Nov. 27, 1923. **1,475,796**

F. G. CONINE

HAIR CURLER

Filed May 13, 1922

Fig. 1

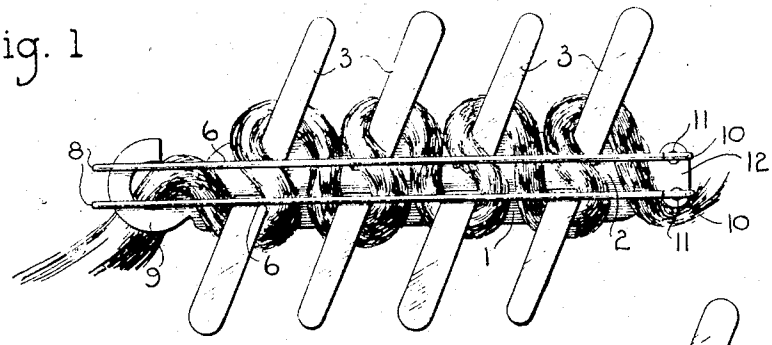


Fig. 2

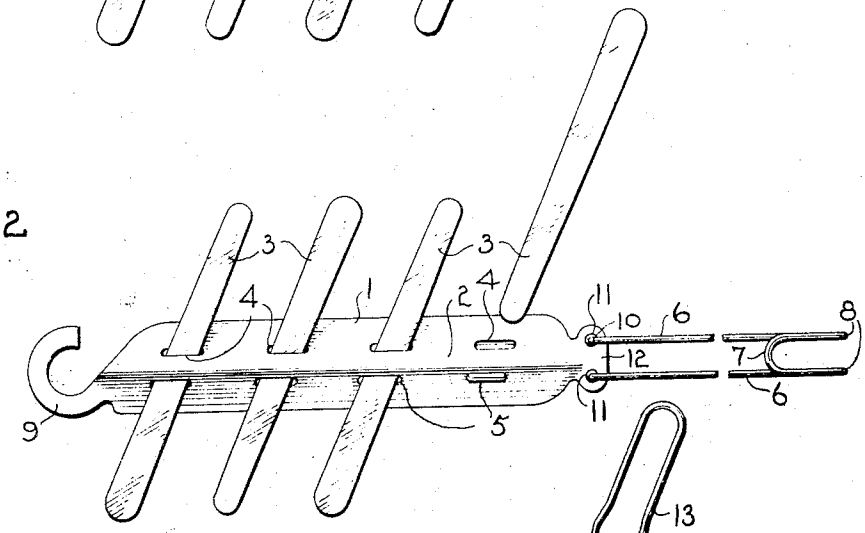
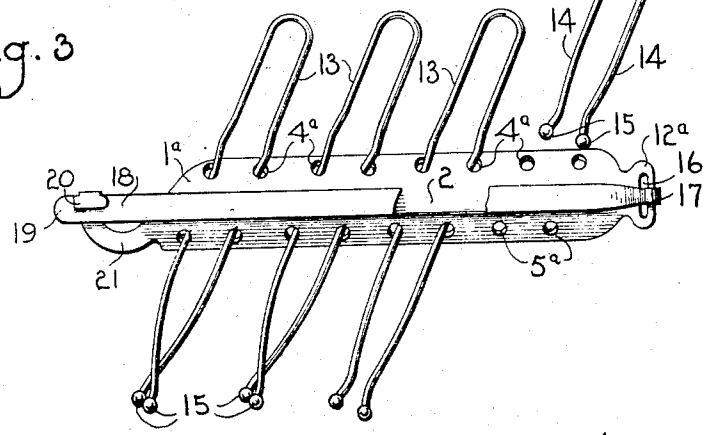


Fig. 3



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UNITED STATES PATENT OFFICE.

FRANCES G. CONINE, OF CHICAGO, ILLINOIS.

HAIR CURLER.

Application filed May 13, 1922. Serial No. 560,612.

To all whom it may concern:

Be it known that I, FRANCES G. CONINE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Hair Curler, of which the following is a specification.

This invention relates to hair curlers, and has for its object to provide a device which is capable of curling locks of hair to produce a flat Marcel wave without the use of heat, and which device may be readily removed from the lock of hair without necessitating the uncurling of the hair whereby the flat Marcel wave remains intact and in the position it assumed on the curler.

A further object of the invention is to provide a simple and practical hair curler for producing a flat Marcel wave, which may be readily applied by a person to her own head without requiring the aid of others, and which is equally as effective as the usual hot Marcel iron but does not injure the hair in any manner.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawing forming part of this specification, with the understanding, however, that the invention is not confined to any strict conformity with the showing in the drawing, but may be changed and modified so long as such changes and modifications mark no material departure from the salient features of the invention as expressed in the appended claims.

In the drawing:—

Fig. 1 is a plan view of a curler with a lock of hair woven on the same and clamped in position, and disclosing the preferred form of my invention.

Fig. 2 is a plan view of the same in open position.

Fig. 3 is a plan view of a modified form of my hair curler.

Referring to Fig. 1, 1 indicates a body member, which is provided with a rib 2 located centrally and extending longitudinally of the body member. On opposite sides of the longitudinal rib 2 are formed rows of spaced slots, through which are inserted pointed or wedge-shaped pins 3. The slots 4 on one side of the longitudinal rib 2 are in staggered relation with the adjacent slots 5 of the other row located upon the opposite side of the rib, so that when the pins 3 are inserted through a pair of spaced slots 4 and 5, they will be located at an acute angle to the rib 2, or to the medial line running longitudinally of the body member.

The pins 3 are wider at one end than at the other end so that said pins may be readily inserted through pairs of adjacent slots, and by reason of their shape will be locked on the body member at a point midway between its ends. The smaller ends of the pins 3 are sufficiently blunt to prevent injury to the hair or head of the wearer.

Alternate pins have their smaller ends inserted from opposite sides of the rib 2 of the body member so that a wide end and a smaller end are adjacent each other on opposite sides of the rib 2. This alternate insertion of the smaller ends from opposite sides of the body member provides an equal spacing of the pins; otherwise, if all the wider ends were located on one side of the rib, and the smaller ends on the other side, the spaces between the wider ends of the pins would be less than the spaces between the smaller ends.

Cooperating with the pins and the body member is a clamping member formed of a double strand of wire 6 bent intermediate its ends at 7, and again at 8 to provide a hook to engage a flat hook-shaped keeper 9 formed integrally with the body member 1, whereby the free end of the clamping member is locked in position. The ends of the strand of the wire 6 are formed into eyes 10 which are adapted to be received within perforations 11 in a lug 12 projecting outwardly from the rear end of the body member 1. As shown in Fig. 1, the strands 6 are spaced apart and engage the removable pins 3 on opposite sides of the rib 2 and close to the rows of spaced slots 4 and 5.

The perforations 11 and the eyes 10 are sufficiently enlarged in order that the clamping member may be swung to one side, so that the hook 7 of said clamping member may be moved beneath the hook 9 on the body member 1 for locking the clamping member in position when a lock of hair has been alternately woven about the teeth 3 on the body member 1.

When the clamping member is in position with the hook 7 engaging the hook 9, it will

be placed under a strain and maintain said hooks in gripping relation and against displacement.

In the modification shown in Fig. 3, instead of the flat wedge-shaped pin 3, I employ a hair pin 13 comprising a strand of wire bent intermediate its ends to form two substantially parallel legs 14 having their free ends made ball-shaped, as shown at 15, and bent in opposite directions in order to lock the ends together, and form as it were a single pin when said pins are mounted upon the body member 1^a.

The body member 1^a in the modified form is provided with a longitudinal rib 2 similar to the rib shown in Figs. 1 and 2, and extended longitudinally of said body member. Upon opposite sides of the rib 2 are formed pairs of spaced openings 4^a and 5^a, the adjacent openings in opposite rows being in staggered relation so that when the legs 14 of the pin 13 are inserted through pairs of adjacent openings, the pins will be located at an acute angle to the rib 2.

After the pins have been inserted through their respective openings, the free ball-shaped ends 15 of the pins are pressed towards each other and locked in the manner shown, whereby the space between the legs 14 of the pins being lessened they will frictionally grip the sides of the openings and maintain the pins at a point intermediate their ends on the body member 1^a.

At one end of the body member 1^a is formed a lug 12^a provided with a slot 16 which is adapted to receive an eye 17 formed on the end of a narrow elongated clamping member 18. The outer free end 19 of said clamping member is adapted to be engaged beneath a keeper 20 provided on the end of a hook-shaped member 21, which forms an integral extension of the body member 1^a and which is opposite to the end provided with the lug 12^a.

The clamping member 18 is adapted to lie in engagement with the top edge of the rib 2 when said clamping member is locked in position on the body member.

The hook-shaped member 9 of Figs. 1 and 2, and the hook-shaped member 21 of Fig. 3, provide a guide for initially positioning a lock of hair when said lock is applied to the body member and woven alternately from opposite sides and about the pins 3 or 13, so that in applying a number of curlers to the several locks of hair on a person's head, all the flat Marcel waves thus produced by the hair curler will be formed in the same direction.

Furthermore, these guides are so positioned relatively to the body member that they will cause the body member to lie flat against the head when a lock of hair is curled upon the same.

As shown in Fig. 1, the flat hook 9 is placed close to the head and near the roots of a lock of hair and on the hair. The lock is then curled over the hook-shaped member, then down beneath a pin, then upwardly and rearwardly, diagonally and transversely of the body, and around the other portion of the pin, located on the opposite side of the rib. The same procedure of waving the remaining portion of hair about the other pins is followed until the last pin is reached. The clamping member is then drawn down on the lock with the end of the hair embraced between the clamping member and the outer end of the body member, with the free end of the clamping member engaging the hook-shaped member 9 or the hook-shaped member 21 of the modified form, whereby the clamping member is locked in position, and it will not only maintain the lock of hair curled about the pins, but will serve to retain the curler in position on the head.

In either form, the waves produced by the curlers on a lock of hair are identical.

In removing either curler, the pins are first removed with the clamping member in position so that the wave is maintained in the position that it has assumed on the curler. The clamping member is then released and thrown back, and the body member slipped out from beneath the curled lock of hair without in any way disturbing the wave and without necessitating the uncurling of the lock.

The body member and the pins may be made of any suitable material for the purpose.

What is claimed is:—

1. A hair curler having an elongated body with transverse projections about which a lock of hair may be woven, a guide at one end of the body for initially positioning the lock of hair, and a clamping member pivoted to the opposite end of the body and engageable with the guide to clamp the hair after it has been woven about the transverse projections.

2. A hair curler having an elongated body with transverse projections about which a lock of hair may be woven, a hook at one end of the body disposed in the same plane as the transverse projections for initially positioning the lock of hair, and a clamping member pivoted to the opposite end of the body and engageable with the hook to clamp the hair after it has been woven about the transverse projections.

3. A hair curler having an elongated body with transverse projections about which a lock of hair may be woven, a hook at one end of the body disposed in the same plane as the transverse projections for initially positioning the lock of hair, and a clamping member having a hook-shaped end and pivoted to the opposite end of the body to swing in a longitudinal plane substantially

at right angles to the plane of the projections and having sufficient lateral play to permit its hook-shaped end to be engaged with the first-mentioned hook to clamp the hair after it has been woven about said projections.

4. A hair curler comprising an elongated body member, and a plurality of means removably mounted on the body member at an acute angle to the medial line running longitudinally of the body member and about which a lock of hair is adapted to be alternately woven.

5. A hair curler comprising an elongated body member provided with a longitudinal rib, spaced pins on said body member, and a clamping means straddling the rib for clamping to said body member a lock of hair woven alternately about the pins.

6. A hair curler comprising an elongated body member provided with a longitudinal rib, spaced wedge-shaped pins removably mounted on said body member, and a clamping means straddling the rib for clamping to said body member a lock of hair woven alternately about the pins.

7. A hair curler comprising an elongated body member provided with a longitudinal rib, and a row of spaced slots on each side of the rib, said slots being in staggered relation, and pins removably mounted through pairs of the staggered slots.

8. A hair curler comprising an elongated body member provided with a longitudinal rib, and a row of spaced slots on each side of the rib, and pins removably mounted through pairs of adjacent slots.

9. A hair curler comprising an elongated body member provided with a longitudinal rib, and a row of spaced slots on each side of the rib, the slots on opposite sides of the ribs being in staggered relation, pins removably mounted through pairs of the staggered slots, and a clamping means straddling the rib.

10. A hair curler comprising an elongated body member provided with a longitudinal rib, and a row of spaced slots on each side of the rib, the adjacent slots on opposite sides of the ribs being in staggered relation, pins removably mounted through pairs of the staggered slots, and a clamping means comprising a double strand of wire pivotally mounted at one end of the body member.

11. A hair curler comprising an elongated body member provided with rows of spaced slots, the rows being in staggered relation, pins inserted through pairs of the staggered slots around which a lock of hair is adapted to be woven, and clamping means for maintaining the hair curled on the pins.

12. A hair curler comprising an elongated body member provided with rows of spaced slots, the rows being in staggered relation, and wedge-shaped pins removably mounted on the body member and providing means for curling a lock of hair, the narrower ends of the pins being alternately inserted from opposite sides of the body member through pairs of the staggered slots.

13. A hair curler comprising an elongated body member provided with rows of spaced slots, the rows being in staggered relation, wedge-shaped pins removably mounted on the body member and providing means for curling a lock of hair, the narrower ends of the pins being alternately inserted from opposite sides of the body member through pairs of the staggered slots, and means pivoted on the body member for clamping the lock of curled hair to said body member.

14. A hair curler comprising an elongated body member provided with rows of spaced slots, the rows being in staggered relation, wedge-shaped pins removably mounted on the body member and providing means about which a lock of hair is adapted to be woven, the narrower ends of the pins being alternately inserted from opposite sides of the body member through pairs of the staggered slots, means pivoted on the body member for clamping the lock of curled hair to said body member, and a hook-shaped member on the body providing a guide for initially positioning the lock of hair on the body member whereby the direction of the weave is defined.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature.

FRANCES G. CONINE.