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HAIR SHAPER

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HAIR SHAPER

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5 Claims. (Cl. 30—30)

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This invention relates to hair shapers, such as are equipped with a razor blade and are commonly used in beauty shops and the like to impart a desired end form to strands of women's hair. The present application is directed to an improvement on the subject matter of my pending application, Serial Number 670,473, filed May 17, 1946.

An object of the invention is to provide an improved mechanism for latching a blade in its mounting and ejecting it when desired.

Another object is to provide a blade mounting of a type having guard teeth for the cutting edge of the blade, and to afford the blade two definite positions of use, each exposing portions of the cutting edge rendered idle by the teeth in the other blade position.

Another object is to so form the blade and its mounting as to safeguard the cutting edge of the blade from contact with the mounting.

These and various other objects are attained by the construction hereinafter described and illustrated in the accompanying drawing, wherein:

Fig. 1 is an enlarged side elevational view of my improved hair shaper, showing a blade latched in its mounting.

Fig. 2 is a similar elevational view in partial section, showing the blade partially ejected.

Fig. 3 is an end view of the implement.

Fig. 4 is a cross sectional view taken on the line 4—4 of Fig. 1.

Fig. 5 is a cross sectional view of the handle, taken on 5—5 of Fig. 2.

Fig. 6 is a fragmentary perspective view of the blade.

In these views, the reference character 1 designates an elongated mounting for a thin elongated blade 2 having a razor edge 3. The mounting is formed with a narrow socket 4 wherein the blade is removably inserted, such socket opening in an end face of the mounting. Adjoining the other end face of the mounting, an abutment 5 for the blade is formed, and a suitable handle 6 for the implement projects. A guard for the cutting edge 3 is formed on the lower portion of the mounting by a row of teeth 7, similar to those of a comb. The upper portions of such teeth form the lower portion of the socket 4, the teeth projecting a suitable distance below the cutting edge. It is desirable to avoid dulling said edge through contact with the tooth-formed bottom wall of the socket 4, and such contact is prevented by giving the top portion of the blade a slight excess of thickness over

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the lower portion, resulting in longitudinal shoulders 8, the socket being correspondingly shaped. Thus the edge 3 exercises no blade supporting or guiding function.

For latching the blade in inserted position, a resilient elongated latch piece 9, preferably metallic, is set jointly into the handle and mounting, the forward portion of said strip passing above the abutment 5 and terminating in a downwardly projecting detent 10 to enter a notch 11 in the upper edge of the blade. The rear portion of the latch piece is exposed beneath the handle, being terminally formed with a downwardly projecting actuating lug 12. Between its rear portion and higher front portion, the latch piece is inclined at approximately forty-five degrees as is indicated at 13, forming a cam to engage the abutment 5. Rearwardly of its inclined portion 13, the latch piece is confined in the handle and limited in its play to a forward and back sliding travel. Thus when the latch piece is slid forward from its normal retracted position, in which the blade is held in place by said detent, the cam portion 13 rides up said abutment, flexing the forward portion of the latch piece upwardly to release the blade from the tooth 10. This release does not occur, however, until the blade has been slid forward sufficiently to expose its front end portion (Fig. 2), thus permitting ready removal of the blade. Following insertion of a new blade, retraction of the latch piece will release the cam portion 13 from abutment 5, allowing the latch piece to flex down to retain the new blade by the detent 10. The latch piece 9 thus has the additional function of a blade ejector. The rear portion of the socket 4 opens into a chamber 14 in the mounting, accommodating the raised forward portion of the latch piece and affording the required sliding and flexure of such portion.

To retain the blade in a use position, the latch piece must itself be retained, and it is preferred to provide two latching positions in one of which the blade contacts the abutment 5, being sufficiently shifted forward in the other position to expose those portions of the edge 3 which were shielded by the teeth 7 in the first-mentioned position. To thus derive an eventual cutting function from the full length of the edge 3, the spaces between the teeth must equal the teeth width, at least in the plane transverse to the teeth established by the cutting edge. The two required latching positions of the piece 9 are established preferably by providing a small tooth 15 on the upper edge of said piece, near its rear end, for

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engagement in either of two small recesses 16 in the handle. Said tooth flexes the exposed rear portion of the latch piece slightly downwardly during sliding actuation of said piece, so that the tooth snaps into either recess when registered therewith. The recesses and tooth 15 are preferably V-shaped, so that a release may be effected by applying a moderate longitudinal pressure to the latch-piece. The tooth 15 slides in a narrow upward extension of the handle passage receiving and guiding the latch piece 9, as best appears in Fig. 2, such passage affording no vertical play to the latch piece.

The mounting 1 and handle 6 are preferably formed of a tough plastic material, as for example, Lucite, and this material may be transparent, permitting a user of the implement to observe the functioning of the combined latch-piece and ejector. Preferably a reinforcing wire 17 is embedded in the top portion of the mounting, extending substantially the full length thereof and also some distance into the handle.

Provision of the described latch-piece, exercising also an ejector function, assures against accidental escape of a blade from the mounting and also avoids difficulty in ejecting a blade. Such difficulty tends to arise if a blade is corroded or not perfectly straight or if particles of dirt clog the socket 4. Adaptability of the blade to be used in two positions, each bringing into use portions of the cutting edge guarded in the other of said positions, substantially doubles the useful life of the blade as compared to constructions lacking this feature.

What I claim is:

1. A cutting implement comprising a blade having a cutting edge, an elongated mounting formed with a socket proportioned to receive the blade and opening substantially at one end of the mounting to afford insertion and removal of the blade, a row of teeth on the mounting extending across and partially shielding said edge, a latch member carried by the mounting to retain the blade in the socket, and slidable longitudinally of the mounting, to release the blade, and having a portion resiliently flexible to operatively engage and disengage the blade, such portion being normally sprung to a blade-engaging position, the mounting and latch member having a provision for normally holding such member in a blade-retaining position, and an abutment on the mounting engageable by said flexible portion of the latch member, upon a sliding actuation of such member, to flex said portion to a blade-releasing position.

2. A cutting implement as set forth in claim 1, said flexible portion of the latch member being

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bent diagonally to the length of the mounting to engage and respond to said abutment.

3. A cutting implement as set forth in claim 1, said latch member having a sliding travel in the mounting adequate to partially eject the blade from the socket in advance of engagement with said abutment.

4. A cutting implement as set forth in claim 1, said latch member being elongated lengthwise of the mounting and being housed within the mounting throughout the major length of said member, and having an end portion exposed exteriorly of the mounting to afford sliding actuation of said member.

5. A cutting implement comprising a blade having a cutting edge, an elongated mounting formed with a socket proportioned to receive the blade and opening substantially at one end of the mounting to afford insertion and removal of the blade, a combined ejector and latch member for the blade slidable in said mounting toward and away from said opening and having a portion resiliently flexible into and out of operative engagement within the blade, such portion being normally sprung to a blade-engaging position, said latch member being terminally formed with a detent for latching and ejecting engagement with the blade, said resiliently flexible portion forming a cam predeterminedly spaced from said detent, and an abutment on the mounting engageable by said cam, responsive to blade-ejecting sliding travel of said member, to release the blade from the detent by flexure of said resilient flexible portion.

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