No. 861,479. PATENTED JULY 30, 1907.

E. D. & H. PAYNE.

HAIR CURLER.

APPLICATION FILED MAY 16, 1907.

Fig. 1.

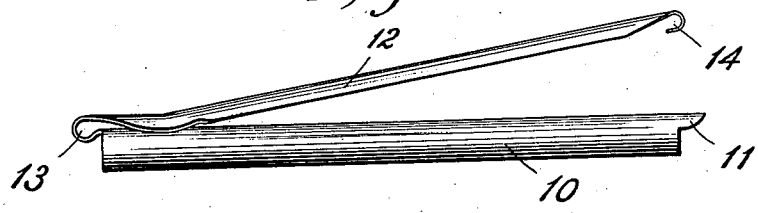


Fig. 3.

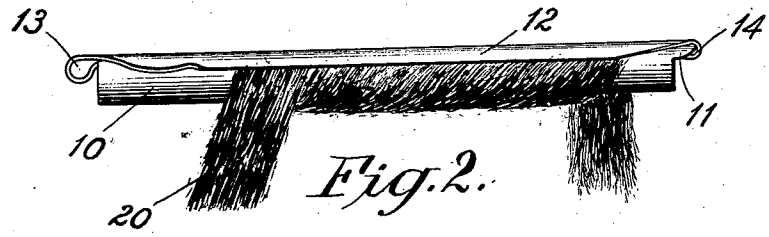


Fig. 2.

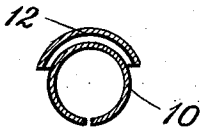
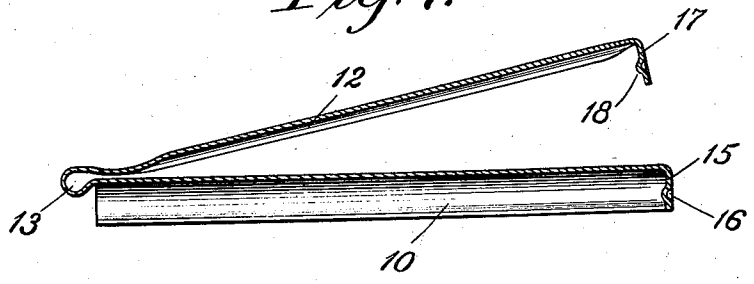


Fig. 4.



WITNESSES:

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HAIR-CURLER.

No. 861,479. Specification of Letters Patent. Patented July 30, 1907.

Application filed May 16, 1907. Serial No. 373,963.

To all whom it may concern:

Be it known that we, ELLEN DANIELSON PAYNE and HULBERT PAYNE, citizens of the United States, and residents of the city of New York, in the county of New York and State of New York, United States of America, have invented certain new and useful Improvements in Hair-Curlers, of which the following is a specification.

Our invention relates to new and useful improvements in hair curlers or crimpers, and the object of our invention is to provide a simple and efficient device which we will describe in the following specification and the novel features of which we will point out in claims.

Referring to the drawings, Figure 1 is a side elevation of a hair curler made according to our invention, the device being shown in its open condition. Fig. 2 is a cross-section on an enlarged scale of the same device with its parts closed. Fig. 3 is a side elevation of the device in its closed condition showing the manner in which it is used. Fig. 4 is a sectional side elevation of a modification of our invention.

Like characters of reference designate corresponding parts in all of the figures.

10 designates a hollow cylindrical tube of sheet metal, such, for example, as tinned steel. The outer end of this tube is provided with a projecting lip 11. At the other end of the tube an arm 12 is connected by means of a spring portion 13. The arm 12 is curved to coincide with the surface of the tube 10 as may be seen in Fig. 2. At its outer end the arm 12 is made somewhat narrower and is bent around to form a hook 14. This hook 14 is adapted to engage with the projecting lip 11 as is shown in Fig. 3. The portions of this device are stamped out of a single piece of metal so that their construction is simple and inexpensive.

In using this device a lock of hair 20 is wound around the tube either flat as is shown in the drawings or rolled up and wound spirally about the tube, after which the arm 12 is brought down upon it to clamp it firmly against the tube. To cause the hook 14 to pass under the projecting lip 11 it is only necessary to depress the arm 12 and to move it laterally a slight amount, after which it may be slipped under the projecting lip and will thus securely hold the parts in their closed position. It will then compress the hair into the required form and hold it in this condition indefinitely. The projecting lip 11 is curved on the same radius as that of the tube 10 so that the portion into which the hook 14 slips is concave and assists in holding the hook in engagement with the lip. The operation of removing the device is also extremely simple, as the parts which form the hook 14 and the projecting lip 11 may be grasped in the fingers and slipped by each other. The spring 13 will thereupon cause the arm 12 to move away from the hair and the tube, after which the hair may be slipped off the tube and will be in the curled or crimped state required.

In Fig. 4 we have shown a modification of our invention, in which case the outer end of the tube 10 is bent down over the opening of the tube as is shown at 15 and is provided with a depression 16. The outer end of the arm 12 in this case is bent downward at right angles to its longitudinal dimension as shown at 17 and a lug 18 is formed in this bent portion. This form of our invention is used in the same manner as that above described, except that in this case to lock the arm 12 it is only necessary to compress it until the lug 18 engages with the depression 16 at the end of the tube.

We have illustrated more than one form of our invention to show that it is not limited to any specific construction.

What we claim is.—

1. In a hair curler, a circular tube, an arm conforming to the surface of the tube, a spring forming a connection between one end of the arm and one end of the tube, and means carried by the arm for securing the free end of the arm to the free end of the tube.

2. In a hair curler, a straight circular tube, a straight arm having a concave surface conforming to the form of the tube, a spring connection between one end of the arm and one end of the tube, a lip projecting from the free end of the tube, and a hook on the free end of the arm adapted to engage with said projecting lip.

3. In a hair curler, a straight circular tube, a straight arm having a concave surface conforming to the form of the tube, a spring connection between one end of the arm and one end of the tube, a lip projecting from the free end of the tube, and a hook on the free end of the arm adapted to engage with said projecting lip, all of said parts being constructed of one integral piece of spring metal.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

ELLEN DANIELSON PAYNE.
HULBERT PAYNE.

Witnesses:
ELLA TUCH,
HENRY C. DATER.