

June 30, 1925.

1,544,428

O. W. BRENZER

HAIR CURLER.

Filed June 17, 1922

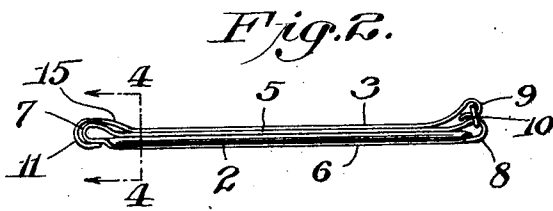
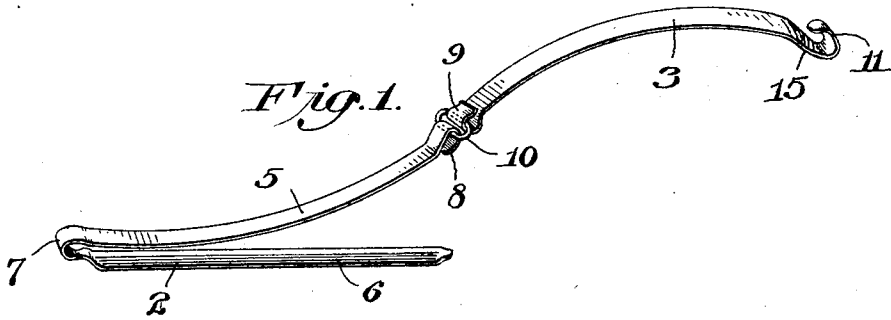


Fig. 4.

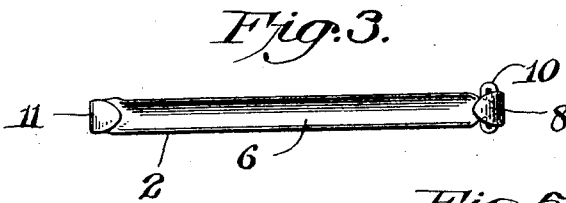


Fig. 7.

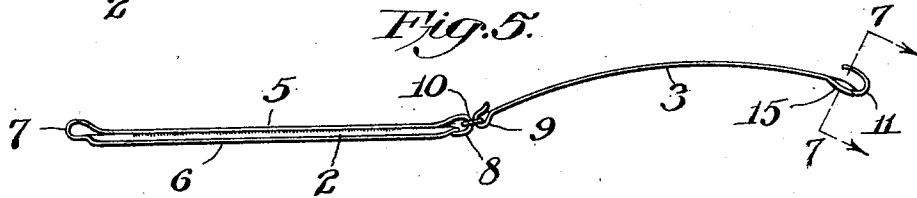


Fig. 5.

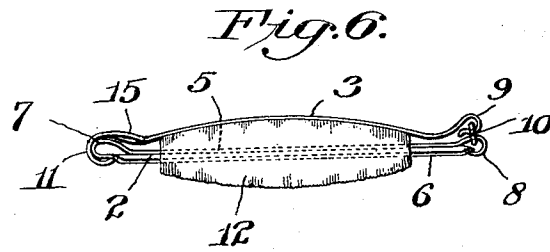


Fig. 6.

INVENTOR:

O. W. Brenzer

A. V. [Signature]
ATTORNEY

UNITED STATES PATENT OFFICE.

ORSON W. BRENIKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO ALEXANDER H. BOYD, OF PHILADELPHIA, PENNSYLVANIA.

HAIR CURLER.

Application filed June 17, 1922. Serial No. 563,983.

To all whom it may concern:

Be it known that I, ORSON W. BRENIKER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Hair Curlers, of which the following is a specification.

The object of this invention is to provide a hair curler of novel, simple and efficient construction having provision whereby the hair may be clamped between the arms of a clamping device and wrapped around or upon the device by turning or twisting the device and thereafter held in place upon the device by a suitable hair confining arm.

The invention aims to provide a curler of few parts which may be manufactured at a low cost and it consists in the novel construction, combination and arrangement of parts hereinafter described and particularly claimed.

In the accompanying drawings illustrating my invention,

Figure 1 is a perspective view of a hair curler embodying my invention, the same being shown in the open position.

Figure 2 is a side view thereof in the closed position.

Figure 3 is a bottom view of the curler in the closed position.

Figure 4 is a transverse section of the curler on line 4—4 of Fig. 2.

Figure 5 is a side view of the curler showing the clamping device thereof closed upon hair therein and showing the hair confining arm in the open position.

Figure 6 is a side view of the curler showing hair wrapped around the clamping device and showing the hair confining arm in the closed position preventing the hair from being unwrapped from the clamping device.

Figure 7 is a cross-sectional view on the lines 7—7 of Fig. 5, looking in the direction indicated by the arrows.

Referring to the drawings, the hair curler comprises a clamping device 2 and a hair confining arm 3 connected thereto.

The clamping device 2 is preferably formed of a single piece of metal and it comprises two arms 5 and 6 which are connected at adjacent ends by a small bowed or loop portion 7. In the normal or open

condition of the curler the arms 5 and 6 diverge from their connected ends to present an open space between them, as shown in Fig. 1.

The arm 5 is flat and flexible and, in its normal condition it is bowed, as shown in Fig. 1. The arm 6 is stiffened by being shaped into concavo-convex form in cross-section, as clearly shown in Fig. 4, so that it will always remain in the straight condition shown in the drawings.

The free end of the flexible arm 5 has a hook 8 formed thereon which is adapted to embrace the free end of the stiff arm 6 when the clamping device is closed, as shown in Figs. 2, 3, 5 and 6; and the free end of the hook 8 is tapered or pointed so that it may enter the groove in the bottom of the stiff arm 6 and hold the free ends of the arms 5 and 6 against accidental lateral displacement.

The hair confining arm 3 is made flat and flexible, and, in its normal condition, it is bowed similarly to the arm 5. One end of the arm 3 has a loop 9 formed therein and it is pivotally connected to the free end of the arm 5 by a link 10 extending through the loop 9 of the arm 3 and the hook 8 of the arm 5. The other or free end of the arm 3 has a hook 11 formed thereon which is adapted to embrace the loop 7 or connected ends of the arms 5 and 6 of the clamping device 2 as shown in Figs. 2, 3 and 6, when the curler is closed. The free end of the hook 11 is tapered or pointed so that it may enter the groove in the bottom of the stiff arm 6 and hold the connected ends of the arms 3 and 6 against accidental lateral displacement.

The free end portion of the arm 3, back of the hook 11, has its side portions flared outwardly, at 15, to present flanges or projections which may be engaged by the finger or thumb of the user in moving the arm 3 laterally into or from engagement with the connected ends of the arms 5 and 6.

The operation of the curler is as follows: The free end portion of the lock of hair to be curled is placed between the clamping arms 5 and 6 and the free ends of the arms are then sprung toward each other, causing the free end portion of the lock of hair to be clamped therein, and the free end of the arm 6 is slipped into the hook 8 by a lateral movement of one or both of the arms 5 and 6

relatively to each other, as shown in Fig. 5. This done the entire curler, in the condition shown in Fig. 5, is rotated or turned to wind or wrap the lock of hair around the arms 5 and 6 of the clamping device, and, thereafter, the arm 3 is moved back over the arms 5 and 6 and its free end is sprung toward the loop 7 and the hook 11 is slipped around the loop 7 and adjacent ends of the arms 5 and 6 by a lateral movement of one or more of the parts, thereby causing the arm 3 to be bowed around the hair 12 previously wrapped around the arms 5 and 6 and confining the hair between the arm 3 and the clamping device and preventing the hair from being unwrapped from the arms 5 and 6 while the curler is in service. After the hair has remained in the curler a sufficient length of time to curl the hair, the curler is removed from the hair by first disengaging the hook 11 from the arms 5 and 6, carefully unwrapping the hair from the same and then disengaging the hook 8 from the arm 6 and thereby releasing the clamped ends of the curled hair from the curler.

The arm 6 is stiff and substantially non-flexible, and the resilient qualities of the metal forming the arms 3 and 5 is such as to cause the hooks 11 and 8 to engage the arm 6 and remain in the groove in the bottom of the arm when the curler is closed either with or with no hair therein, by the tendency of the arms 3 and 5 to resume their normal condition, as shown in Fig. 1.

When the arm 3 is closed over the hair 12 the body of the hook 11 is opposite to the adjacent end of the stiff arm 6, and thereby prevents accidental disengagement of the hook 11 from the arm 6 by the widening of the space between the arms 3 and 6 which might occur if the stiff arm 6 were flexible.

I claim as my invention:

1. In a hair curler, the combination of a hair clamping device comprising a pair of clamping arms connected at one end of the device and provided with means to detachably connect the arms at the other end of the device, a hair confining arm, a link connecting one end of the hair confining arm to one end of the device, and means to detachably connect the hair confining arm to the other end of the device.

2. In a hair curler, the combination of a hair clamping device comprising a pair of clamping arms connected at one end of the device, the free end of one of said arms having a hook formed thereon to detachably

connect it to the free end of the other of said arms, a hair confining arm having a loop formed on one end thereof, a link extending through said hook and said loop and connecting one end of the hair confining arm to one end of the device, and means to detachably connect the hair confining arm to the other end of the device.

3. In a hair curler, the combination of a hair clamping device comprising a pair of clamping arms connected at one end of the device, the free end of one of said arms having a hook formed thereon to detachably connect it to the free end of the other of said arms, a hair confining arm having a loop formed on the end thereof, a link extending through said hook and said loop and connecting one end of the hair confining arm to one end of the device, and a hook on the other end portion of the hair confining arm to detachably connect it to the other end portion of the device.

4. In a hair curler, the combination of a hair clamping device comprising a flexible arm and a relatively stiff arm connected at one end of the device and provided with means to detachably connect them at the other end of the device, and a flexible hair confining arm connected to one end of the device and having a hook formed on the free end thereof and adapted to embrace the stiff arm of the device at the other end of the device and thereby be prevented from being disengaged therefrom by the outward bowing of the hair confining arm.

5. In a hair curler, the combination of a hair clamping device comprising a flexible arm and a relatively stiff arm connected at one end of the device and provided with means to detachably connect them at the other end of the device, and a flexible hair confining arm connected to one end of the device and having a hook formed on the free end thereof and adapted to embrace the stiff arm of the device at the other end of the device and thereby be prevented from being disengaged therefrom by the outward bowing of the hair confining arm, the stiff arm having a longitudinal groove therein, and the free end of the hook being prevented by the walls of the groove from being displaced laterally of the device when the hook is engaged with the stiff arm.

In testimony whereof I affix my signature hereto.

ORSON W. BRENIZER.