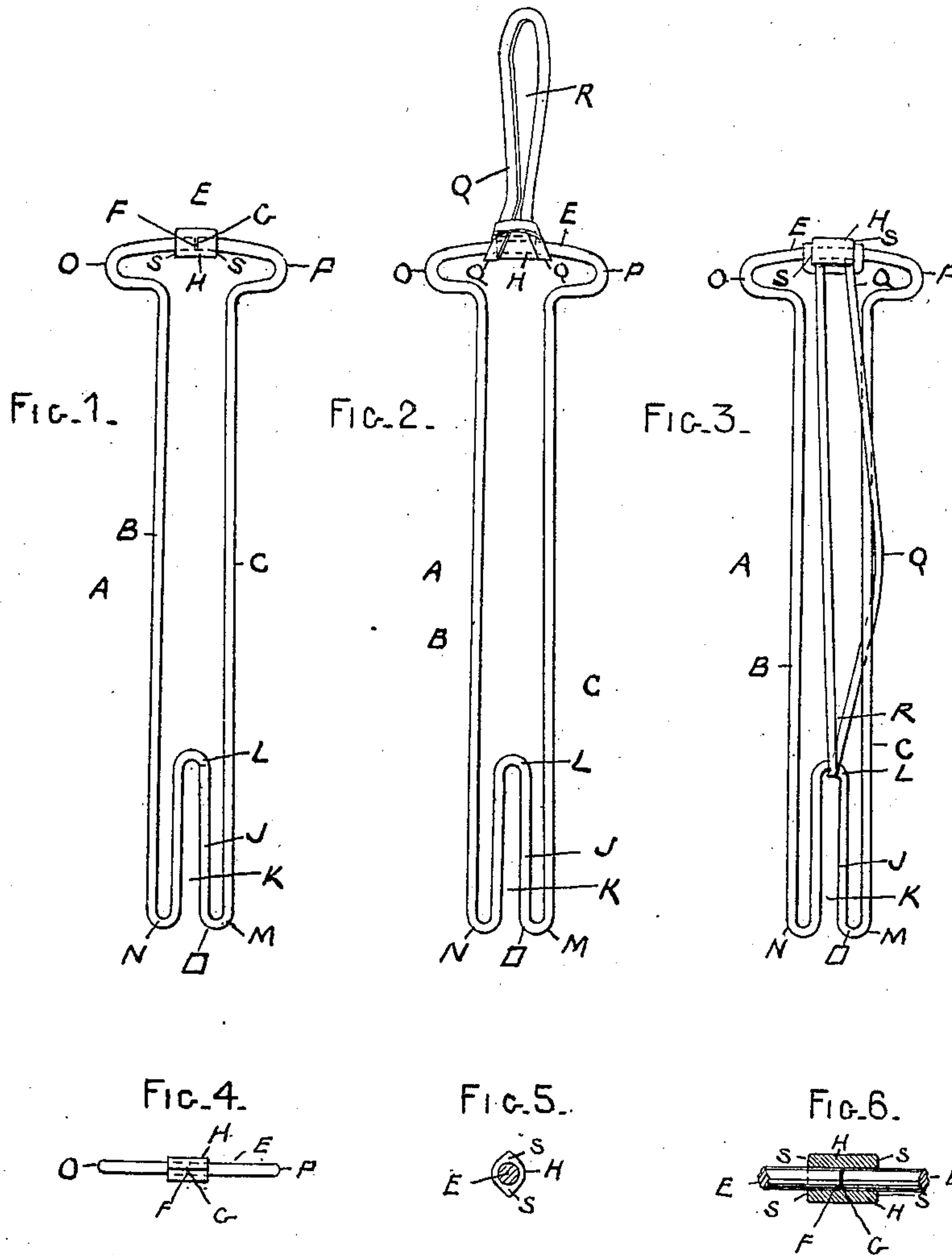


H. N. NORTHROP.
HAIR CURLER.
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Patented Feb. 9, 1909.



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HERBERT N. NORTHROP, OF SOMERVILLE, MASSACHUSETTS.

HAIR-CURLER.

No. 912,154.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, HERBERT N. NORTHROP, a citizen of the United States, residing at the city of Somerville, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improved Hair-Curler, of which the following is a specification.

This invention relates to appliances for curling and waving the hair of a person's head, and to that class of such appliances as embrace an elongated open rectangular shaped metal frame closed on its opposite ends and sides and an endless elastic band, that, at one end-portion, is attached to one end of said frame but otherwise normally is free therefrom and which, in the use of the appliances, after the hair, to be curled or waved, has been wound or coiled, as may be desired, around said frame is then, under tension, capable of being engaged by its free end-portion with a reëntrant way or depression at the end-portion of the frame opposite to the end-portion thereof to which said band is attached, and thus to secure and retain the wound or coiled hair on said frame, and all so as to impart to the hair a curling or waving condition and in a manner such, that, when the band is disengaged from the frame and from its hold on the wound hair, and the frame removed from the hair, the hair will retain its said curling or waving condition.

This invention consists of an appliance of the class stated which in many respects is of a most novel, improved, efficient and superior construction, all as is hereinafter fully described, and appears.

In the drawings, forming part of this specification, and in which all the figures are on an enlarged scale, Figure 1 is a side view of the metal frame, Fig. 2 is a similar view to Fig. 1, but showing the endless elastic band attached to one end-portion of the frame. Fig. 3 is a similar view to Figs. 1 and 2 of the metal-frame, but showing the endless elastic band not only as attached, as in Fig. 2, to one end-portion of the frame, but as also under tension detachably engaged with the other end-portion of the frame. Figs. 4, 5 and 6 are views in detail, Figs. 5 and 6, being still further enlarged, all as hereinafter appears.

In the drawings, A is a metal frame of substantially rectangular shape and closed on opposite sides B and C, and on its oppo-

site ends D and E. This frame A is made of a piece of wire, preferably round, of sufficient length and suitable diameter and stiffness for the appliance of this invention and for its use for the purposes stated.

A wire length, such as referred to, by bending it at various and suitable points of its length, is made into a frame A of the shape and outline, as shown, Figs. 1, 2 and 3, and its two ends F and G are brought substantially together and there secured against accidental displacement by a metal or other suitable ferrule H, overlapping and sealing the joint between said two ends F and G. The making of the frame A of a wire length and the shape of the frame referred to, and as it is shown in Figs. 1, 2 and 3, together with the ferrule H, covering and securing the wire together at its adjacent ends as described, constitute in substance the novel feature of this invention, and that said shape of the frame A may be more fully understood it is now explained in detail.

The opposite sides B and C of the frame, as shown, converge along their length slightly toward each other, and this convergence is most preferable, although they may be parallel with each other. The end D of the frame, at which the frame, as shown, is the wider, has intermediate of its width, and preferably along its central line, a comparatively short reëntrant portion J and thus is formed a longitudinal passage or way K which extends inwardly for a comparative short distance of the length of the sides B and C, and the wire constituting such sides and the inner end and sides of said way, all of which are in direct continuation of each other, has, at the several points L, M and N, a semi-circular bend. The end E of the frame opposite to the end D having the reëntrant-way K as described, or in other words, the narrower end of the frame, as shown, has two similar side projecting or laterally extending wings O and P, one on each side of the frame, and each of these wings, at its outer end-portion, constitutes, as it were, a projecting side shoulder to the frame, and the extreme outer end of each of these wings has a semi-circular bend, and otherwise each has a quarter bend in continuation of it and the respective sides B and C of the frame and the wings are continued in alinement with each other and the extreme ends of the wire of such continuations are substantially brought together and

secured by the ferrule H as has been explained.

The ferrule H, as shown, preferably, is without joint or seam and the ends of the wire are inserted therein and the whole secured, as for instance, by soldering, or in any other well known manner so as to prevent accidental detachment. This ferrule H, Figs. 5 and 6, preferably, is of greater diameter in one direction and this greater diameter, preferably, is across from one side face to the other of the frame A.

Q is an endless elastic band at one end-portion, secured to the end E of the frame A, by first wrapping such end-portion around that end of the frame at its said ferrule attachment, and then passing its other end-portion through the loop thereof and tightening it about and upon the end of the frame, the whole resulting in a loop R of the band Q, Fig. 2, and by this loop the band, under tension, is entered into the reëntrant way K of the frame and engaged and so held by the semi-circular bend L at the inner end of said way, all substantially as shown in Fig. 3.

In the use of the appliance described the hair to be curled or waved, preferably, is first twisted like a rope and then having placed the appliance in the condition shown in Fig. 2 close to the head, the hair is wound or coiled tightly around the frame, beginning at the end-portion of the frame having the lateral wings O and P and continuing toward the other end, until the desired winding is accomplished, when draw the elastic looped-band Q over the so wound or coiled hair and the frame, and engage it, as has been explained, with reëntrant way K of the end D of the frame, and thus with an allowance of sufficient time the desired curl or wave will be secured, and in a manner for its retention when the frame is removed from the hair. The removal of the frame is accomplished by first disengaging the elastic band from the end D of the frame and then drawing the frame out from the hair.

The appliance described has no sharp edges nor has it any joints, creases, angles or projections of any nature by which the hair can in any manner be caught or entangled or cut, or otherwise injured. Again the lateral wings O and P of the frame hold the hair that has been wound or coiled upon the frame from passing off of it under the tension or strain of the elastic band Q thereon, or otherwise. Further the opposite

end-faces S, S of the ferrule H hold the elastic band from slipping out of its proper place on the frame, and this is still further enhanced by the increased width, as has been explained, given to such faces S at the opposite side-faces of the frame A. Again the taper in width of the frame along its width as described, combined with the lateral wings of the frame, is advantageous in that the wound hair can be the better crowded, as it were, when being wound toward and against said wings, and thus held the more securely against accidental escape.

Having thus described my invention what I claim and desire to secure by Letters Patent is,

1. An appliance for curling or waving hair composed of a metal frame having sides and ends in a single piece of wire and the wires on each side converging toward each other and toward one end of the frame, and the wider end of the frame provided with a reëntrant way or passage and the narrower end of the frame provided with a lateral wing at each of its sides, and the ends of the wire thereat alined with each other, and of a ferrule securing together said alined ends, in combination with an endless elastic band attached to said end of the frame having said alined ends and said ferrule, and capable under tension of being entered into and engaged with said reëntrant way at the other end of said frame.

2. An appliance for curling or waving hair composed of a metal frame having sides and ends in a single piece of wire, and one end provided with a reëntrant way or passage, and the opposite end provided with a lateral wing at each side of the frame and the ends of the wire thereat alined with each other, and of a ferrule securing together said alined ends and having an increased diameter in a direction across from and between the opposite sides of the frame, in combination with an endless elastic band attached to said end of the frame having said alined ends and said ferrule, and capable under tension of being entered into and engaged with said reëntrant way at the other end of said frame.

In witness whereof, I have hereunto set my hand in the presence of two subscribing witnesses.

HERBERT N. NORTHROP.

Witnesses:

ALBERT W. BROWN,
SUMNER B. ROBINSON.