Nov. 19, 1940. Z. B. CHENEY 2,221,757

HAIR DRESSING IMPLEMENT

Filed Oct. 9, 1939

FIG_1_

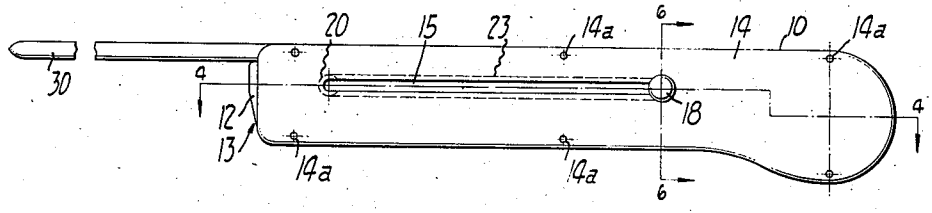


FIG_2_

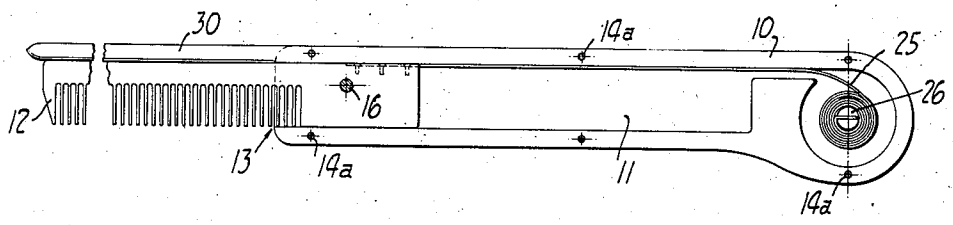


FIG_3_

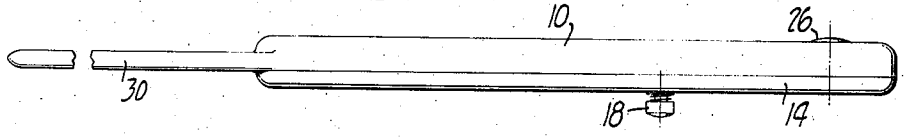
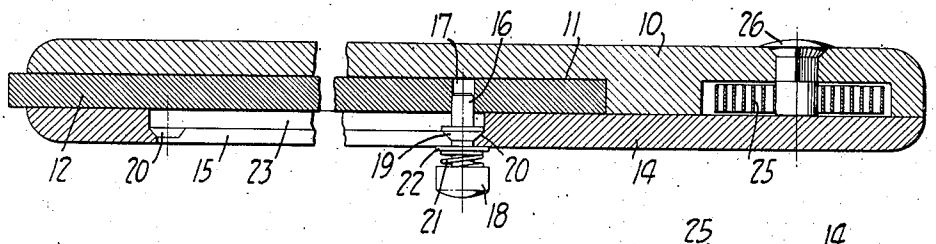


FIG_4_



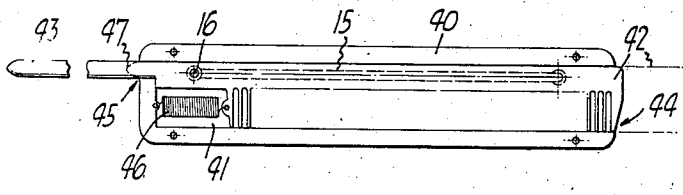


FIG_5_

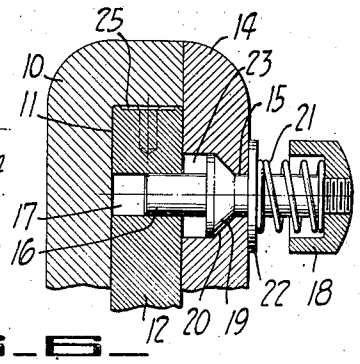


FIG_6_

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Patented Nov. 19, 1940 2,221,757

UNITED STATES PATENT OFFICE

2,221,757

HAIR DRESSING IMPLEMENT

Zelta Beryl Cheney, San Francisco, Calif.

Application October 9, 1939, Serial No. 298,609

13 Claims. (Cl. 132—19)

My invention relates to hair dressing implements and more particularly to implements especially adapted for use in permanent waving operations.

In preparing the hair for permanent waving it is necessary to separate it into strands each of which must be combed into a flat strand about two inches in width. Each strand must then be wound on a heater by means of an implement known as a "needle", which is a rod, usually three or four inches long and about an eighth of an inch in diameter. This operation must be repeated from twenty-five to thirty-five times on each subject, and each time the operator must lay down the comb, pick up the needle, lay down the needle and pick up the comb.

Prior to my invention these implements have never been satisfactorily combined in a single implement, because it is necessary that the comb be shielded to avoid entanglement with the hair when the needle is being used, and that the needle be at least guarded to avoid similar entanglement or possible injury to the subject when the comb is being used.

It is therefore the principal object of my invention to provide a combination needle and comb in which either of these implements may be guarded against entanglement with the hair while the other is being used.

A further object of my invention is to provide an implement of this character which is capable of adjustment from the condition in which either the comb or needle is guarded to the opposite condition, by a one-hand operation while the implement is held therein, to avoid any risk of disarrangement of a combed strand held by the other hand.

A further object of my invention is to provide an implement of this character which can be cheaply and easily manufactured.

The foregoing objects and others ancillary thereto I prefer to accomplish by providing a hollow handle member constituting a sheath having an open end through which the comb may slide, and arranging the needle either integral with the handle member adjacent the open end of the sheath or integral with the comb and slidable into and out of the sheath as the comb slides out of and into the sheath.

If the needle is made integral with the handle member, as first described, the comb in its exposed position will serve as a guard for the needle preventing entanglement of the latter with the hair during combing. If the needle is made integral with the comb, as next described, it will be retracted into the sheath and guarded thereby when the comb is exposed. In either case the comb must be retracted within the sheath and guarded thereby against entanglement with the hair when the needle is being used.

It is also desirable to provide a latching device for holding the comb in its exposed position with respect to the sheath, and a latch may also be provided for holding it in retracted position. A further desirable, though optional, refinement is the provision of a spring for retracting the comb into the sheath upon release of the latch holding it in exposed position, since this makes possible the most speedy, one-hand adjustment of the device at the time when the operator is holding a combed strand of hair in one hand and desires to use the needle promptly to avoid disarrangement.

The novel features of my invention are set forth with particularly in the appended claims. The invention, together with additional objects and advantages thereof, however, will be best understood from the following description of specific embodiments, when read with reference to the accompanying drawing, in which:

Figure 1 is a view in side elevation of a preferred embodiment of the invention;

Figure 2 is a view in side elevation of the device of Figure 1, with one side of the handle member removed and the comb in exposed position;

Figure 3 is a view in plan of the device of Figure 1;

Figure 4 is a sectional view of the device of Figure 1, taken on the line 4—4 of said figure;

Figure 5 is a view in side elevation of an alternative embodiment of my invention, with one side of the handle member removed; and

Figure 6 is an enlarged detail view of the latching mechanism utilized in both of the above embodiments.

As shown in Figures 1 to 4 of the accompanying drawing the preferred embodiment of my invention comprises a metal or composition handle member 10 recessed as at 11 to provide a sheath for a comb 12 longitudinally slidable into and out of the sheath through the open end 13. The recessed handle member 10 is preferably provided with a cover plate 14 fixed thereto by means such as pins 14a and having a longitudinal slot 15 through which extends a pin 16 seated in a hole 17 in the comb 12 and provided with a screwed on head 18 by means of which the comb may be moved longitudinally into exposed or retracted position with respect to the sheath.

In order to latch the comb 12 in such exposed or retracted position, the pin 16 is preferably made with an enlarged intermediate portion 19 capable of seating in depressions 20 formed internally of the cover plate 14 adjacent the ends of slot 15; the enlarged portion 19 being resiliently retained in either of said depressions 20 by a spring 21 compressed between head 18 and a washer 22 slidable on the exterior of the cover plate 14. When the spring 21 is compressed by pressure exerted by the thumb or finger on head 18, the portion 19 will be moved out of either depression 20 into a wider portion 23 of slot 15 so that the pin 16 and comb 12 may be moved longitudinally in either direction to expose or retract the comb.

It is also desirable, for reasons hereinabove set forth, to provide spring means for retracting the comb into the sheath upon release of the latch holding it in exposed position. For this purpose the present device, as shown in Figures 2 and 4, includes a flat helical spring 25 disposed within the handle member 10. One end of the spring 25 is attached to a post 26 fixed in the handle member 10, and the other end is fixed to the inner end of the comb 12, so that upon movement of the comb to exposed position, as shown in Figure 2, the spring 25 is tensioned, and upon release of the latching device, by pressing head 18 and releasing it, the spring will immediately move the comb to retracted position.

In the preferred embodiment of my invention the needle 30 is made integral with the handle member and extends parallel to the path of movement of the comb 12 from adjacent the open end 13 of the sheath. This arrangement is such that the comb 12 in its exposed position, as shown in Figure 2, constitutes a guard for the needle 30 preventing it from entangling nearby hair or jabbing the subject as it might if it projected unguarded from any other part of the handle. It may furthermore be disposed so as to contact the back of the comb 12 when the latter is in exposed position so as to furnish mechanical support for it in use.

In the alternative embodiment of my invention illustrated in Figure 5 of the accompanying drawing the handle member 40 is recessed as at 41 to provide a common sheath for the integral comb 42 and needle 43, the comb being longitudinally slidable through the open end 44 of recess 41 and the needle being concurrently movable through an opening 45 in the opposite end of recess 41 to the retracted position indicated by the line 47 in Figure 5. A cover plate (not shown) may of course be provided so as to completely enclose the comb or needle when retracted into the recess.

The means for moving and latching the comb and needle of this alternate embodiment corresponds to that utilized in the preferred embodiment hereinabove described and illustrated in Figure 6 of the accompanying drawing, and the description need not therefore be repeated.

A somewhat simpler spring mechanism for retracting the comb and exposing the needle is illustrated in Figure 5 as comprising a coil spring 46 disposed in the recess 41 and tensioned between an inner wall of the recess and the adjacent end of the comb 42, so that when the comb is moved to exposed position by manipulation of head 18, the spring 46 will be tensioned, and when the latching device is released by depressing head 18 and releasing it, spring 46 will immediately draw the comb 42 into the sheath and extend the needle 43 to exposed position.

In using this alternative embodiment the operator must of course reverse the position in which the implement is held in the hand in switching from a combing operation to a spreading operation in which the needle is utilized, and the embodiment first described is preferred because no such reversal is necessary. The alternative embodiment may, however, be manufactured and sold more cheaply, and both embodiments insure that the comb will be satisfactorily shielded when the device is adjusted for using the needle, and vice versa.

It will be seen therefore that both of the above described embodiments of my invention accomplish the objects set forth, and it will be apparent that other modifications of the form in which the invention is embodied are possible. The invention, therefore, is not to be considered as restricted to the forms disclosed, except insofar as is necessitated by the prior art and by the spirit of the appended claims.

I claim:

1. An implement of the character described comprising a handle member, a comb sheath within said handle member having an opening adjacent one end thereof, a comb slidably mounted within said sheath and movable through said opening to an exposed position, and a needle element associated with said handle member and comb so that movement of the comb into the sheath will expose said needle element for wrapping operations.

2. An implement of the character described comprising a handle member, a comb sheath within said handle member having an opening adjacent one end thereof, a comb slidably mounted within said sheath and movable through said opening to an exposed position, and a needle element associated with said handle member and comb so that movement of the comb into the sheath will expose said needle element for wrapping operations, and means for latching said comb in exposed position.

3. An implement of the character described comprising a handle member, a comb sheath within sand handle member having an opening adjacent one end thereof, a comb slidably mounted within said sheath and movable through said opening to an exposed position, and a needle element associated with said handle member and comb so that movement of the comb into the sheath will expose said needle element for wrapping operations, means for latching said comb in exposed position, and means for latching said comb in retracted position within said sheath.

4. An implement of the character described comprising a handle member, a comb sheath within said handle member having an opening adjacent one end thereof, a comb slidably mounted within said sheath and movable through said opening to an exposed position, and a needle element associated with said handle member and comb so that movement of the comb into the sheath will expose said needle element for wrapping operations, means for latching said comb in exposed position, and spring means disposed within said handle member for retracting said comb within said sheath upon release of said latching means.

5. An implement of the character described comprising a member having a handle portion and an integral needle portion projection from one end thereof, a comb sheath within said handle

portion having an opening adjacent the junction of said handle and needle portions, and a comb slidably mounted within said sheath and movable through said opening to an exposed position in which the back of said comb lies adjacent said needle portion and constitutes a guard therefor.

6. An implement of the character described comprising a member having a handle portion and an integral needle portion projecting from one end thereof, a comb sheath within said handle portion having an opening adjacent the junction of said handle and needle portions, a comb slidably mounted within said sheath and movable through said opening to an exposed position in which the back of said comb lies adjacent said needle portion and constitutes a guard therefor, and means for latching said comb in exposed position.

7. An implement of the character described comprising a member having a handle portion and an integral needle portion projecting from one end thereof, a comb sheath within said handle portion having an opening adjacent the junction of said handle and needle portions, a comb slidably mounted within said sheath and movable through said opening to an exposed position in which the back of said comb lies adjacent said needle portion and constitutes a guard therefor, means for latching said comb in exposed position, and means for latching said comb in retracted position within said sheath.

8. An implement of the character described comprising a member having a handle portion and an integral needle portion projecting from one end thereof, a comb sheath within said handle portion having an opening adjacent the junction of said handle and needle portions, a comb slidably mounted within said sheath and movable through said opening to an exposed position in which the back of said comb lies adjacent said needle portion and constitutes a guard therefor, means for latching said comb in exposed position, and spring means disposed within said handle portion for retracting said comb within said sheath upon release of said latching means.

9. An implement of the class described comprising a handle member, a sheath within said member having openings adjacent opposite ends thereof, and an integral comb and needle element slidably mounted in said sheath and so related in length to said sheath as to cause movement of said element through one of said openings to expose said comb, to effect substantially complete retraction of said needle within the sheath, and to cause movement of said element through the other of said openings to expose said needle, to effect substantially complete retraction of said comb within said sheath.

10. An implement of the class described comprising a handle member, a sheath within said member having openings adjacent opposite ends thereof, an integral comb and needle element slidably mounted in said sheath and so related in length to said sheath as to cause movement of said element through one of said openings to expose said comb, to effect substantially complete retraction of said needle within the sheath, and to cause movement of said element through the other of said openings to expose said needle, to effect substantially complete retraction of said comb within said sheath, and means for latching said comb in exposed position.

11. An implement of the class described comprising a handle member, a sheath within said member having openings adjacent opposite ends thereof, an integral comb and needle element slidably mounted in said sheath and so related in length to said sheath as to cause movement of said element through one of said openings to expose said comb, to effect substantially complete retraction of said needle within the sheath, and to cause movement of said element through the other of said openings to expose said needle, to effect substantially complete retraction of said comb within said sheath, means for latching said comb in exposed position, and means for latching said needle in exposed position.

12. An implement of the class described comprising a handle member, a sheath within said member having openings adjacent opposite ends thereof, an integral comb and needle element slidably mounted in said sheath and so related in length to said sheath as to cause movement of said element through one of said openings to expose said comb, to effect substantially complete retraction of said needle within the sheath, and to cause movement of said element through the other of said openings to expose said needle to effect substantially complete retraction of said comb within said sheath, means for latching said comb in exposed position, and spring means disposed within said handle member for retracting said comb within said sheath and exposing said needle upon release of said latching means.

13. An implement of the character described comprising a handle member having a longitudinally extending channel therein forming a sheath, a comb and pin carried by said handle in mechanical relation, the comb being slidably mounted in the channel, and means on the handle for projecting or retracting the comb, respective movements of the comb serving to guard and expose the needle.

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