July 12, 1966 E. E. M. ZURNDORFER 3,260,269

HAIR DRESSING DEVICE WITH RETRACTABLE COMB

Filed Feb. 20, 1964

FIG. 1

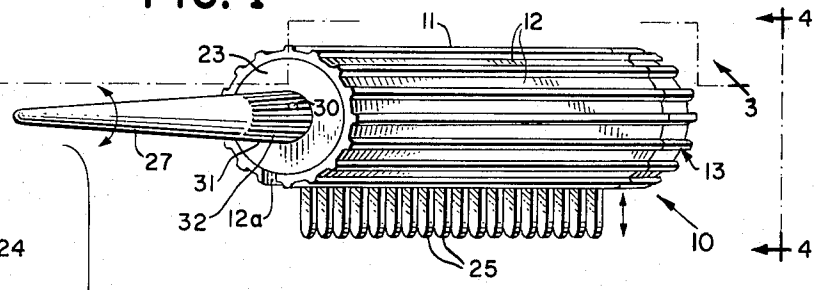


FIG. 2

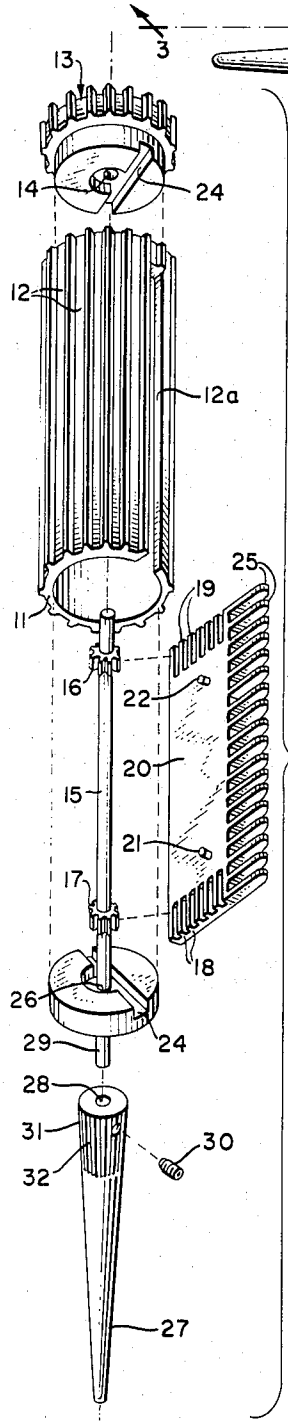


FIG. 3

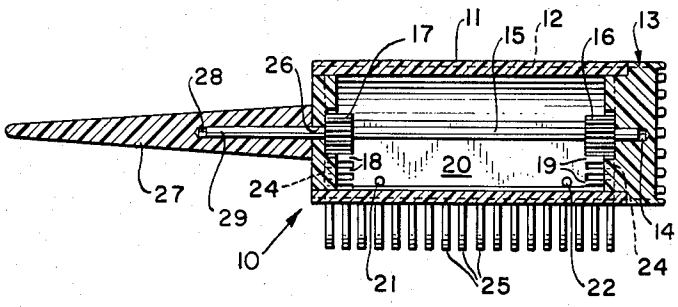
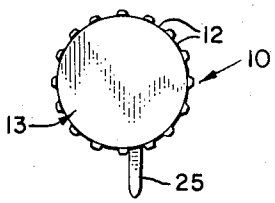


FIG. 4



INVENTOR.
ESTHER E. MORRIS ZURNDORFER
BY Joseph T. Padden
ATTORNEY

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HAIR DRESSING DEVICE WITH RETRACTABLE COMB

Esther E. Morris Zurndorfer, 37 St. Mark Place, Brooklyn, N.Y.

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This invention refers to hair dressing devices. More particularly, it relates to a compact hair dressing and combing device having a disappearing combing member.

In the hair dressing art, ordinary combs are used for fixing the hair. Such combs are often provided with an extension member for insertion into the mop of hair on the head so as to bunch strands preparatory to clipping or curling the same. Such combs do not afford all the cooperative parts necessary for hair combing and curling.

In accordance with my invention, it is an object of the same to provide a compact hair sorting, curling and setting device.

Ordinarily, many women have in their hand bags, combs, lipstick and other cosmetic addenda for use while away from their homes. In the present case, I have provided a hair separating, combing and curling device in one compact form, which can be carried and used at the convenience of the owner.

A more specific object of my invention is to provide a compact, unitary cooperative hair combing, setting and curling device in which the comb portion thereof is actuated so as to be exposed for use and to when not in use, be retracted to produce a compact unit.

Still another object of my invention is to provide a hair dressing device having an externally corrugated housing for a disappearing comb, and manipulative means for operating said comb, one end of said housing being provided with grooves.

Other objects and features of my invention will become apparent from the following detailed description, taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective view of a preferred embodiment of my invention.

FIG. 2 is an exploded view of FIG. 1 showing the component and related parts unassembled,

FIG. 3 is a longitudinal sectional view taken on line 3—3 of FIG. 1, and

FIG. 4 is an end view of FIG. 1 taken on line 4—4 thereof.

Referring now to the drawing in which like reference numerals refer to like parts throughout, I provide, according to my invention, a hair dressing device **10**. Said device is provided with a tubular casing or housing **11** provided with a plurality of longitudinal recesses **12** arranged circumferentially on the housing so as to impart a scalloped or milled appearance to the housing. Said housing is also provided with a longitudinal slot **12***a*.

Housing **11** has at its butt end, a closure cap **13** which is fixed thereto in any suitable manner such as by cementing or welding. It will be noted that said cap **13** has recesses which are in alignment and correspond with those of housing **11**, so that when the cap is inserted into housing **11** a uniform appearance is obtained or imparted. Also, said cap has extensions on its periphery, which form extended circumferential recesses.

Said cap **13**, part of which fits into housing **11** has an opening **14** for accommodating one end of a rod **15** thereby acting as a bearing, when said rod is rotated. Rod **15** has a pair of spaced apart gear members **16** and **17** which are adapted to mesh with the side teeth **18** and **19** respectively of a comb **20**, and operate the comb to move it in and out of the interior of the housing **11**

through slot **12***a*. Comb **20** is provided on one of its faces with a pair of spaced pins **21** and **22**, which act as stops against the full extrusion of comb **20** from housing **11**. Said stops make contact with the inner wall of housing **11** as shown in FIG. 3. Said comb, furthermore extends the length of the housing and is adapted to fit in said housing when the comb is retracted as will hereinafter be described. In order to guide the comb, in its movement in and out of housing **11**, cap **13** and end cap **23** each has a guide slot **24**. Said slots **24** are in alignment with opening **12***a*. The ends of the comb slide up and down said guide slots when the rod **15** is actuated. To facilitate the even movement of comb **20** teeth **18** and **19** in engagement with gear members **16** and **17** are simultaneously and evenly set that comb **20** will evenly move in and out of slot **12***a*.

The end cap **23** has an opening **26** through which said rod **15** extends. Said rod fits into a rat tail spindle **27** which has an opening **28** for accommodating the free end **29** of rod **15**. A socket screw **30** is provided for insertion into the spindle and firmly fixing the rod and spindle to permit uniform rotation of the rod.

From FIG. 3, which shows the assembled device, it will be noted that the depth of the comb is substantially equal to the internal diameter of housing **11** so that when the comb is retracted into the housing, the comb disappears, whereas when the comb is actuated the teeth **25** extend outwardly of the housing to a point set by stop pins **21** and **22**. In addition, gear members **16** and **17** being in mesh with teeth **18** and **19** operate uniformly so that the length of the comb moves evenly via grooves **23** and **24** of the end caps **13** and **23**.

Spindle **27** is provided at its end adjacent cap **23** with a milled or knurled end **31** to permit easy grasping and rotation of the spindle for operating rod **15** which in turn moves comb **20** in and out of said housing.

My invention as described and illustrated herein provides a readily usable, compact hair dressing device. It can be used for separating the hair by means of the spindle so as to form a compact bundle of hair which is then combed by means of comb **20** so as to straighten the same preparatory to being curled. The combed hair is then rolled around the housing to form the desired type of hair curl. This curl, once formed as desired, is then clipped by means of a bobby pin or the like which can be readily slid along any one of the external longitudinal grooves or recesses **12**. It will be noted that these bobby pins can be set at any point in the periphery of the housing.

Sometimes, it is desired to form curls which are flattened against the scalp instead of being substantially parallel with the plane of the scalp. In such cases, where the curls are to be flat against the head the curl formed as hereinabove described is forced toward the end cap **13** which is in turn placed flat against the scalp. In order to insert bobby pins or the like through such hair curls, grooves or recesses **12** have sufficient free space so that the pins can readily pass along and be guided by said pins. Also, said recesses **12** are formed by ribs which can be extended beyond cap **13**.

From the foregoing, it is apparent that I have provided a compact cooperative hair dressing device which can be readily carried in a bag having a lady's personal effects. The combination of a housing for a retractable comb, a spindle for separating hair and retracting and exposing said comb and guide means on the external periphery on one end of the housing provide for a compact unit which can be used at any time the owner decides.

While a preferred embodiment of my invention has been described and illustrated, it is to be noted that it

may be made of any suitable type of material and may be modified as to form, arrangement of parts and use of material without departing from the spirit and scope of my invention as claimed.

I claim:

1. A hair curling device, comprising a ribbed cylindrical housing, said housing having a longitudinal slot extending through the wall of the housing in an axial direction, a pair of opposed spaced end pieces attached to the respective ends of the housing, each of said end pieces being provided with a transverse slot in alignment with said longitudinal slot, an actuating rotatable rod centrally located in the housing and inserted at one end into one of the end pieces and extending at the other end through the opposed end piece, said rod having a pair of spaced toothed gear members rigidly secured thereto within the housing, a comb in said housing having end rack teeth in meshing engagement with the toothed gear members, said comb being slidable in and out of the longitudinal slot and guided by said transverse slots of the end pieces, and tapered handle means fixed to said rod and in alignment therewith for rotating said rod.

2. A device according to claim 1, wherein the comb is provided with stop members to prevent the full extrusion of said comb from said housing.

3. A device according to claim 1 in which the handle means extending from the housing is partly knurled and rat tail shaped, and the other end of the cylinder is inset and provided with grooves arranged peripherally thereon.

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RICHARD A. GAUDET, *Primary Examiner.*

R. L. FRINKS, *Assistant Examiner.*