extending beyond the fulcrum, and a U-shaped leaf spring is located between said handle sections for urging the jaws to closed position, the ends of said spring being anchored by two pairs of lugs bent over from the extremities of said handle sections.

A further object is to provide a hair curler of the above nature which will be simple in construction, inexpensive to manufacture, easy to apply and manipulate, compact, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, there has been illustrated on the accompanying drawing, one form in which the invention may be conveniently embodied in practice.

In the drawing:

Fig. 1 represents a side elevational view of the hair curler device, with a section broken away.

Fig. 2 is a top plan view of the same.

Fig. 3 is a fragmentary perspective view of the handle end of the tubular body, showing how the U-shaped spring is anchored in position.

Referring now to the drawing in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates a hollow tubular body section having a tapered curved clamp or "alligator" jaw 11 hinged thereto, said jaw being concavo-convex in cross-section so as to tightly embrace the upper portion of the body 10.

The tubular body member 10 is provided with a series of perforations 12 in circumferentially spaced rows extending substantially throughout its entire length, and which are adapted to permit air to circulate therethrough for drying the hair. The alligator jaw 11 is likewise formed with a series of spaced perforations 13 which are adapted to register with the row of perforations in the body member 10.

The hair curler also includes a wire loop 14 which is provided with a transverse end section 15 passing through the body 10, and serving as a common fulcrum for pivotally connecting the loop 14 and the jaw 11 to the body 10. The wire loop 14 is provided with a pair of opposed bowed sections 14*a* and 14*b* which merge at a point adjacent the nose end 14*c* of the body 10 into a pair of parallel straight sections 17, the forward ends 17*a* and 17*b* of which are turned inwardly into abutted engagement. The inturned ends 17*a* and 17*b* are adapted to be held secured together by means of a cylindrical sleeve member 17*c* crimped or otherwise secured thereabout.

The outer free end of the loop 14 is provided with a slidable bar 16 having its ends curled around the straight parallel sections 17, and which is adapted to be detachably engaged in a pair of opposed slots 18 formed in the open front nose 14*c* of the body 10, thus locking the loop 14 rigidly upon said body 10.

The tubular body member 10 is provided at its rear end with an integral rearwardly extending finger grip portion 19, and the alligator jaw 11 is provided with a similar rearwardly opposed finger grip portion 20, and when said portions 19 and 20 are manually squeezed together, the opposite end of the alligator jaw 11 will be separated from the body portion 10. The jaw 11 is adapted to be normally held in closed position with respect to the body 10 by means of a substantially U-shaped leaf-spring 21 having a pair of diverging ends 22 and 23 positioned within the folds of the finger grip portions 19 and 20, respectively.

In order to provide a secure anchorage for the U-shaped spring 21 in its assembled position, each finger grip portion 19 and 20 is provided at its end with a pair of spaced longitudinally extending lugs 24 and 25 of identical construction formed integral with said body 10 and jaw 11, respectively. The lugs 24 and 25 are connected at their bases with transverse end flanges 26 and 27. The lugs 24 and 25 are bent inwardly into contact with the concave body of the finger grip portions 19 and 20 and are adapted to engage opposite edges of the extremities of the diverging ends 22 and 23 of the spring 21. The end flanges 26 and 27 serve to hold the ends of the spring 21 against longitudinal movement, and the lugs 24 and 25 retain said ends against lateral movement.

The crown or intermediate section of the spring 21 is provided with a reentrant arch 28 which is adapted to embrace the mid-portion of the looped

hinge pin 15. It will be obvious from the above construction that the spring will be firmly held against any forces tending to displace it from position.

Operation

In operation, when it is desired to curl a tuft of hair, the sliding bar 16 will first be slipped forwardly on the parallel sections 17 to a position free of the slots 18, whereupon the loop 14 will be permitted to swing downwardly to open position, and by manually pressing the finger grip portions 19 and 20 together, the nose of the alligator jaw 11 will be swung upwardly against the influence of the spring 21. The loose ends of the tuft of hair, preferably moistened, may then be slipped underneath the jaw 11 to a position adjacent its hinging fulcrum 15, after which the jaw 11 will be allowed to snap back into normal clamping position shown in Fig. 1.

The hair curling device will then be twisted the desired number of times for coiling the hair tightly about the body 10 and the exterior surface of the jaw 11. In performing the above operation, the wire loop 14 will preferably be swung to a position substantially at right-angles to the body member and be conveniently used as a handle for holding the same.

After the twisting operation has been completed, the wire loop 14 will be swung back into normal parallel alinement with the body 10, and the sliding bar 16 will be forced rearwardly into locking engagement within the slots 18. In this position, the bowed portions 14*a* and 14*b* of the wire loop will snugly embrace the hair twisted about the body 10 and the jaw 11.

If desired, a tighter twist may be provided in the hair by keeping the alligator jaw 11 open during the entire operation of twisting the hair about the body 10, after which the jaw 11 will be released and permitted to clamp thereupon.

While there has been disclosed in this specification one form in which the invention may be embodied, it is to be understood that this form is shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosure but may be modified and embodied in various other forms without departing from its spirit. In short, the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new and for which it is desired to secure Letters Patent is:

1. In a hair curling device, a tubular body, a jaw member shaped to fit against and hinged between its ends to said body, said body and jaw members having relatively short handle sections on one end, a U-shaped strip metal spring located between said handle sections to urge the opposite ends of said body and jaw toward one another to clamp upon a tuft of hair, and a plurality of bent-over lugs extending inwardly from the sides of said body and jaw for holding said spring means in its assembled position, said lugs embracing the legs of said spring.

2. In a hair curling device comprising two cooperating members pivotally connected together intermediate the ends thereof, a U-shaped spring located between said members and engaging the pivot thereof to urge them to closed position, and a pair of bent-over lugs formed at the adjacent extremities of each of said members and adapted to embrace opposite legs of said spring to prevent longitudinal and lateral displacement of the latter.

3. In a hair curling device comprising two cooperating hair clamping members, a hinge pin for pivotally connecting said members together intermediate the ends thereof, a U-shaped spring located between said members at the outer sections of two adjacent ends thereof to urge the members toward contacting engagement, each of said clamping members having a pair of spaced lugs at the extremities thereof adapted to form a secure anchorage for the legs of said spring, and means at the crown end of said spring for embracing said hinge pin in such a manner as to centralize said spring.

4. In a hair curling device, a tubular body, a concave jaw member shaped to fit against said body, both of said members having adjacent finger gripping portions at one end and being pivotally connected together intermediate their opposite ends, a U-shaped leaf-spring disposed between said finger gripping portions for urging said jaw member into contact with said body member, each of said finger gripping portions having a pair of spaced bent-over lugs extending inwardly from the ends of said member in a longitudinal direction for anchoring the ends of said spring in its assembled position against lateral movement.

5. In a hair curling device, a tubular body, a concave jaw member shaped to fit against said body, both of said members having adjacent finger gripping portions at one end and being pivotally connected together intermediate their opposite ends, a U-shaped leaf-spring disposed between said finger gripping portions for urging said jaw member into contact with said body member, each of said finger gripping portions having a pair of spaced bent-over lugs extending inwardly from the ends of said member in a longitudinal direction for anchoring the ends of said spring in its assembled position against lateral movement, said lugs being connected at their base sections by transverse flanges which serve to prevent longitudinal movement of the legs of said spring.

6. In a hair curling device, a body member, a cooperating jaw member pivoted to said body member, both of said members having finger gripping portions at adjacent ends, a U-shaped leaf-spring disposed between said finger gripping portions for urging said members to closed position, said finger gripping portions having upstanding flanges, and each flange having at its end a pair of spaced lugs bent over into engagement with the interior bases of said gripping portions, said lugs being adapted to embrace the opposite edges of said legs to prevent lateral movement thereof.

7. In a hair curling device, a tubular body, a jaw member shaped to fit against and hinged between its ends to said body, said body and jaw members having relatively short handle sections on one end, a U-shaped strip metal spring located between said handle sections to urge the opposite ends of said body and jaw toward one another to clamp upon a tuft of hair, and means extending inwardly from the sides of said body and jaw for holding said spring means in its assembled position, said means embracing the legs of said spring

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