No. 785,844. PATENTED MAR. 28, 1905.

A. A. WEST.

HAIR CURLER OR CRIMPER.

APPLICATION FILED DEC. 22, 1903.

Fig. 1.

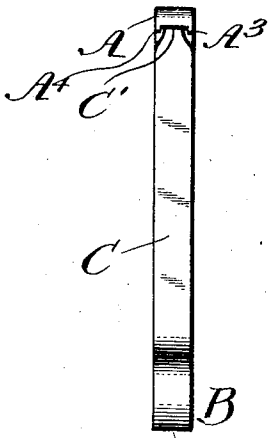


Fig. 2.

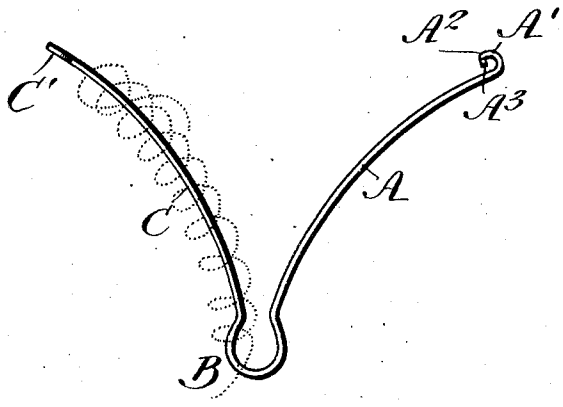


Fig. 3.

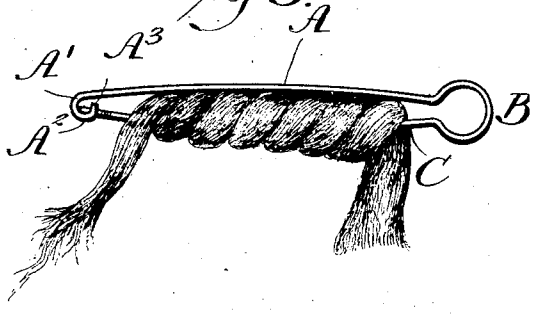




Fig. 4.

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No. 785,844. Patented March 28, 1905.

UNITED STATES PATENT OFFICE.

AUGUSTUS A. WEST, OF NEW YORK, N. Y.

HAIR CURLER OR CRIMPER.

SPECIFICATION forming part of Letters Patent No. 785,844, dated March 28, 1905.

Application filed December 22, 1903. Serial No. 186,205.

To all whom it may concern:

Be it known that I, AUGUSTUS A. WEST, a citizen of the United States, residing in the borough of Brooklyn, in the city and State of New York, have invented a certain new and Improved Hair Curler or Crimper, of which the following is a specification.

The device is a single piece of elastic material. I have in my experiments used flat steel, such as is much used in corsets. One end is sharply curled and returned upon itself to constitute a locking end. A bend is formed near the mid-length, so that another and shorter arm is presented with an elastic tendency of the whole to assume a V shape to be engaged under the return. In what I esteem the most complete form the return portion—the extreme end of the locking-arm—is extended longer at each edge and turned inward, so that the space between constitutes a notch. The end of the shorter arm is narrowed and is capable of being engaged in such notch. The elasticity of the steel allows the arms to be brought together and the short arm engaged under the return portion of the longer locking-arm. The hair is wound on the short arm while the device is in the open or V-shaped condition. Then the parts are brought together and by side movements the short arm is engaged with the locking end of the long arm.

The following is a description of what I consider the best means of carrying out the invention.

The accompanying drawings form a part of this specification.

Figure 1 shows the device in an upright position with the ends locked together. Fig. 2 is a view at right angles to that in Fig. 1 with the arms liberated and sprung open to their easy position. Fig. 3 is a view corresponding to Fig. 2 except that a quantity of hair has been wound on and the ends are closed and engaged together. Fig. 4 is a view corresponding to Fig. 3 in an empty condition. This shows a modification in having the arms waved.

Similar letters of reference indicate corresponding parts in all the figures where they appear.

A is the long arm, B the smoothly-curved joining portion bent on a large radius, and C the short arm. The free end of the latter is narrowed, as indicated by C′.

A′ is a sharp bend made in the long arm extending toward the other arm.

A^2 is a further extension of the end inward toward the joining portion of the two arms, and A^3 A^4 are slight further extensions on each side at the extreme end. The space between these extensions is marked *a*. I will term it a "notch." This notch should have a breadth a little greater than the narrowed end C′ of the other arm. All are smoothly finished.

The lock of hair to be curled is wound on the short arm C in any manner preferred. One way is to commence with the extreme end of the lock of hair and by the obvious means, which I may term "overlapping," to confine the extreme end to the arm C at a point near the end, leaving the extension C′ exposed to be easily locked, and to wind the hair on the arm C in a series of conveniently-laid coils. In the last part of the winding the elasticity of the device may be availed of to allow the arms to be extended beyond their ordinary V-shaped relation. When the winding is completed, the free ends of the arms A and C are pressed together, assuming a bent condition opposite to their previous bends if there is a large quantity of hair wound on, and the extreme end C′ of the short arm, being deflected to one side a little, is snapped under from the side, and on the pressure being relaxed it springs outward and engages with the notch.

As in curling with other devices the operation may be promoted by dampening the hair to a proper extent. The device may be allowed to remain on many hours. A tolerably complete effect is produced by holding the hair in this closely-coiled condition for only ten or fifteen minutes; but there is no objection to its remaining clasped on the hair for hours. The device occupies little room. It may remain over night.

The liberation is effected very simply. The finger and thumb being applied and pressed together and moved laterally relatively to

each other and the free arm disengaged from the notch *a*, the arms will expand to their natural V-shaped relation and the device will by its own weight or with a very gentle pull be drawn out and the hair liberated perfectly curled or crimped.

The lock of hair may, if preferred, be applied beginning at the root of the hair and winding from the junction B outward on the arm C, taking care to get it all on before reaching the end of the arm. If a lock is long and strong, there is no objection to winding it back and forth several times over on the arm C, taking care to leave the narrowed extension C′ free and to hold the hair in place on the arm C until the arms A and C are brought together and locked. This is the condition indicated by the dotted lines in Fig. 2.

When the device is used in the ordinary manner, the locking end of the device is that which is the last to receive the lock of hair and lies farther from the roots of the hair.

I attach importance to the fact that in my construction the long arm is smoothly curved, and when the parts are engaged together it incloses the end of the shorter arm, so that the bent end of the longer arm serves as a guard. When the parts are locked together in use, the short end cannot in any position or movement of the device injure the head of the wearer. The short arm may be engaged with the long arm by being introduced from either the right or left side indifferently.

Modifications may be made without departing from the principle or sacrificing the advantages of the invention. I have shown the large bend B as more than a semicircle, being about three-fourths of a circle. It is important that it be of a greater diameter than the general space between the arms A and C; but the curvature may be somewhat quicker, or the partial circle by which it is produced may be smaller or may be still larger. Its effect is to give much more elasticity to the junction than to the arms A and C.

When the device is made from previously-hardened steel, the temper should be drawn by heating at the end of the long arm. It is important for various reasons to make the whole of one piece. I prefer that the parts A' A^2 A^3 A^4 be formed by a continuous curve of the flat metal; but they can be nearly angular, if preferred for any reason.

The notch *a* may be reduced in depth. It is only necessary to hold the arms against lateral displacement relatively to each other. With some metal the device will succeed without the notch.

I prefer that the arms A and C be so conditioned as to bend naturally apart when the device is empty and standing open. When they are compressed together, they will be approximately straight; but if the quantity of hair is large they will be considerably sprung the other way.

The arms may be waved, if desired, taking care not to make the bends so sharp as to prevent the arm C being easily withdrawn from the hair by a simple endwise movement of the device relatively to the curl wound thereon. Fig. 4 shows such wavy form.

I claim as my invention—

1. In a hair-curler formed of one piece of elastic material, two flat smooth arms of unequal length, conditioned to curve gently apart when free, and to lie approximately straight when forcibly confined together, the end of the shorter arm being received and confined within a smooth bend formed in the end of the longer arm, so that the junction shall serve both as a coupling means and as a guard, substantially as herein specified.

2. A hair-curler comprising a flat smooth arm C curved junction B and longer arm A, the latter formed with a locking end A' A^2, the short arm being narrowed and the locking end of the long arm correspondingly notched and curled inward, all in a single piece of elastic metal, adapted to serve substantially as herein specified.

In testimony that I claim the invention above set forth I affix my signature in presence of two witnesses.

AUGUSTUS A. WEST.

Witnesses:

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M. F. BOYLE.