(No Model.)

J. W. LEONARD.

HAIR CURLER.

No. 519,189. Patented May 1, 1894.

Fig. 1.

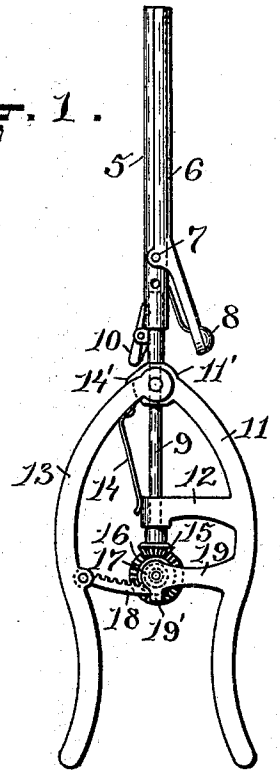


Fig. 2.

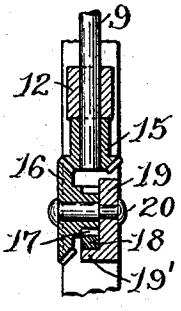
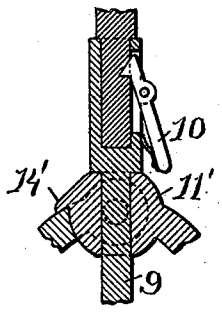


Fig. 3.



WITNESSES:

Henry J. Miller

Chas. H. Luther Jr.

INVENTOR:

John W. Leonard,

by Joseph A. Miller & Co.

Attys.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN W. LEONARD, OF CHICAGO, ILLINOIS.

HAIR-CURLER.

SPECIFICATION forming part of Letters Patent No. 519,189, dated May 1, 1894.

Application filed July 5, 1893. Serial No. 479,587. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. LEONARD, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hair-Curlers; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in hair curlers in which a cylindrical body and a concaved pressing-arm are used to press the hair.

The object of the invention is to facilitate the use of the curlers,—and the invention consists in the peculiar and novel construction of a handle by which the curling iron may be firmly held, readily connected with or disconnected from the crimping-iron and by which the curling iron may be readily turned, as will be more fully set forth hereinafter.

Figure 1 is a side view of my improved curling-iron and handle, showing the mechanism for rotating the crimping-iron. Fig. 2 is a vertical sectional view of the mechanism for turning the iron shown in Fig. 1. Fig. 3 is a vertical sectional view of the mechanism for connecting and disconnecting the curling-iron and the handle.

Similar numbers of reference indicate corresponding parts throughout.

In the drawings 5 indicates the curling-iron, 6 the concaved presser-bar hinged to the curling-iron at 7 and provided at its lower end with the thumb-piece 8. A spring is placed between the lower part of the curling-iron and the thumb-piece 8 by which, in the normal condition, the lower end of the concaved presser-bar is forced outward and the upper part pressed against the curling-iron. By pressing on the thumb-piece the concaved presser-bar is moved away from the curling-iron to permit the hair to be laid between the same.

In practice a number of the curling-irons 5 and hinged presser-bars 6 permanently secured together by the pivot 7 are used,—they are heated and are successively secured to the handle, used, and then disconnected and reheated.

To facilitate the connection and disconnection of the curling-iron I provide the spindle with the spring-catch 10 so as to engage with a notch on the lower end of the curling-iron 5. The curling-iron may be made to extend over the spindle, as shown in Fig. 1.

The handle is made of two arms, the arm 11, which is provided with the bracket 12, forms the support for the spindle 9 which is journaled in the head 11′ and the bracket 12. The arm 13 is pivoted at the head 11′, it is held in the expanded position by the spring 14 which swings this part outward until it comes in contact with the stop 14′.

The device may be used to crimp hair by pressing the hair between the iron 5 and the concaved presser-bar 6. To make longer waving crimps, the iron 5 and presser-bar 6 may be partially rotated, and, when used for curling, the bar 5 and presser-bar 6 may be turned one revolution or more.

The mechanism for turning the curling-iron is operated by the arm 13 by moving the same toward or from the arm 11 and consists in the beveled-pinion 15 secured to the spindle 9, the beveled-gear 16 meshing with the pinion 15 and having the pinion 17 formed on its side,—the curved rack-bar 18 is pivotally secured to the arm 13, it engages with the pinion 17 and transmits the motion of the arm 13, by means of the rack-bar 18 and pinion 17, through the bevel-gear 16 and beveled-pinion 15 to the spindle 9. The bracket 19 extends from the arm 11 and forms the support for the journal-pin 20. The bracket 19 is provided with the projection 19′ to form a support for the curved rack-bar 18.

By the use of this improved device the curling spindles may be readily secured or released and be turned, when the hair is connected, to the extent desired, and all this can be readily done with one hand leaving the other hand free to handle and manipulate the hair.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

In a curling-iron, the combination with a mandrel, of the arm 11 having the head 11′ and the brackets 12 and 19, the spindle 9, jour-

naled in the head 11′ and in the bracket 12, and provided with means for engaging the end of the mandrel, the beveled-pinion 15 on the spindle, the beveled-gear 16, furnished with the pinion 17, rotatable on a shaft extending from the bracket 19 and engaging the pinion 15, the arm 13 pivoted to the head 11′, and the rack-bar 18 pivoted to the arm 13 and adapted to engage the pinion 17, as and for the purpose described.

In witness whereof I have hereunto set my hand.

JOHN W. LEONARD.

Witnesses:
JOSEPH A. MILLER,
JOSEPH A. MILLER, Jr.