P. E. HERRMANN.

HAIR CURLING AND WAVING APPARATUS.

APPLICATION FILED JUNE 7, 1916.

1,199,550. Patented Sept. 26, 1916.

2 SHEETS—SHEET 1.

Fig. 2.

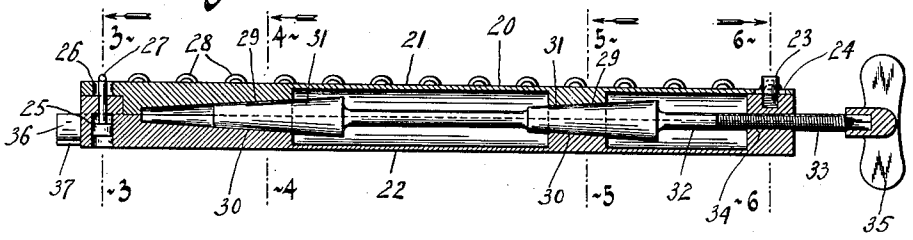


Fig. 3.

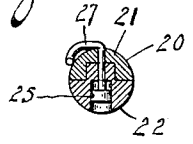


Fig. 4.

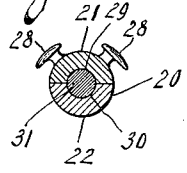


Fig. 5.

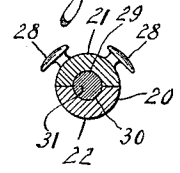


Fig. 6.

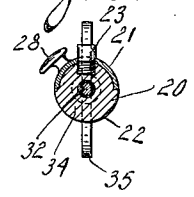


Fig. 1.

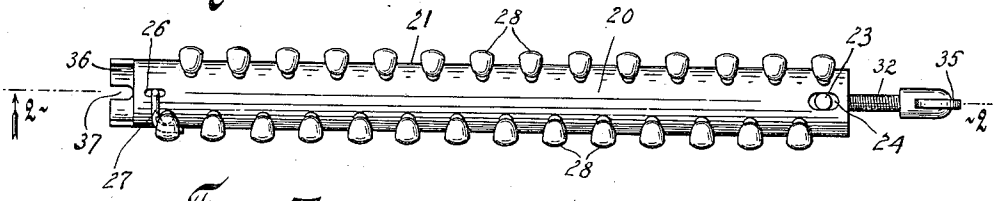
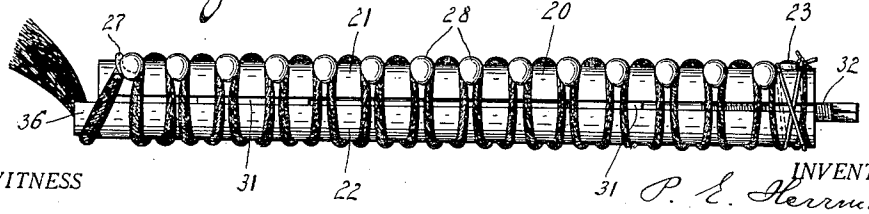


Fig. 7.



WITNESS

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2 SHEETS—SHEET 2.

Fig. 9.

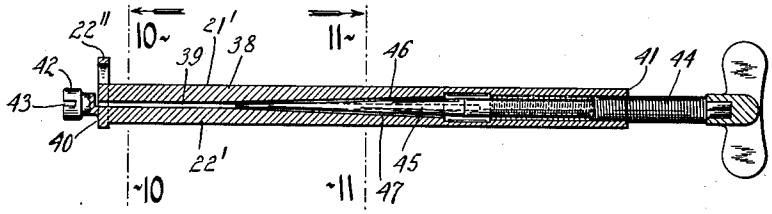


Fig. 10.

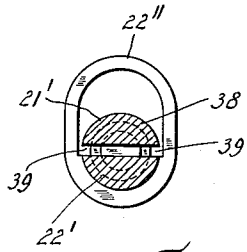


Fig. 11.

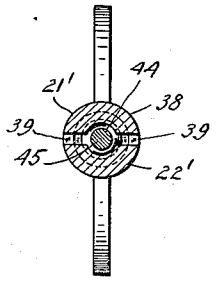


Fig. 8.

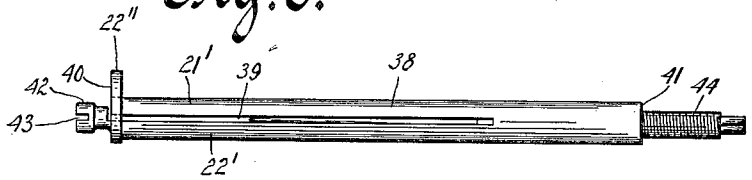
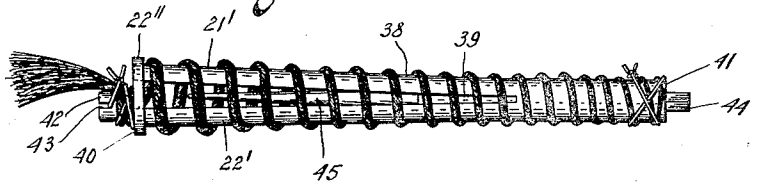


Fig. 12.



WITNESS

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UNITED STATES PATENT OFFICE.

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HAIR CURLING AND WAVING APPARATUS.

1,199,550. Specification of Letters Patent. Patented Sept. 26, 1916.

Application filed June 7, 1916. Serial No. 102,266.

To all whom it may concern:

Be it known that I, PAUL E. HERRMANN, a subject of the German Emperor, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Hair Curling and Waving Apparatus, of which the following is a specification.

The present invention relates to hair-curlers and wavers.

In devices of this type a tress or lock of hair is wound upon the instrument, proper care being taken that the lock be drawn thereon as taut as possible, inasmuch as the efficiency of the device depends largely upon the degree of stretching to which the hair is subjected while upon the curler for treatment.

One of the objects of the present invention is to provide a hair-curler and waver with simple and efficient means, whereby the lock or tress of hair, after being coiled upon the curling instrument, is adapted to be stretched, or in other words drawn taut.

Another object of the invention is to produce a hair-curler and waver of this type which can be manufactured on a commercial scale, or in other words one which is not so difficult to make as to be beyond the reasonable cost of such a contrivance.

With these and other objects in view, which will more fully appear as the nature of the invention is better understood, the same consists in the combination, arrangement, and construction of parts hereinafter described, pointed out in the appended claims and illustrated in the accompanying drawings, it being understood that many changes may be made in the size and proportion of the several parts and details of construction within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

Two of the many possible embodiments of the invention are illustrated in the accompanying drawings, in which:—

Figure 1 is a front elevation of a hair-curler and waver constructed in accordance with this invention; Fig. 2 is a section taken on line 2—2 of Fig. 1; Fig. 3 is a section taken on line 3—3 of Fig. 2; Fig. 4 is a section taken on line 4—4 of Fig. 2; Fig. 5 is a section taken on line 5—5 of Fig. 2; Fig. 6 is a section taken on line 6—6 of Fig. 2; Fig. 7 is a front elevation of the instrument with a tress or lock of hair thereon; Fig. 8 is a front elevation of a modified curler; Fig. 9 is a vertical longitudinal section taken through the curler shown in Fig. 8; Fig. 10 is a section taken on line 10—10 of Fig. 9, on a larger scale; Fig. 11 is a section taken on line 11—11 of Fig. 9, also on a larger scale; and Fig. 12 is a front elevation of the modified implement with a lock of hair wound thereupon.

Referring now more particularly to Figs. 1 to 7, inclusive, the numeral 20 indicates a tubular member, that is longitudinally split or divided into two sections 21 and 22. In order to keep these two sections in proper relation to each other, there may be provided, for instance, upon the section 22 a lug 23, which extends through a slot 24 in the section 21, and furthermore there may be rotatably mounted upon the section 22 a slide 25, projecting through a slit 26 in the section 21. This slide is provided outside of the section 21 with an extension 27 which is adapted to project over the said section. Upon the section 21 there are formed two rows of projections or cleats 28, both of said rows extending substantially throughout the length of the said section, as clearly appears from the several figures of the drawings. The projections of the two rows are staggered for a purpose hereinafter to be described. The two sections of the tubular member are provided with a plurality, in the present case two, sets of registering conical longitudinal recesses 29 and 30, into which fit male cones 31, formed upon a bolt 32 which is normally disposed in the longitudinal axis of the tubular member, and is provided with screw threads 33, meshing with those of a nut 34, the latter being made integral with or attached to one of the sections of the tubular member. In the case illustrated in the drawings the said nut is made integral with the section 22. For the purpose of rotating the bolt there is provided a detachable handle 35 thereon. Upon that end of the section 22 which is opposite to the one upon which the nut 34 is formed there is provided an extension 36, which projects beyond the section 21, and in the said extension is cut a notch 37 for a purpose presently to be described.

The operation of this device is as follows:

In order to prepare the implement for use, the bolt 32 is turned in the proper direction until the two sections of the tubular-member contact with each other (Figs. 1 to 6, inclusive). The lock or tress of hair is then first drawn through the notch 37 in the extension 36 and below the extension 27 of the slide 25, the last named extension being held at right angles to the longitudinal axis of the instrument, whereby it clamps the lock to the curler. The tress of hair is then engaged alternately with the two rows of cleats or projections 28, and its outer end tied with a cord or other means to the curler. The bolt 32 is then rotated in a direction so as to expand the tubular member until the lock has been drawn taut on the instrument, after which the handle 35 is removed. The hair is then subjected to treatment in order to curl and wave the same. Inasmuch as this treatment does not form part of the present invention it will not be described herein.

The modification illustrated in Figs. 8 to 12, inclusive differs mainly from the one above described in that its tubular member is made of one piece only, having longitudinal slits. This tubular member is indicated by the numeral 38, and provided at preferably diametrically opposite portions with longitudinal slits 39 which extend from the outer end 40 of the tubular member toward its inner end 41, but stop short of said inner end. The slits 39 divide thus the major portion of the tubular member into two sections, denoted by the numerals 21′ and 22′. With the section 22′ is made integral a bail-shaped member 22″, which embraces, as it were, the section 21′ but permits the last named section to recede from the section 22′. Beyond the member 22″ there is provided upon the section 22′ a knob-like projection 42, having a notch 43 therein. In the inner end of the tubular member there are formed interior screw threads, meshing with those of a bolt 44, which is disposed in the longitudinal axis of the tubular member and provided with a cone 45, seated in registering cone-shaped recesses 46 and 47, that are formed in the sections 21′ and 22′, respectively.

The operation of this device is as follows: The lock or tress of hair is tied by a cord or otherwise to the knoblike projection 42, the said cord being passed through the notch 43 in the said projection. The lock is then coiled upon the tubular member and its free end tied to the inner end of said member. The bolt is then tightened up, whereby the cone expands the split portion of the tubular member, drawing the lock of hair taut.

From the foregoing it appears that the curlers and wavers herein described comprise each, broadly, a split tubular member, in combination with an expanding means, for the purpose of drawing the lock of hair wound thereupon taut.

What I claim is:

1. A hair-curler and waver, comprising a split tubular member upon which a lock or tress of hair is adapted to be coiled and to which the ends of the hair are to be fastened, said tubular member being provided with interior cone-shaped registering recesses, and a longitudinally shiftable element extending into said tubular member having a male cone seated in said recesses, substantially as and for the purpose specified.

2. A hair-curler and waver, comprising a tubular member divided longitudinally into two sections, a nut interiorly formed upon one of said sections, both sections being provided with interior registering cone-shaped recesses, and a screw bolt extending into said tubular member having threads in mesh with those of said nut and being provided with a male cone seated in said recesses, substantially as and for the purpose specified.

3. A hair-curler and waver, comprising an expansible tubular member upon which a lock or tress of hair is adapted to be wound and to which the ends of the hair are to be fastened, and means extending into said tubular member for expanding the same whereby the coils are drawn taut upon the instrument.

4. A hair-curler and waver, comprising an expansible tubular member upon which a lock or tress of hair is adapted to be wound and to which the ends of the hair are to be fastened, and longitudinally shiftable means extending into said tubular member for expanding same whereby the coils are drawn taut upon the instrument.

5. A hair-curler and waver, comprising an expansible tubular member upon which a lock or tress of hair is adapted to be wound and to which the ends of the hair are to be fastened, said tubular member being provided with interior cone-shaped registering recesses, and a longitudinally shiftable element extending into said tubular member having a male cone seated in said recesses, substantially as and for the purpose specified.

Signed at New York, in the county of New York and State of New York, this 1st day of June, A. D. 1916.

PAUL E. HERRMANN.