

(No Model.)

H. C. BERNNER.
HAIR CRIMPER.

No. 495,292.

Patented Apr. 11, 1893.

Fig. 1.

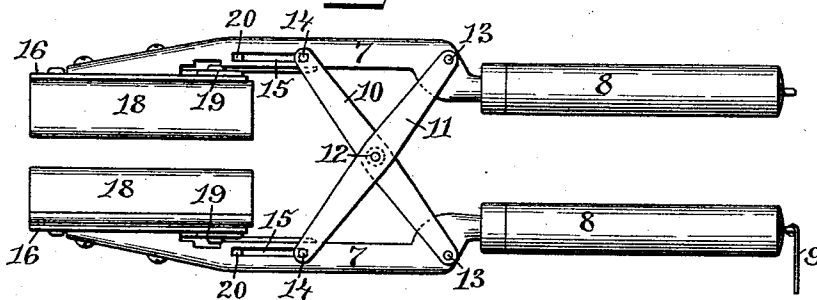


Fig. 2.

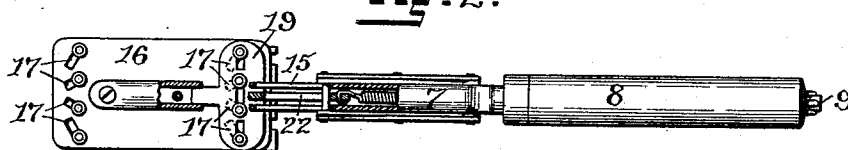


Fig. 3.

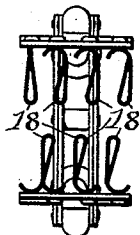


Fig. 4.



Fig. 5.

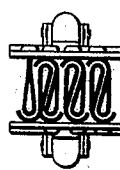
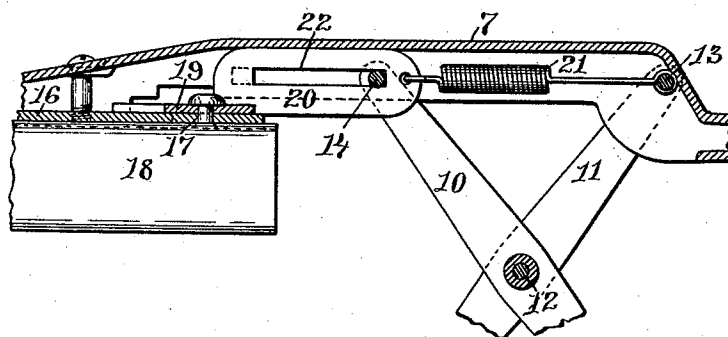


Fig. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HERMANN C. BERNNER, OF PROVIDENCE, RHODE ISLAND.

HAIR-CRIMPER.

SPECIFICATION forming part of Letters Patent No. 495,292, dated April 11, 1893.

Application filed March 23, 1892. Serial No. 426,046. (No model.)

To all whom it may concern:

Be it known that I, HERMANN C. BERNNER, of Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Hair-Crimpers; 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 the construction of the class of hair-crimpers known as crimping-tongs.

The object of the invention is to secure a more-perfect curling of the hair without subjecting the hair to longitudinal strain.

The invention consists in the peculiar and novel combination by which the crimping-plates are always in positions parallel to each other and are finally moved diagonally toward each other to compress the hair, as will be more fully set forth hereinafter.

Figure 1 is a side view of my improved hair-crimper. Fig. 2 is a top view showing the top of one of the two arms partly in section and also the oblique slots in which the posts of the crimping-plates move during the final compression of the hair. Fig. 3 is an end view showing the crimping-plates separated. Fig. 4 is an end view showing the position of the crimping-plates when the tongs are closed sufficiently to bend the hair. Fig. 5 is an end view showing the position of the crimping-plates when the tongs are closed finally and the hair is pressed between the crimping-plates. Fig. 6 is an enlarged sectional view of part of one of the arms showing the mechanism for operating the crimping-plates.

Similar figures of reference designate corresponding parts throughout.

In the drawings the numerals 7 designate the two opposite arms of the crimper.

8—8 designate the two handles, one of which is secured to each of the arms 7.

The latch 9 is used to hold the crimper in the closed position by securing the two handles 8—8 together.

To secure an even strain on the hair and a uniform crimping of the same, the two arms 7—7 are secured together by means of a pair of lazy-tongs formed of the arms 10 and 11

pivotaly secured at their center to the stay 12 connecting the two lazy-tongs and pivoted to the arms 7 by the studs 13, the opposite ends of the levers being connected with the lever of the opposite lazy-tong by the studs 14 extending through the slots 15 formed in the arms 7.

Near the ends of the arms 7—7, opposite the ends to which the handles 8—8 are attached, are secured the plates 16 provided with the diagonal slots 17.

The curling-plates 18 are provided with studs which extend through the slots 17 in the plates 16. The studs nearest the handles also extend through slots in the sliding-plate 19 which is secured to the longitudinally-slotted plate 20. This plate is connected with the stud 13 by the coiled-wire spring 21. The slot 22 in the plate 20 is on a line with the slot 15 in the arms 7, but is sufficiently shorter than the slot 15 so that, when the stud 14 reaches the end of the slot 22, the plate 20 and sliding-plate 19 may be pushed forward and, as the studs on the crimping-plates extend through the slots in the plate 20, will be pushed into the oblique slots 17, thereby moving the crimping-plates obliquely forward and closer together until they reach the position shown in Fig. 5.

In use, the hair is placed between the crimping-plates when in the position shown in Fig. 3. The handles are now brought nearer to each other until the studs 14 of the lazy-tongs reach the end of the slot 22 this movement of the handles causing the upper and lower plates to approach a central plane parallel with the arms 8 until the crimping-plates 18 partially engage with each other and assume the position shown in Fig. 4. The hair is readily drawn into the crimper when it is thus closed as the spaces between the crimping-irons are large. To complete the crimping, pressure is now exerted on the handles. The lazy-tongs transmit this pressure, by means of the studs 14, on to the plate 20 which is pushed forward assisted by the coiled-spring 21. The plate 20 and the sliding-plate 19 are moved forward and, as the rear studs of the crimping-plates 18 extend through the slots in the sliding-plate 19, the crimping-plates are moved forward and are guided, by the oblique-slots 17,

into the position shown in Fig. 5. As the crimping-plates are usually heated, the hair held compressed between the crimping-plates is thoroughly crimped.

5 The crimping-plates are shown in the drawings as having considerable depth, there being a straight tangential line or space between the curves; this proportion of the crimping-plates produces a peculiar and desirable wave
10 of the hair, and I prefer this form, but I do not wish to confine the form of the crimping-plates to the form or construction shown, as the tangential depth may be diminished or omitted.

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

1. In a hair-crimper, the combination with the arms 7—7, the handles 8—8, the lazy-tong

arms 10 and 11, and the sliding-plates 19, of 20 the crimping-plates 18, and means adapted to move the crimping-plates obliquely and press the hair, as described.

2. In a hair-crimper, the combination with the handles 8—8, the arms 7—7, and the arms 25 10 and 11 pivoted as described to secure the parallel motion of the arms, of the crimping-plates 18, the plates 16 provided with the oblique slots 17, and mechanism adapted to move the crimping-plates in said slots, as and for 30 the purpose described.

In witness whereof I have hereunto set my hand.

HERMANN C. BERNNER.

Witnesses:

HENRY J. MILLER,

JOSEPH A. MILLER, Jr.