Oct. 11, 1938. A. R. VISITACION 2,132,500

HAIR CURLER

Filed May 25, 1937 2 Sheets-Sheet 1

Fig. 1

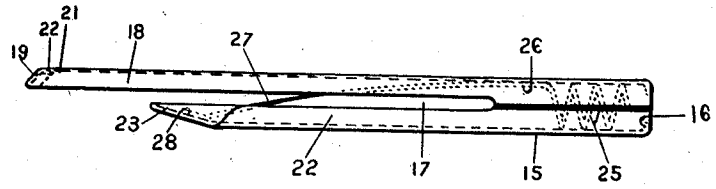


Fig. 2

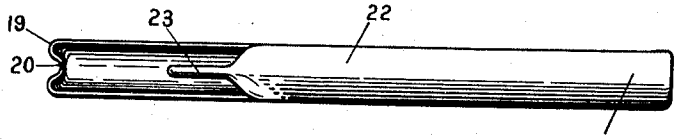


Fig. 3

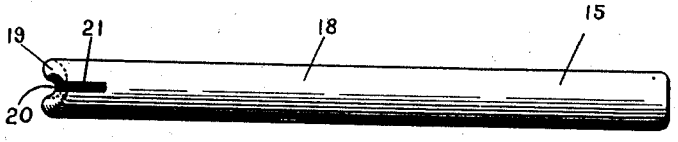
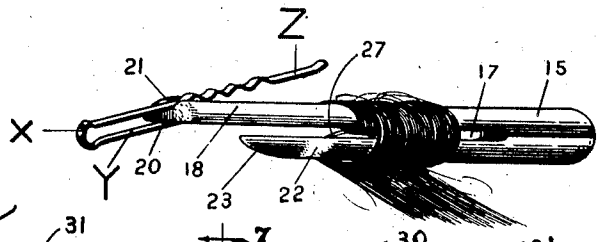


Fig. 4



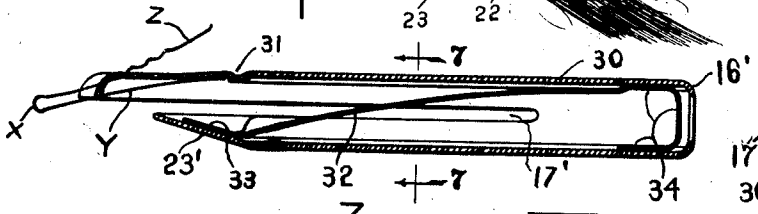


Fig. 6

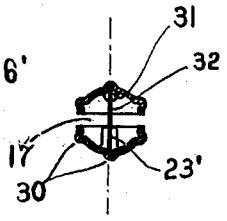


Fig. 7

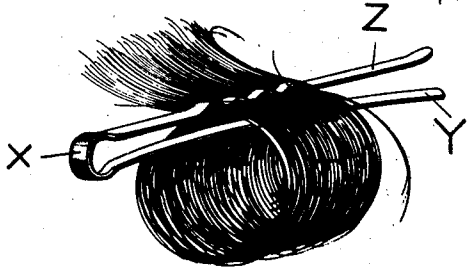


Fig. 5

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Oct. 11, 1938. A. R. VISITACION 2,132,500

HAIR CURLER

Filed May 25, 1937 2 Sheets-Sheet 2

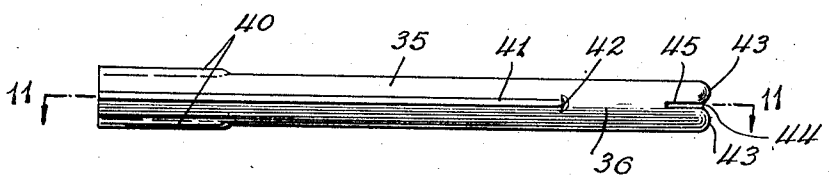


Fig. 8.

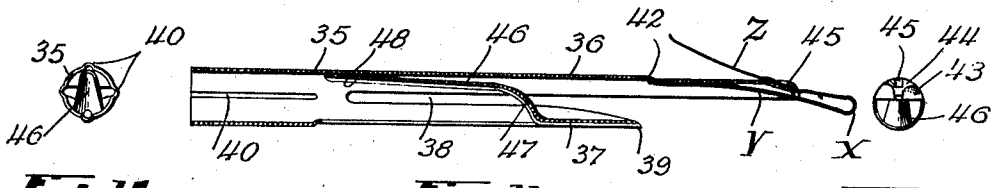


Fig. 10. Fig. 11. Fig. 9.

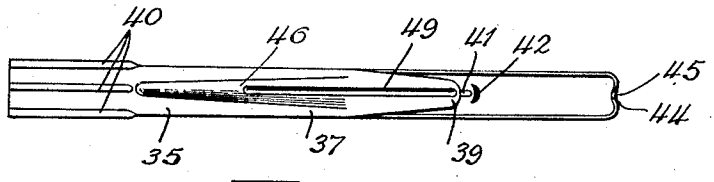


Fig. 12.

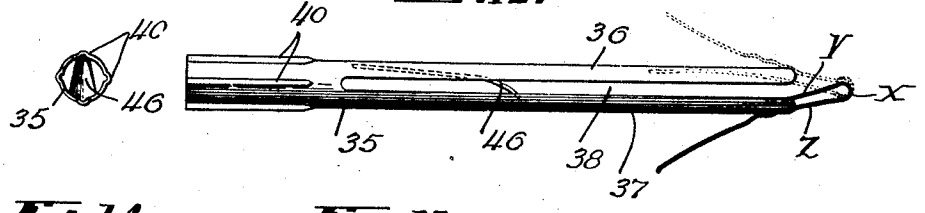


Fig. 14. Fig. 13.

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UNITED STATES PATENT OFFICE

2,132,500

HAIR CURLER

Aniceto R. Visitacion, New York, N. Y.

REISSUED

Application May 25, 1937, Serial No. 144,587

7 Claims. (Cl. 132—33)

This invention relates to improvements in hair dressing appliances and has particular reference to a curler.

An object of the invention is to provide an efficient hair curling implement to which the ends of hair strands are secured upon a tubular mandrel, thereafter coiled by winding thereon as closely as possible to the scalp, the coil thus formed being released by drawing the mandrel lengthwise, and becoming engaged between the spring prongs of a clamp or bobbie pin carried by the mandrel in open position.

A further object is in the provision of an easily operated curling implement, that may be subjected to heat without damage, is readily cleansed, capable of long continued service, and is of such simplicity as to be inexpensive to construct.

Another object is to make the hair curler wholly and entirely of one single piece of material, having no additional attached or detached parts whatever, save the customary curl clamp or bobbie pin.

These valuable objects are accomplished by the novel construction and arrangement of parts hereinafter described and illustrated in the accompanying drawings, which include preferred embodiments of the inventive idea.

In the drawings:

Figure 1 is a side elevational view of one embodiment of the invention.

Figure 2 is a top plan view thereof.

Figure 3 is a bottom plan view of the same.

Figure 4 is a perspective view indicating its application.

Figure 5 is a perspective view of the curl produced and its holding means.

Figure 6 is a longitudinal sectional view of another modification in construction.

Figure 7 is a transverse sectional view taken on line 7—7 of Figure 6.

Figure 8 is a side elevational view of still another embodiment of the device.

Figure 9 is a front end view thereof looking from the bifurcated end.

Figure 10 is a similar view looking from the opposite or rear end.

Figure 11 is a longitudinal sectional view taken on line 11—11 of Figure 8.

Figure 12 is a side view showing the reverse side of the implement from that illustrated in Figure 8.

Figure 13 is a side elevational view of a slightly modified form of the curler as seen from the slotted side, and

Figure 14 is an end view thereof.

The main feature of the invention, as will be seen by inspection of the drawings, is its extreme simplicity, the device consisting of a hollow cylindrical body 15, preferably partially closed at one end 16, as shown in Figures 1 to 6.

Longitudinal slots 17 formed in opposed portions of the body divides the same throughout the greater portion of its length into two sections 18 and 22, relatively long and short.

The longer portion 18 has its end 19 downturned and containing a central depression 20, while a narrow recess 21 leads from the depression towards the opposite end, the bottom of the recess being inclined upwardly as indicated.

The opposite body portion 22 is far shorter in length; its forward end 23 compressed laterally and tapered to a rounded point.

The coils 25 of a spring wire are fitted in the body 15, at its closed rear end, the wire continuing along the inner side of the body section 18, as at 26, then bent angularly, as at 27, to contact the section 22 and finally entered into the contracted end 23, as at 28, by which the end of the wire is firmly anchored.

The clamp or bobbie pin used in connection with the mandrel, usually consists of a plain straight arm Y and a corrugated loop X.

The arm Y of the pin is entered under the open end of the longer section 18, while the shorter arm Z is guided in the recess 21, raising its end from the surface of the mandrel and tensioning the lower arm in a manner well understood.

In the modification shown in Figures 6 and 7, the body of the mandrel is shaped to produce a series of longitudinal hollow ribs 30, and at a point near the front is a depressed node 31 to act as a stop for the pin arm Y, limiting its entrance into the curler mandrel.

A flat spring wire 32 has its end 33 anchored in the front end 23' of the shorter section and at its rear fashioned into an angular spring loop 34, the sides of which are closely fitted to the inner, hollow surfaces of the ribs 30, adjacent the partially closed end 16' of the mandrel body so as to be retained in operative position.

In operation, the ends of the lock of hair to be curled are entered into the slot 17—17' and clamped by the spring 27 or 32 frictionally tight; thereafter the mandrel is turned by the fingers until as close to the scalp as possible, the bobbie pin inserted, its arm Z being raised, whereupon the coil is drawn over the front end of the man-

drel and engaged between the arms of the pin, completing the curling.

In the embodiments of the device shown in Figures 8 to 12, the mandrel **35** comprises a metallic tube formed from a single sheet of suitable material and having arms **36** and **37** respectively long and short, these arms being partially separated by opposed slots **38** extending from the front end approximately three quarters of the length of the tube.

The shorter arm **37** is reduced in width as it approaches the smoothly rounded point **39** to permit easy entrance of a lock of hair.

The rear portion of the tube may be reinforced by ribs **40**, one of which, **41**, directly opposite the shorter arm, is extended towards the front, its forward end terminating at an inturned lug **42**.

The longer arm **36** is formed to project inwardly, forming cheeks **43** having between them a depression or saddle **44** from which a narrow recess **45** extends rearwardly, its bottom being outwardly inclined, as best seen in Figure 11.

A bobbie pin X, or like hair clamping means, is mounted in position as in Figure 4, its entrance being limited by reason of the extremity of its arm Y contacting the lug **42**, while the outer arm Z is guided laterally by the recess **45**, the saddle **44** acting to spread the arms of the pin.

The shorter arm **37** is sheared or otherwise cut to produce an integral spring **46** curved, as at **47**, towards the opposite side of the tube, where its inner end portion **48** normally contacts the inner surface of the arm **36**. A stiffening rib **49** may be used to reinforce the spring if required.

In the modification shown in Figures 13 and 14 the arms are substantially of equal length and either of them may receive the bobbie pin as shown in full and dotted lines in Figure 13.

In operation, a lock of hair is engaged at its outer end by being entered into the slot **38**, from either side, and pressed towards the rear of the tube sufficiently to become held by the spring **46**, the bobbie pin having previously been attached in the manner shown.

When the tube is rotated by hand the hair will be wound upon it as closely to the scalp as possible, the tube drawn outwardly, causing the curl thus formed to become engaged by the bobbie pin, and there retained for such length of time as may be desired.

Although the improvements have been described with considerable detail and with respect to certain particular forms of the invention, it is not desired to be limited to such details since many changes and modifications may well be made without departing from the spirit or scope of the invention in its broadest aspect.

What is claimed is:

1. A hair curling appliance comprising a hollow cylindrical mandrel composed of two members of unequal length partially separated by longitudinal slots adapted to receive the ends of a lock of hair, means at the outer end of the lower member forming a mounting for a hair pin, and a spring having one end positioned in the shorter member and its other end located within the mandrel, said spring passing obliquely through the center of the mandrel from one of the members thereof to the other.

2. A hair curling appliance comprising a hollow cylindrical mandrel composed of two members of unequal length partially separated by longitudinal slots adapted to receive the ends of a lock of hair, means at one end of the lower member to engage a hair pin, means limiting the entrance of the pin, a spring recessed in the front end of the shorter member and extending diagonally upward and rearward to the longer member, and means to secure the rear end of said spring in the mandrel at its rear portion.

3. A hair curling appliance comprising a hollow cylindrical mandrel composed of two members of unequal length partially separated by longitudinal slots adapted to receive the ends of a lock of hair entered from its open end, a plurality of ribs arranged at spaced intervals on said mandrel extending longitudinally thereof, said shorter member having a contracted socket at its forward extremity, a spring engaged in said socket and extending diagonally rearward to the longer member in intersecting relation to the plane of said slots, and a loop on the rear portion of said spring to engage the inner surfaces of said ribs.

4. A hair curling appliance comprising a unitary tubular mandrel slotted longitudinally to present two spaced members relatively long and short, means associated with said members to resiliently clamp a lock of hair entered therebetween, and a tapered recess formed in the longer member of said mandrel to temporarily retain a hair pin in position to receive the curl produced by winding the hair upon the mandrel.

5. A hair curling appliance comprising a tubular body slotted longitudinally for a major portion of its length, a depression formed in the one end of the body, a recess formed in said depression and leading therefrom in the outer surface of the body to receive an arm of a bobbie pin, and a spring arm extending from one side of said body to the other in intersecting relation to the plane of the slot in said body.

6. A hair curling appliance comprising a tubular body bifurcated to receive a lock of hair between its side portions, means formed in the end of one side portion to receive and retain a bobbie pin, and a spring integrally inbent from the opposite side to extend diagonally to contact the first named side at a point remote from the pin holding means.

7. A hair curling appliance comprising a tubular body formed wholly from a single blank of sheet metal to produce opposed slots open at one end and closed at the other and to further produce a spring struck from one portion of said body to extend diagonally across said slot.

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