Dec. 20, 1938. G. L. SMITH 2,140,858

HAIR CURLING DEVICE

Filed Sept. 22, 1936

Fig. 1.

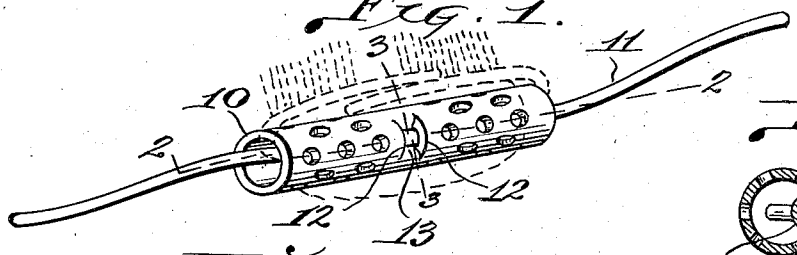


Fig. 2.

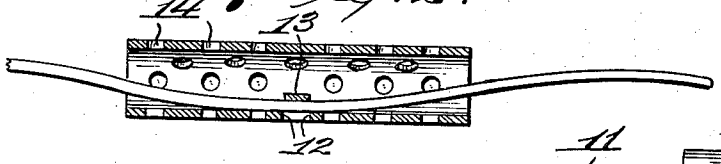


Fig. 3

Fig. 4.



Fig. 5.

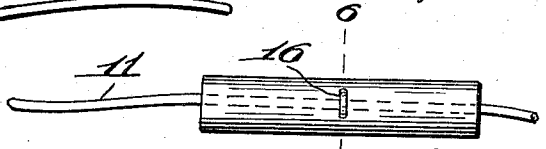


Fig. 6.

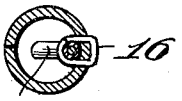


Fig. 7.

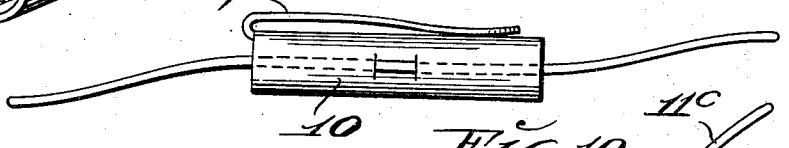


Fig. 8.

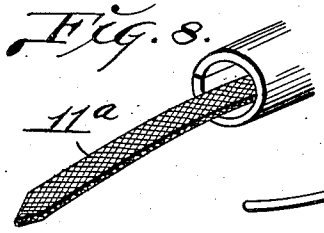


Fig. 9.

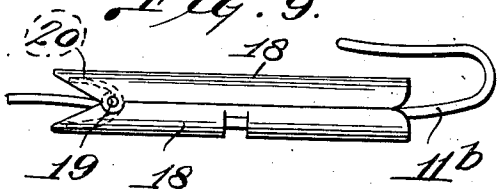


Fig. 10.

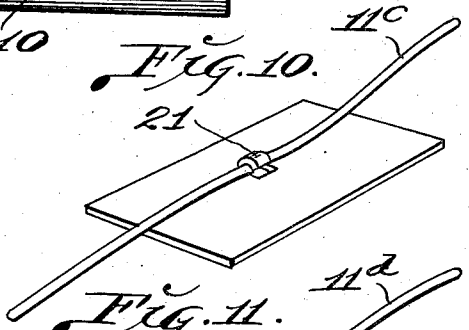
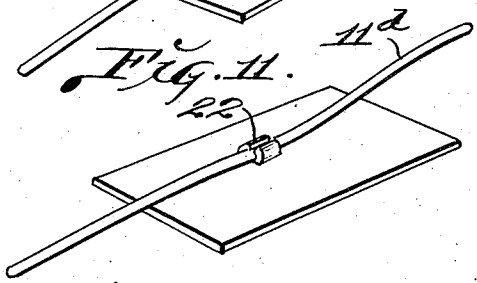


Fig. 11.



INVENTOR,
GERTRUDE L. SMITH.
BY Martin O. Smith ATTY.

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HAIR CURLING DEVICE

Gertrude L. Smith, Los Angeles, Calif.

Application September 22, 1936, Serial No. 101,945

3 Claims. (Cl. 132—42)

My invention relates to hair curling devices and has for its principal objects to generally improve upon and simplify the construction of the existing forms of hair curling devices, and to provide a hair curler that is relatively simple in construction, inexpensive of manufacture and capable of being readily applied to and removed from the hair.

A further object of my invention is to provide a hair curler having a tubular member on which the hair is wound to become set and curled, and said tube having associated therewith means for holding the hair that is wound upon the tube, said holding means being in the form of a member of pliable material that extends through the tubular body of the device and being permanently secured to said tubular body on the interior thereof with the ends of said pliable member projecting substantial distances from the ends of the tube so that they may be conveniently engaged and bent over the hair that is wound on the tube so as to retain the same in position while becoming dry and set.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will be hereinafter more fully described and claimed and illustrated in the accompanying drawing, in which:

Figure 1 is a perspective view of a hair curler constructed in accordance with my invention.

Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1.

Fig. 3 is an enlarged cross section taken on the line 3—3 of Fig. 1.

Fig. 4 is an elevational view of a modified form of the hair curler.

Fig. 5 is an elevational view of a further modified form of the hair curler.

Fig. 6 is an enlarged cross section taken on the line 6—6 of Fig. 5.

Fig. 7 is a side elevational view of a further modified form of the curling device.

Fig. 8 is a perspective view of the end portion of the curler wherein the pliable member is in the form of a narrow tape-like strip.

Fig. 9 is a side elevational view of a further modified form of the curler.

Fig. 10 is a perspective view showing the body of the curler before the same is bent into tubular form and illustrating the means of securing the pliable member to said body.

Fig. 11 is a perspective view similar to Fig. 10 and showing a modified arrangement for clamping the pliable member to the tubular member of the body.

Referring by numerals to the accompanying drawing, 10 designates a tubular member which may be formed of metal, rubber, composition or other suitable material, and the wall of the tubular body may be perforated as illustrated in Figs. 1, 2 and 4, or imperforate as illustrated in Figs. 5, 7 and 9. Where the tubular body is perforated air may circulate more freely through the body, thus tending to shorten the drying and setting of the hair while the curler is in use.

Extending through the tubular body and clamped or secured to the interior thereof, is a pliable member 11, the end portions of which extend substantial distances beyond the ends of the tubular body in order that said extended ends may be bent inwardly so as to overlie the hair that is wound upon the tubular body of the curler, thus retaining said hair in position on said body while the hair is becoming dry and set.

In Fig. 1 I have shown a strand of hair wound upon the body of the curler in dotted lines, and with dotted lines showing the projecting portions of the pliable member 11 bent over onto the hair to hold the same in proper position upon the hair.

The pliable member 11 is preferably formed of wire which may be repeatedly bent without crystallizing, and said wire covered with relatively soft flexible material, for instance, rubber, or braided threads or the like.

The pliable member may be secured to the interior of the tubular body in various ways, for instance, as illustrated in Figs. 1 to 3, inclusive the wall of the tube adjacent its longitudinal center is provided with short slits 12 that are disposed substantially at right angles to the axis of the tube and the material between said slits is bent inwardly, thereby forming a substantially semicircular clamping strip 13, and the pliable member extends between this clamping strip and the wall of the tube adjacent the slits 12.

By applying pressure to the clamping member 13 the central portion of the pliable member 11 is clamped to the central portion of the tubular body. This manner of connecting the pliable member to the center of the tubular member and upon the center thereof gives the projecting end portions of the pliable member a wider range or scope of movement when bent inwardly to overlie the hair that is wound upon the tubular body than if said pliable member were connected to one or both ends of the tubular body.

In Figs. 1 to 4 inclusive the tubular body is

shown provided with perforations 14, and these perforations may be rounded as illustrated, or in the form of short slots.

In Fig. 4 I have shown the wall of the tubular body provided with longitudinally disposed slots, such as 15, that extend from one end of the body inwardly to a point near or beyond the center of the body, and which slots provide means for receiving the strand of hair that is wound upon said body.

In Figs. 5 and 6 the pliable member 11 is shown as being secured to the tubular body 10 by a small wire clip or staple 16, the legs of which pass through small apertures formed in the wall of the tubular body and the ends of said legs being clamped around the central portion of the pliable member 11.

In Fig. 8 the pliable member 11*a* that passes through the tubular body is shown as being in the form of a narrow tape-like strip instead of a wire-like member as illustrated in the other figures of the drawing.

In Fig. 7 I have shown a narrow strip of material that is formed integral with or secured to one end of the tubular body 10, thus providing a tongue 17 that extends lengthwise on the exterior of the tubular body, and which provides a clip for securing the end of the strand of hair that is wound on the tubular body.

In Fig. 9 I have shown the tubular body divided on a medial longitudinally disposed line to form a pair of practically identical members 18 pivotally connected adjacent one end as designated by 19, and with an internally arranged spring 20 associated with said pivot, thus providing, in effect, a pair of jaws which may be pressed open so as to receive and clamp between them the strand of hair that is wound upon the body of the holder.

In this form of device the pliable member 11*b* is clamped or secured to the inner surface of one of the members 18 near the center thereof.

In the modified construction illustrated in Fig. 10, the body of the curler is shown in flat form before being shaped into a tube and with a narrow tongue 21 cut and pressed from the sheet of material of which the tubular body is formed, and which tongue is clamped over the central portion of the pliable member 11*c*.

In the construction illustrated in Fig. 11 a pair of short tongues 22 are cut from the sheet of material of which the tubular member is formed, and these tongues provide a pair of clamps that engage the central portion of the pliable member 11*d*.

In the use of my improved hair curler a strand of hair is wound upon the tubular body and the projecting portions of the pliable member 11 are bent inwardly and pressed onto the hair that is wound on the tubular member, thereby holding the same in proper shape while the hair is becoming dry and set.

In the form of device illustrated in Fig. 4, the strand of hair that is to be wound on the tubular body is inserted through the slots 15 and in the form of device illustrated in Fig. 7 the strand of hair is engaged beneath the retaining strip 17.

In the form of device illustrated in Fig. 9, the jaw members 18 are sprung apart in order to receive the strand of hair that is wound upon the tubular body formed by the members 18 when closed.

In some instances it may be found desirable to thread the pliable member through the loop or eyelet formed by the inwardly pressed strip 13 on the tubular body without clamping said strip against said pliable member, and such construction will enable a pliable member that has become worn, broken or unfit for service, to be readily removed from the tubular body and replaced by a new pliable member.

Thus it will be seen that I have provided a hair curling device that is relatively simple in construction, inexpensive of manufacture and very effective in performing the functions for which it is intended.

Especially desirable features of my invention are the simplicity of construction and cheapness of manufacture, inasmuch as the preferred forms of the device comprise only two parts, the tubular body and the pliable member that is secured to and extends through said tubular body in such a manner that its projecting ends may be bent in any direction over the ends of the tubular body to firmly engage and hold the strand of hair that is wound thereupon.

It will be understood that minor changes in the size, form and construction of the various parts of my hair curling device may be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. In a hair curler the combination with a rigid tubular body of metal, the wall of which is perforated throughout its length and circumference, of a pliable member extending through said tubular body which pliable member is longer than said tubular body so that both ends of said pliable member project substantial distances beyond the ends of said tubular body, and the central portion of which pliable member is permanently secured to the central portion of said tubular body.

2. In a hair curling device, a rigid tubular body of metal, the wall of which is perforated throughout its length and circumference, a pliable member extending through said tubular body with its end portions projecting beyond the ends of said tubular body, and means forming a part of said tubular body for securing the central portion of said pliable member to the interior of said tubular body.

3. A hair curling device comprising a rigid tubular body of metal, the wall of which is perforated throughout its length and circumference, a pliable member extending through said tubular body with its end portions projecting substantial distances beyond the ends of said tubular body, and a portion of the wall of said tubular body being cut and bent inwardly to form a clip for engaging and permanently securing said pliable member to said tubular body.

GERTRUDE L. SMITH.