Sept. 29, 1931. A. E. PAUSSER 1,825,540

WINDER AND CLIP FOR HAIR WAVING APPARATUS

Filed Oct. 4, 1930

Fig. 1.

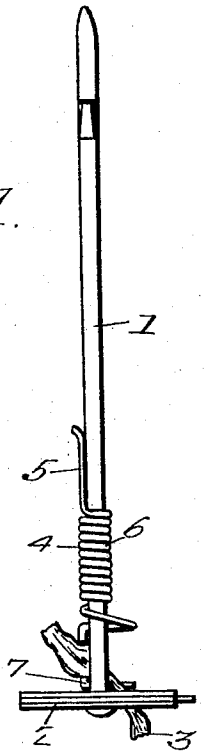


Fig. 2.

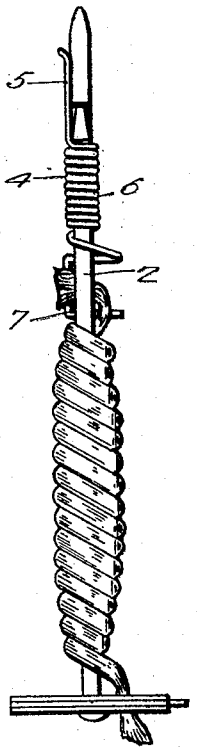
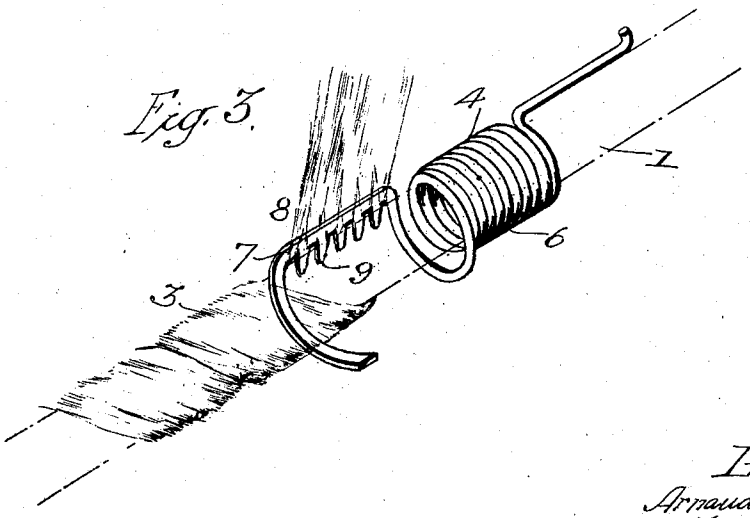


Fig. 3.



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UNITED STATES PATENT OFFICE

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WINDER AND CLIP FOR HAIR WAVING APPARATUS

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This invention relates to winding and clasping devices in general, and has particular reference to such devices for use in connection with hair-waving apparatus, the general object being to provide a simple and efficient winder and clip for winding and clasping the strands of hair upon the usual pins or rods.

Heretofore in the hair-waving art, it has been customary to wind the strands of hair upon pins or rods by hand and to provide a clasp at the end of each pin for clasping the end of the strand. This procedure has necessarily been cumbersome and tiresome to the operator and, in addition, requires considerable time. The device provided in accordance with the present invention enables the strands of hair to be wound upon the pins with much greater ease and in considerably shorter space of time. In addition, the device acts as a clasp, thereby eliminating the necessity for providing an additional member to hold the end of the strand of hair. In accordance with the invention, I provide a device of the type indicated above by forming a single piece of spring wire in a manner to obtain the desired structure. Since the device is of such simple construction that it can be readily made at low cost, it readily lends itself to commercial manufacture. As a modification, the invention contemplates the optional use of a device of the type indicated above having teeth or other means thereon to unravel the hair during the winding operation.

The details of construction of a device embodying the principles of my invention will be clearly understood from the following detailed description and the accompanying drawings.

In the drawings:

Fig. 1 shows the device of my invention mounted in operative relation with respect to the usual pin or rod, and having a strand of hair in position ready to be wound upon said rod;

Fig. 2 shows the device of Fig. 1 at the end of the rod after the strand of hair has been wound thereon; and

Fig. 3 shows a device constructed in accordance with a modification of the invention in operative relation with a rod during the process of winding a strand of hair thereon.

As is well known in the art, it is the usual practice in permanent waving to divide the hair of the patron into a number of strands. The strands of hair are each wound upon individual pins and the ends of the strands are clasped to the pin by some suitable clip or fastening device. The hair is then treated and a curling element, which takes the general form of a cylindrical member having a heating coil mounted therein, is placed over each of the pins and strands of hair, so that the end of the pin protrudes through the end of the element. The pin is then rigidly fixed by a suitable clamping device which clamps the pin in fixed relation to the curling element. As previously stated, it has been customary heretofore to wind each strand of hair upon its individual pin by hand, the operator clasping the strand of hair between his fingers and winding the same upon the rod. The device of my invention eliminates the necessity for such a method and at the same time provides a clasp for the hair.

Referring to Figs. 1 and 2 of the drawings, there is shown the customary pin or rod 1 which is carried by a base or supporting member 2. This is the usual structure, the base 2 being supported upon a protective pad which is adapted to rest against the head of the patron, while the particular strand of hair is wound about pin 1. The specific structure of base 2 and the pin carried thereby forms no part of this invention, and these elements are merely shown to clearly illustrate the real invention. These elements may take any conventional or customary form. A strand of hair is indicated at 3, and in Fig. 1 is shown in a position so that it is about to be wound about the pin by means of the device 4 of my invention. The winder and clasp 4 of the present invention comprises a single piece of spring wire, which is bent to provide an extending portion 5, a coil portion 6 and a winding and clasping portion 7.

The extension 5 is adapted to lie longitudinally along pin 1, and provides a bearing surface for the device against the pin. This extension may also serve a purpose which will be apparent later. Coil 6 comprises a plurality of adjacent turns of the spring wire, while the winding and clasping portion 7 takes the form of a curved U. Portion 7 is preferably flattened so as to provide greater contact area with the pin. This portion is also normally slightly misaligned with the axis of coil 6. When the device is mounted upon the pin, the slight misalignment causes the portion 7 to exert a positive pressure upon the pin due to the resiliency of coil 6. Extension 5 provides the necessary contact area with the pin to maintain the coil in position and enable it to resiliently force portion 7 against the pin.

In utilizing the device of the invention, the particular strand of hair is passed through the U-shaped portion 7 so that it lies between the said portion and the pin, as indicated in Fig. 1. The device is then drawn upward along the rod and is, at the same time, turned to wind the strand of hair along the rod. The U-shaped portion holds the strand of hair against the rod but allows the hair to slide between the said portion and the pin. In Fig. 2, the device is shown after it has been drawn upward along the rod and rotated to wind the hair. The device is left in the position shown in Fig. 2, since it functions also as a clasping device to hold the end of the strand of hair. It will be understood, of course, that the frictional engagement between the device and the pin prevents the device from moving with respect to the pin except when it is manually moved. After the hair has been wound by means of the device, as indicated in Fig. 2, the hair may be treated and a curling element may be positioned over the pin and the strand of hair, the end of the pin being rigidly attached to such element in the usual manner. Since this forms no part of the present invention, it is deemed unnecessary to disclose such structure. However, if the hair is wrapped in a cloth prior to placing the curling element over it, the device may be utilized to hold such cloth in place. For example, if a strip of cloth is wound spirally about the hair, the end of the cloth may be inserted under extension 5, which will hold the cloth in place. The extension is provided with an upturned end to facilitate slipping the end of the cloth under it.

In Fig. 3, I have shown a modification of the device of my invention in which the U-shaped portion 7 is provided along its hair-engaging portion 8 with a plurality of teeth 9. Such teeth constitute a comb and serve to unravel individual hairs composing the strand as the same pass underneath the U-shaped portion and are wound upon the pin 1. Otherwise, the device shown in Fig. 3 is of the same construction as that of Figs. 1 and 2. The teeth provided on the device of Fig. 3 may be formed as an integral part of the device, or they may constitute a small comb which may be attached to the device in any suitable manner.

It will be apparent to persons skilled in the art that the device of my invention constitutes a simple and efficient means for winding the hair during the hair-waving process. It will be obvious that changes in the construction of the device are possible without departing from the spirit of the invention. The device may be made of any suitable material which is adapted for the purpose. Any spring wire, such as spring steel wire, having the desired degrees of resiliency and rigidity may be used. I desire it to be understood, therefore, that my invention is not to be limited by the specific disclosure contained herein but only by the scope of the appended claims.

I claim:

1. A winding and clasping device comprising a central coiled spring portion adapted to surround a rod upon which it is desired to wind a given article, an extension at one end of said portion adapted to lie along said rod and provide a substantial bearing against said rod, and a U-shaped winding and clasping portion at the other end of said spring portion urged into frictional engagement with said rod by said spring portion and adapted to hold said article against said rod.

2. A winding and clasping device comprising a central coiled spring portion adapted to surround a rod upon which it is desired to wind a given article, an extension at one end of said portion adapted to lie along said rod and provide a substantial bearing against said rod, and a winding and clasping portion at the other end of said spring portion urged into frictional engagement with said rod by said spring portion and adapted to embrace said rod to hold said article against said rod.

3. A winding and clasping device comprising a central coiled spring portion adapted to surround a rod upon which it is desired to wind a given article, an extension at one end of said portion adapted to lie along said rod and provide a substantial bearing against said rod, and a U-shaped winding and clasping portion at the other end of said spring portion urged into frictional engagement with said rod by said spring portion and adapted to embrace said rod to hold said article against said rod.

4. A winding and clasping device comprising a single piece of spring wire formed to provide a coiled portion adapted to surround

a rod upon which it is desired to wind a given article, an extension at one end of said coiled portion adapted to lie along said rod and provide a substantial bearing against said rod, and a winding and clasping portion at the other end of said coiled portion urged into frictional engagement with said rod by said coiled portion and adapted to hold said article against said rod.

5. A winding and clasping device comprising a single piece of spring wire formed to provide a coiled portion adapted to surround a rod upon which it is desired to wind a given article, an extension at one end of said coiled portion adapted to lie along said rod and provide a substantial bearing against said rod, and a U-shaped winding and clasping portion at the other end of said coiled portion urged into frictional engagement with said rod by said coiled portion and adapted to hold said article against said rod.

6. A winding and clasping device comprising a single piece of spring wire formed to provide a coiled portion adapted to surround a rod upon which it is desired to wind a given article, an extension at one end of said coiled portion adapted to lie along said rod and provide a substantial bearing against said rod, and a winding and clasping portion at the other end of said coiled portion urged into frictional engagement with said rod by said coiled portion and adapted to hold said article against said rod, said winding and clasping portion being curved and flattened to embrace said rod and slightly misaligned with said coil portion to insure positive clasping action.

7. A winding and clasping device comprising a single piece of spring wire formed to provide a coiled portion adapted to surround a rod upon which it is desired to wind a given article, an extension at one end of said coiled portion adapted to lie along said rod and provide a substantial bearing against said rod, and a U-shaped winding and clasping portion at the other end of said coiled portion urged into frictional engagement with said rod by said coiled portion and adapted to hold said article against said rod, said winding and clasping portion being curved and flattened to embrace said rod and slightly misaligned with said coil portion to insure positive clasping action.

8. A winding and clasping device for winding a strand of hair or the like upon a rod, comprising a winding and clasping portion having teeth for separating the strands of hair and adapted to hold the hair against said rod, and a resilient body portion adapted to support said first portion upon said rod and in operative relation thereto.

9. A winding and clasping device for winding an article upon a rod and thereafter holding said article in tightly wound position on the rod, comprising a resilient body portion adapted to support said device on said rod, and a winding and clasping portion coaxially disposed with respect to said body portion and engaging said rod, said portions having their axes normally slightly misaligned, whereby said winding and clasping portion is urged into frictional engagement with said rod by said body portion.

10. A winding and clasping device for winding an article upon a rod and thereafter holding said article in tightly wound position on the rod, comprising a resilient body portion adapted to closely encircle said rod, and an arcuate winding and clasping portion coaxially disposed with respect to said body portion and engaging said rod, said portions having their axes normally slightly misaligned, whereby said winding and clasping portion is urged into frictional engagement with said rod by said body portion.

11. A winding and clasping device for winding an article upon a rod and thereafter holding said article in tightly wound position on the rod, comprising a coiled spring portion surrounding said rod, and an arcuate winding and clasping portion coaxially disposed with respect to said spring portion, said portions having their axes normally slightly misaligned, whereby said winding and clasping portion is urged into frictional engagement with said rod by said spring portion when the device is mounted on the rod.

12. A winding and clasping device for winding an article upon a rod and thereafter holding said article in tightly wound position on the rod, comprising a resilient body portion adapted to support said device on said rod, and a U-shaped winding and clasping portion urged into frictional engagement with said rod by said body portion.

13. A winding and clasping device for winding an article upon a rod and thereafter holding said article in tightly wound position on the rod, comprising a coiled spring portion surrounding said rod, and an arcuate U-shaped winding and clasping portion coaxially disposed with respect to said spring portion, said portions having their axes normally slightly misaligned, whereby said winding and clasping portion is urged into frictional engagement with said rod by said spring portion when the device is mounted on the rod.

14. A winding and clasping device for winding an article upon a rod and thereafter holding said article in tightly wound position on the rod, comprising a resilient body portion adapted to support said device

on said rod, an arcuate winding and clasping portion coaxially disposed with respect to said body portion at one end thereof, and an extension at the other end of said body portion adapted to lie along said rod and provide a substantial bearing thereagainst.

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