

Dec. 17, 1935.

M. KIESSLING

2,024,771

HAIR CURLER

Filed Aug. 21, 1934

Fig. 1.

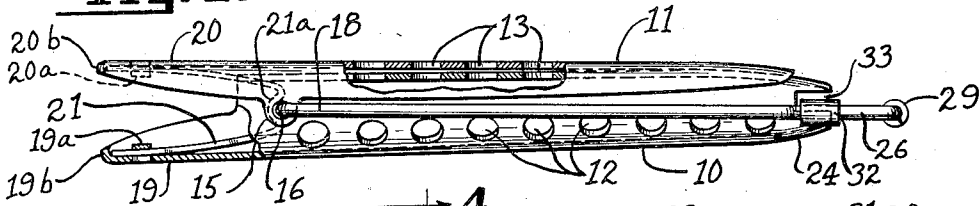


Fig. 2.

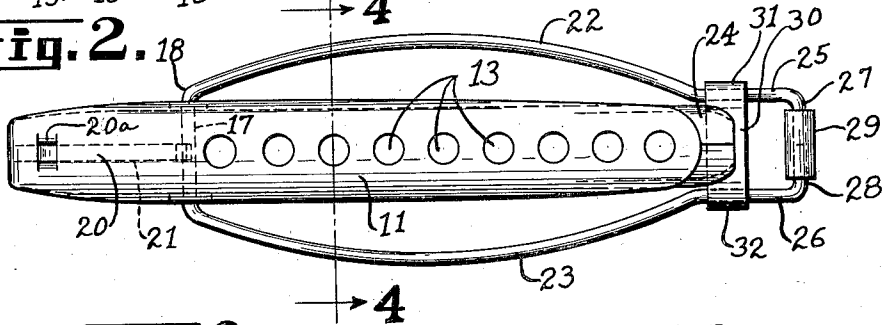


Fig. 3.

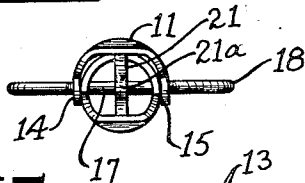


Fig. 4.

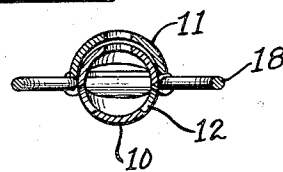


Fig. 5.

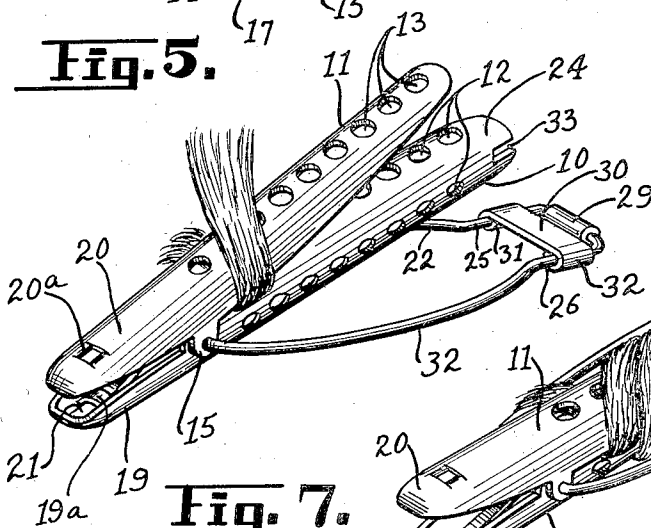


Fig. 6.

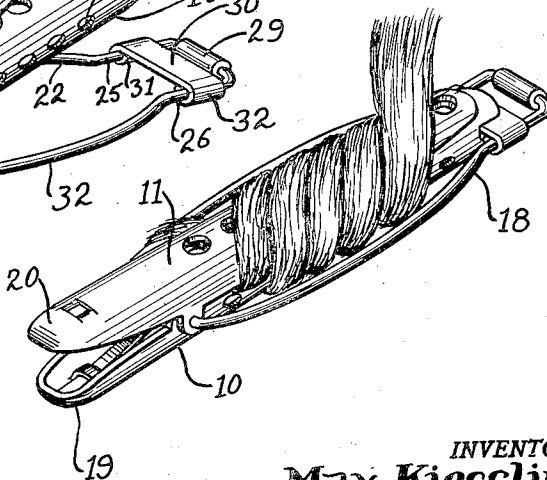
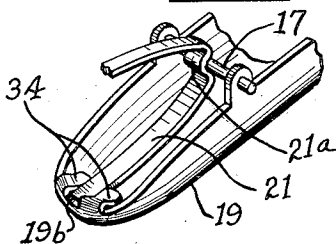


Fig. 7.



INVENTOR
Max Kiessling
BY *H. S. Manning*
ATTORNEY

UNITED STATES PATENT OFFICE

2,024,771

HAIR CURLER

Max Kiessling, Waterbury, Conn., assignor to
Hayes-Donahue Company, Waterbury, Conn., a
corporation of Connecticut

Application August 21, 1934, Serial No. 740,791

12 Claims. (Cl. 132—41)

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

One object of this invention is to provide a hair curler of the above nature having novel means for hinging the several parts together, and locking the same upon a twisted tuft of hair.

A further object 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 the locking loop serves as the pivot pin for itself and the jaw.

A further object is to provide a hair curling device of the above nature in which the hinged wire loop is adapted to be locked in hair-curling position by means of a sliding locking bar embracing said loop and engaging in suitable slots in the adjacent end of the hair curler.

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 have been illustrated on the accompanying drawing two forms in which the invention may be conveniently embodied in practice.

In the drawing:

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

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

Fig. 3 is a left-hand end view of the same.

Fig. 4 is a transverse sectional view taken along the line 4—4 of Fig. 2, looking in the direction of the arrows.

Fig. 5 is a perspective view of the hair curling device as it appears during the initial step of locking a tuft of hair therein.

Fig. 6 is a similar view showing the device after the tuft of hair has been locked thereon in twisted condition.

Fig. 7 is a fragmentary perspective view of the handle end of the tubular body, showing a modified construction for holding the spring in place.

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 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 upper row of perforations in the body member 10.

In order to hinge the body 10 and the alligator jaw 11 together, the latter member is provided with a pair of lugs 14 and 15 depending from its lower edge, and having apertures 16 therein, which are adapted to register with similar apertures in the body 10, and the intermediate section 17 of the wire loop 18 is transversely positioned therein. The section 17 thus constitutes a common hinge pin for pivotally connecting the jaw 11 and the wire loop 18 to the body member 10.

The tubular body member 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 extending 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, as shown in Fig. 5. The jaw 11 is adapted to be normally held in closed position upon the body 10 by means of a substantially U-shaped leaf-spring 21 having diverging ends positioned within the folds of the finger grip portions 19 and 20.

In order to provide a secure anchorage for the U-shaped spring 21 in its assembled position, the finger grip portions 19 and 20 are provided with a pair of sheared integral strap loops 19a and 20a formed inwardly from the body of said grip portions 19 and 20 (see Figs. 1 and 5). In assembly, the arms of the spring 19 are slipped through the strap loops 19a and 20a until the tip ends of the spring abut against a pair of flanges 19b and 20b provided at the extreme ends of the finger grip portions 19 and 20. The crown end of the spring 21 is provided with a re-entrant arch 21a which is adapted to embrace the intermediate section of the loop hinge pin 17. It will be obvious from the above construction that the spring will be firmly held against any forces tending to displace it from position.

The wire loop 18 is formed with a pair of opposed bowed sections 22 and 23, which merge at a point adjacent the nose end 24 of the body 10 into a pair of parallel straight sections 25 and 26, the forward ends 27 and 28 of which are turned inwardly into abutted engagement. The

inturned ends 27 and 28 are adapted to be held secured together by means of a cylindrical sleeve member 29 crimped or otherwise clamped thereabout.

In order to lock the wire loop upon the nose 24 of the body 10, provision is made of a sliding bar 30 having its ends curled around the straight sections 25 and 26 to form loops 31 and 32, which are adapted to have longitudinal sliding engagement thereupon. When the sliding bar 30 is positioned in its rearmost position, as shown in Figs. 1, 2, and 6, it engages in a pair of opposed slots 33 formed in the nose 24 of the body 10, thus locking the loop 18 rigidly upon said body.

Operation

In operation, when it is desired to curl a tuft of hair, the sliding bar will first be slipped forwardly on the parallel sections 25 and 26 to a position free of the slots 33, whereupon the loop 18 will be permitted to swing downwardly to the open position as shown in Fig. 5, 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 17 as shown in Fig. 5, 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 18 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 18 will be swung back into normal parallel alinement with the body 10, and the sliding bar 30 will be forced rearwardly into locking engagement within the slots 33. In this position, the bowed portions 22 and 23 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.

Fig. 7 shows a modified construction of means for anchoring the jaw operating spring 21 in position. This form is identical with the first form except that the strap loops 19a and 20a are omitted and a pair of spaced lugs 34 are formed integral with each flange 19b and 20b of the finger grips 19 and 20, only one pair of such lugs 34 being shown. The lugs 34 are bent inwardly into contact with the concave body of the finger grips 19 and 20, and are adapted to engage on opposite edges of the extremities of the spring 21.

It is also within the scope of the present invention to employ a pair of spaced inwardly formed nibs or prick punches to embrace the sides of the ends of the spring 21 for holding the latter in position in lieu of the strap loops 19a and 20a or the lugs 34 described above.

While there have been disclosed in this specification two forms in which the invention may be embodied, it is to be understood that these forms are shown for the purpose of illustration only, and that the invention is not to be limited to

the specific disclosures 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 member, a cooperating jaw member and a wire loop member pivoted to said body member, said wire loop having a pair of parallel sections extending beyond the forward end of said body member, said body having a pair of opposed slots provided in its forward end, and a locking bar slidable on said parallel sections and adapted to engage said opposed slots for interlocking said loop and said body.

2. In a hair curling device, a tubular body member, a jaw member and a wire loop member cooperating therewith, said wire loop having a transverse end section engaging in apertures in said body and jaw members and comprising a hinge for pivotally connecting said members together at a common fulcrum point, said wire loop extending beyond the end of said body section and having inturned ends, and means slidably mounted on the sides of said extending loop section for interlocking engagement with said body.

3. In a hair curling device, a body member, a jaw member hinged at a point between its ends to said body member and having a finger engaging portion, a loop member having one end hinged to said body member, and means slidable upon and connected to the other end of said loop member for interlocking engagement with said body member.

4. In a hair curling device, a body member, a jaw member hinged at a point between its ends to said body member and having a finger engaging portion, a loop member having one end hinged to said body member, and means slidable upon and connected to the other end of said loop member for interlocking engagement with said body member, said loop member and said jaw member being pivoted upon a common fulcrum.

5. In a hair curling device, a body member, a spring-pressed jaw member hinged at a point between its ends to said body member and having a finger engaging portion, a substantially rigid loop member having one end hinged to said body member, and means slidable upon and connected to the other end of said loop member and having interlocking engagement with said body member.

6. In a hair curling device, a body member having a slotted end, a jaw member of shorter length than said body member pivoted thereto, means pivoted to said body member for embracing a tuft of hair coiled on said body member when swung up into parallel relation thereto, and means on said hair embracing means for slidable interlocking engagement with the slotted end of said body member.

7. In a hair curling device, a tubular body, a jaw member conformably fitted and hinged to said body, said body and jaw member having handles at one end, a U-shaped leaf-spring located between said handles to urge the opposite ends of said body and jaw toward one another to clamp upon a tuft of hair, and offset eye straps on said body and jaw for holding said spring against lateral twisting.

8. In a hair curling device, a tubular body, a jaw member conformably fitted and hinged to

said body, said body and jaw member having handles at one end, a U-shaped leaf-spring located between said handles to urge the opposite ends of said body and jaw toward one another to clamp upon a tuft of hair, and means on said body and jaw for holding said spring against lateral twisting, said means comprising a pair of strap loops formed inwardly from the handle ends of said body and jaw and embracing the arms of said spring.

9. In a hair curling device, a tubular body, a jaw member, a transverse pin for hinging said body and jaw together, a U-shaped leaf-spring for pressing one end of said body and jaw member upon a tuft of hair located therebetween, the crowned end of said spring having a recess for embracing the hinge pin in such a manner as to centralize said spring.

10. In a hair curling device, a tubular body, a jaw member, a transverse pin for hinging said body and jaw together, a U-shaped leaf-spring for pressing one end of said body and jaw member upon a tuft of hair located therebetween, and means formed at the crowned end of said spring for embracing the hinge pin in such a manner

as to centralize said spring, said latter means comprising a re-entrant arcuate section of said crowned end.

11. In a hair curling device, a tubular body, a jaw member, a transverse pin for hinging said body and jaw together, a U-shaped leaf-spring for pressing one end of said body and jaw member upon a tuft of hair located therebetween, and means formed at the crowned end of said spring for embracing the hinge pin in such a manner as to centralize said spring, the arms of said spring being secured in position by a pair of loops formed inwardly from said body and jaw member.

12. In a hair curling device, a tubular body, a jaw member, a transverse pin for hinging said body and jaw together, a U-shaped leaf-spring for pressing one end of said body and jaw member upon a tuft of hair located therebetween, the crowned end of said spring having a recess for embracing the hinge pin in such a manner as to centralize said spring, the arms of said spring being secured in position by a pair of loops formed inwardly from said body and jaw member.

MAX KIESSLING.