Oct. 25, 1938. R. G. LELAND 2,134,486

HAIR WAVING APPARATUS

Filed Feb. 9, 1938

Fig. 2.

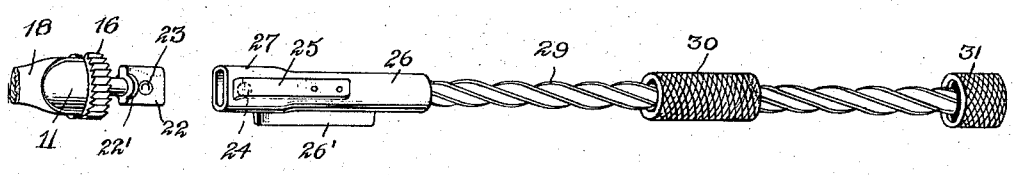


Fig. 3.

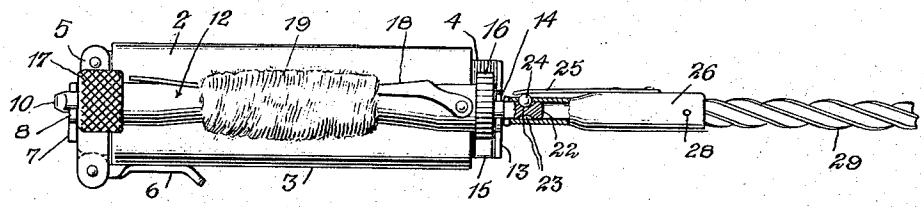


Fig. 1.

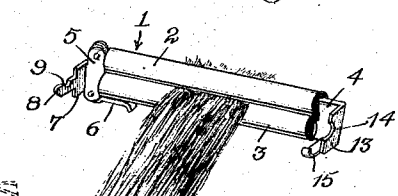


Fig. 5.

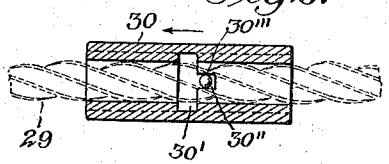
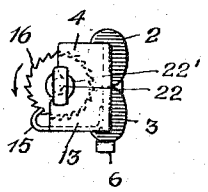
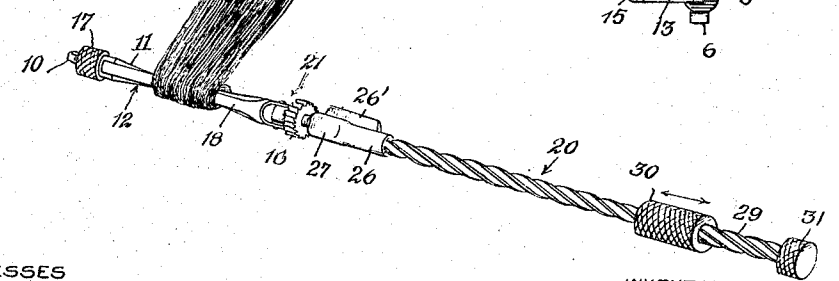


Fig. 4.





WITNESSES

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HAIR WAVING APPARATUS

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4 Claims. (Cl. 132—33)

This invention relates to improved hair waving mechanism and has for an object to provide an improved construction wherein the winding operation for a strand of hair may be speeded up.

Another object of the invention is to provide in a hair waving apparatus improved means for preventing a coiled strand of hair from unwinding.

A further object, more specifically, is to provide a hair waving apparatus having a holding clamp, a winder, and a removable hand actuated member associated with the winder for causing the same to quickly wind a strand of hair thereon and simultaneously move the winder to a position against the clamp.

In the accompanying drawing—

Fig. 1 is a perspective view of a waving apparatus disclosing an embodiment of the invention;

Fig. 2 is a perspective view of the turning member and part of the winder, said turning member and winder embodying certain features of the invention;

Fig. 3 is a side elevation of the clamp and winder embodying the invention, the same being shown in connection with part of the turning member;

Fig. 4 is an end view of the winder and clamp shown in Fig. 3;

Fig. 5 is a longitudinal vertical sectional view through the traveling clutch member shown in Fig. 1.

Referring to the accompanying drawing by numerals, 1 indicates a clamp which has a pair of separable clamping bars 2 and 3 pivotally connected at one end with a plate 4 and disengageably connected together by a lock 5 at the opposite end. This lock is adapted to be moved to a locking position or unlocking position by a lever 6. The parts just described are old and well known and will therefore need no additional description. An end bracket 7 is connected with the lock 5 and is provided with an extension 8 having an arc-shaped notch 9 adapted to receive the end 10 of the forming bar 11 of a winder 12. At the opposite end the plate 4 is provided with an end bracket 13 having a notch 14 and a spring catch 15 adapted to coact with a ratchet wheel 16 to prevent any reverse movement of this wheel and, consequently, prevent a reverse movement of the forming bar. It will be noted that the forming bar 11 is rigidly secured to the ratchet wheel 16 and when this ratchet wheel is held by the spring catch or pawl 15, as shown in Fig. 4, the bar cannot rotate, except in a direction for tightening the coil of hair thereon.

Coacting with the clamp 1 is the winder 12 which is provided with the forming bar 11 preferably concave in the center and provided at one end with a freely rotatable thumb member or sleeve 17. At the opposite end the winder is provided with the ratchet wheel 16. A clip 18 is pivotally mounted on the forming bar 11 at the end near the ratchet wheel and acts to clamp the free end of a strand of hair 19 on the forming bar at the beginning of the winding of the hair. The strand of hair held by the clamp 2 and wound on the bar 11 may be a few hairs or a large number as may be desired.

When using the device a desired bunch of hair is separated from the remaining hair and this forms the strand 19. The clamp 1 is then applied to the strand of hair as near to the scalp as possible and then the outer end of the strand is clamped to the bar 11 by clip 18. The hand actuated turning member 20 is then applied and caused to function whereupon the bar 11 with its clip 18 will rotate as indicated by the arrow 21. In doing this the roller or sleeve 17 is grasped by the left hand and the clutch member 30 is grasped by the right hand and moved toward the left as shown in Fig. 1. This will wind the strand of hair so that the coil will be beneath the strand as the parts move toward the clamping bars 2. This winding operation is continued until the parts assume the position shown in Fig. 3, with the end 10 fitting into notch 9 and the opposite end of the forming bar fitting into notch 14 with the ratchet wheel 16 engaging the spring pawl or catch 15. A further turning movement may be provided, if desired, to tighten the wound coil on the forming bar 11 by grasping the member 26 and forcing the thumb of the right hand against the member 26'. As soon as the ratchet wheel 16 engages the pawl 15 the parts cannot unwind or rotate in a reverse direction.

Preferably the hair is put under some tension by further winding after the parts have assumed the position shown in Fig. 3. The hair is left in this position for a desired time during a suitable treatment thereof, and then the clamp and winder are removed. In waving the hair a large number of clamps and winders are used but only one turning member 20.

It will be observed from Figs. 3 and 4 that the forming bar 11 is provided with an extending end or shank 22 which is preferably rectangular in cross section and which also is preferably provided with one or more depressions 23. These

depressions are adapted to receive the ball or rounded member 24 welded or otherwise secured to the spring 25, which spring is riveted or otherwise secured to the tubular sleeve 26 as shown in Fig. 3. The sleeve 26 is provided with a socket 27 of a shape to fit over the shank 22 and is also provided with a rivet or other means 28 whereby the threaded member 29 is rigidly secured thereto. The threaded member or coil is provided with the traveling or sliding ball clutch member 30 which acts to rotate the threaded member 29 when moved in one direction and to slide freely thereon when moved in the opposite direction. Usually after the parts have been arranged as shown in Fig. 1, the rotatable member 17 is grasped by the left hand of the operator and the clutch member 30 is grasped by the right hand and moved to the left as shown in Fig. 1 and this will rotate the forming bar 11 so as to quickly wind the strand of hair 19 thereon. Preferably the threaded member or body 29 is sufficiently long so that one movement of the clutch member 30 from the stop 31 to the tubular member 26 will be sufficient to wind the strand of hair until the ratchet wheel 16 has assumed the position shown in Figs. 3 and 4.

The socket member 26, as shown particularly in Fig. 1, is provided with the radially extending thumb member 26' which is used in rotating the forming bar 11 after the ratchet wheel 16 has been engaged by its spring pawl. This additional rotation of the forming bar results in tightening the coil to a desired extent. It will also be noted, particularly from Figs. 1 and 3, that adjacent the shank 22 there is provided a stop or abutment 22'. This abutment is so positioned that when the socket 27 is forced into its correct position the abutment 22' will stop the movement of the socket in time to permit the ball or enlargement 24 to snap into the depression 23.

The ball or member 24 acts to hold the socket 27 in place in case it should be necessary or desirable to move the clutch member a second or third time to secure the desired winding action.

In regard to the clutch member 30, it will be seen from Fig. 5 that the same is provided with an annular groove 30' and diametrically oppositely positioned notches 30'' which may receive the respective balls 30''' when the clutch is moving in one direction. When the balls 30''' are as shown in Fig. 5 and the clutch member is moving to the left as shown in Fig. 1, the threaded member 29 will be rotated. If the clutch should be moved in the opposite direction the balls will move into the groove 30' and the clutch member will freely slide to the right without rotating member 29. It will therefore be seen that member 30 may be moved back and forth freely, but when moved to the left as shown in Fig. 1 it will always rotate member 29. While this particular structure may be used others accomplishing the same result may also be used without departing from the spirit of the invention. Also in regard to the connection including ball 24, it will be evident that some other connection could be used for connecting the winding member to the forming bar 11 without departing from the invention. However, the particular structure shown is desirable as it is simple and may be quickly and easily applied or removed.

I claim:

1. A hair waving apparatus including a clamp adapted to be placed near the head of a person for clamping a strand of hair near the scalp, a forming bar, a clip on the forming bar adapted to hold the outer end of said strand during the winding operation, said bar having a shank, a bar turning member removably connected to said shank, said turning member including a socket fitting over said shank and a threaded body, a traveling clutch on said body, a rotatable finger engaging member at the end of said forming bar opposite said shank whereby when said traveling clutch is moved toward said socket by the right hand of an operator and said finger engaging member is grasped by the left hand of said operator, said body will rotate and will in turn rotate said forming bar until said strand of hair has been wound thereon and said bar moved to a position against said clamp, and means for locking said bar to said clamp.

2. A hair waving apparatus including a forming bar, a clip for clamping the end of a strand of hair thereon, said bar having a shank and removable hand actuated means engaging said shank for rotating the shank and said bar with the coil of hair underneath the strand, said means including a socket fitting over said shank, a threaded rod extending axially from said socket, a traveling clutch mounted on said rod adapted to rotate said rod when moved in one direction and slide freely over said rod when moved in the opposite direction, and a stop positioned on the end of the rod opposite said socket for preventing accidental removal of said traveling clutch.

3. A hair waving apparatus including a forming bar, a clip for clamping the free end of a strand of hair thereon, said bar having a shank substantially rectangular in cross section formed with a depression, and a removable hand actuated structure for engaging said shank for rotating the shank and said bar, said hand actuated structure including a socket adapted to slide over said shank, said socket having an opening therein through one side, a spring catch secured to said socket at one end and having a rounded projection at the opposite end adapted to extend through said opening into said depression, a threaded member extending from said socket, and means acting as a traveling clutch for rotating the threaded member and socket when said means is moved longitudinally of the threaded member in one direction.

4. A hair waving apparatus including a formin bar, a clip for clamping the free end of a strand of hair thereon, a freely rotatable thumb member mounted on one end of said forming bar, a hand actuated structure removably connected to the other end of said forming bar, said hand actuated structure including a threaded body and a traveling clutch member positioned on said body whereby when said thumb member is grasped by the left hand of an operator and said clutch member is moved toward said thumb member by the right hand of said operator said forming bar will be rotated for winding said strand of hair on said bar.

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