March 11, 1941. H. LEWIS 2,234,440

HAIR CUTTING AND TRIMMING DEVICE

Filed March 8, 1940

Fig. 1.

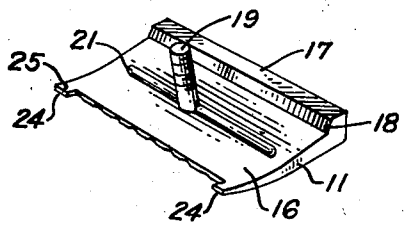


Fig. 2.

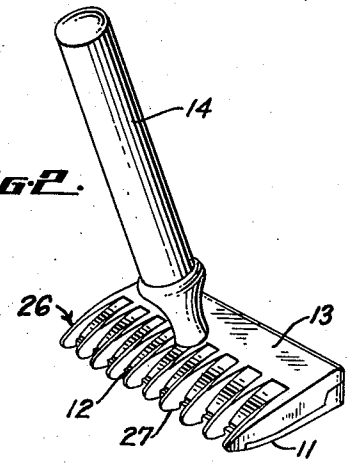


Fig. 3.

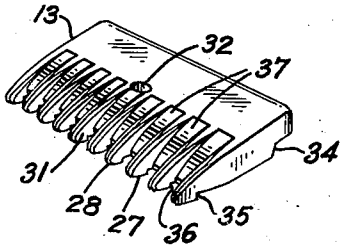


Fig. 5.

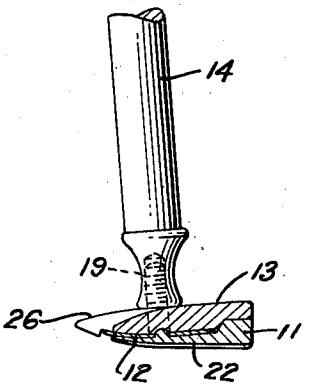


Fig. 4.

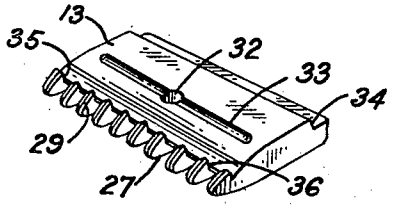
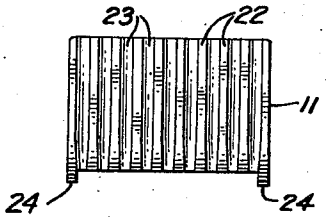


Fig. 6.



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Patented Mar. 11, 1941 2,234,440

UNITED STATES PATENT OFFICE

2,234,440

HAIR CUTTING AND TRIMMING DEVICE

Harrison Lewis, San Francisco, Calif.

Application March 8, 1940, Serial No. 322,935

2 Claims. (Cl. 30—30)

The invention, in general, relates to means for enabling a person neatly and effectively to cut and to trim his own hair or the hair of another. More particularly, the invention relates to a device embodying a double interlocking comb-like structure carrying and encompassing a blade with the cutting edge thereof enveloped so as to prevent injury to the user of the device.

The present invention constitutes an improvement upon my hair trimming and cutting devices disclosed in Letters Patent Nos. 2,165,391 and 2,171,880, granted to me on July 11, 1939 and September 5, 1939, respectively, as well as improvement upon my device for cutting and trimming hair which is disclosed in my pending application bearing Serial No. 318,081, filed February 9, 1940.

The hereinafter described device must in no way be confused with devices that are designed for the purpose of shaving inasmuch as my present improvement is so constructed as to prevent cutting of the hair too close to the skin of an individual and, further, is so constructed that it will follow in an even manner the contour of the head thereby cutting the hair smoothly and evenly in a tapering manner.

The objects of the present invention are similar to the objects set forth in my above mentioned pending application and such objects are incorporated herein by reference and adopted as a part of this application as fully as if the said objects were fully set forth herein.

Other objects of the invention are the provision of means in a device for trimming hair affording the bringing of portions of the cutting edge of a blade more closely to the scalp to effect a tapering trim on the neck and around the ears; of means affording a cushioning engagement of the device with the scalp; and of means for lessening the resistance to movement of comb teeth through the hair.

The foregoing and other objects are attained in the preferred embodiment of the improvement which is illustrated in the accompanying drawing. It is to be understood that the showings are for purposes of explanation and exemplification of a preferred embodiment only and that I am not to be limited to the precise arrangement of parts nor to the precise embodiment shown, as my improvement, as defined in the appended claims, can be embodied in a plurality and variety of forms.

Referring to the drawing:

Figure 1 is a perspective view of the obverse of one of the elements of the preferred embodiment of the present improvement.

Figure 2 is a perspective view of the preferred embodiment of my improvement as completely assembled and ready for use.

Figure 3 is a perspective view of the obverse of another element of the present improvement.

Figure 4 is a perspective view of the reverse of the element shown in Figure 3.

Figure 5 is a cross-sectional view, slightly enlarged, of the interlocking comb-like structure and encompassed blade of the preferred embodiment of the improvement, the manipulating handle being shown in fragmentary elevation.

Figure 6 is a plan view of the reverse side of the element shown in Figure 1.

In its preferred form, the hair cutting and trimming device of my present improvement preferably comprises a base having a blade receiving surface that is slightly curved upwardly adjacent to the front thereof, a blade removably mounted on said surface, a plate removably overlying said blade and interlocking with said base substantially to encompass said blade, a comb-like structure on said plate consisting of a plurality of relatively long, spaced teeth having relatively high side walls for lifting and holding the hair in the most advantageous position for cutting and trimming, means on the under sides of said teeth for counter-sinking and embedding the cutting edge of said blade to limit the amount of said edge that is exposed and to prevent cutting the hair too close to the skin, together with means on said plate for conveying hair that has been cut away from the cutting edge of said blade to prevent clogging thereof, and means for firmly holding said base and plate in interlocking relationship and for manipulating the device.

As in the case of my hair cutting device disclosed in the aforementioned pending application, the present improvement consists of a minimum of parts including a base 11, a blade 12, a combining plate 13 including a comb-like structure thereon, and a manipulating handle 14. With the exception of the blade 12, which can be a conventional safety razor blade, the improved device can be fabricated entirely of metal, such as from aluminum or an aluminum alloy, or from any other suitable metal. Or, if desired, the foregoing parts may be fabricated or molded from a suitable plastic material, such as a phenolic condensate.

With reference particularly to Figures 1 and 6 of the drawing, the base 11 preferably is formed

with an upper surface 16 that is slightly curved upwardly adjacent to the front thereof and that is provided with an upstanding flange 17 at the rear thereof defining a shoulder 18 against which the blade of the combination abuts when in operative use. The base 11 is conveniently provided with a short threaded stud 19 for detachably receiving the manipulating handle 14, and the upper surface 16 of the base is formed with a ridge 21 thereon extending from opposite sides of the stud 19 for confining the blade 12 against movement thereon. The blade 12, of course, is formed with a central opening, not shown, for passing the stud 19, as well as with an elongated slot, also not shown, for passing the ridge 21 on the base 11. Preferably, the bottom of the base is formed with alternating ridges 22 and grooves 23, as depicted in Figure 6 of the drawing, in order that the cutting edge of the blade may be brought into close contact with the head as the bottom is drawn over the head in using the device. The base 11 also is provided with a pair of forwardly projecting extensions 24 at its opposite sides, as shown, which define shoulders 25 for effecting interlocking engagement with the combining plate 13.

In accordance with this improvement, I provide a comb-like structure upon the plate 13 which is designated generally by the reference numeral 26. Preferably, the comb-like structure comprises a plurality of elongated, spaced teeth 27 which are tapered longitudinally to form pointed tips 28 thereon, and which are beveled top and bottom to decrease to a minimum the resistance to movement of the teeth through the hair. The beveled under sides or bottoms of the teeth provide bead-like elements 29 which produce a cushioning engagement with the head as the device is drawn thereover. In addition, the teeth 27 of the comb-like structure are formed with side walls 31 that are relatively low adjacent to the tips 28 but which are relatively high adjacent to the rear of the teeth, the walls serving effectively to lift and to hold the hair in the most advantageous position for cutting and trimming. As particularly illustrated in Figures 3 and 4 of the drawing, plate 13 is provided with a central opening 32 for passing the stud 19 extending from base 11, as well as with an elongated slot 33 extending from opposite sides of the opening 32 for passing the ridge 21 on the upper surface 16 of the base when the plate and base are combined and interlocked. Moreover, the rear of the plate 13 is undercut, as at 34, to provide a cooperating shoulder for effecting an interlock with the flange 17 and shoulder 18 thereof on base 11, all as indicated in Figure 2 of the drawing. The end teeth of the comb-like structure 26 likewise are undercut, as at 35, in order to provide cooperating interlocking shoulders thereon at the front of the plate to effect an interlock with the base at the front extensions 24 and shoulders 25.

In order to prevent injury to the user of the device, the extent to which the cutting edge of the blade 12 is exposed is limited so that it is exposed only between the teeth 27 of the comb-like structure. To this end, the back portions of the undersides of all teeth except the end teeth of the comb-like structure are recessed, as indicated by the reference numeral 36, for the purpose of counter-sinking and embedding the cutting edge of the blade when the plate and base are combined and interlocked and the handle 14 assembled and tightened thereon for operative use of the device, as shown in Figure 2.

Means are provided for conveying hair that has been cut away from the cutting edge of the blade and preferably are provided upon the combining plate 13. As particularly illustrated in Figures 2 and 3 of the drawing, the upper surface of the plate 13 is cut away between the teeth 27 of the comb-like structure to form inclined guides 37 which lead from points adjacent to the cutting edge of the blade upwardly and back to the rear of the teeth. In drawing the bottom of the base 11 over the head in the cutting and trimming operation, the hair is lifted and held in the most advantageous position by the walls 31 of the teeth 27 and, upon being cut, the hair is conveyed away upwardly and back from the cutting edge of the blade to thus prevent clogging thereof.

The handle 14 of the device is of the conventional type having an internally threaded socket for removably receiving stud 19 of the base. Upon assembly of the blade 12 upon the base, which is partially guided to its operative position by the stud 19 and the ridge 21 of the base, and then positioning the combining plate 13 in overlying and interlocking relationship with the base so as substantially to encompass the blade, it is only necessary to tighten handle 14 down upon the plate 13 to firmly hold the parts together and to flex the forward portion of the blade so as to counter-sink and embed the cutting edge thereof in the recesses 36 of the teeth 27 of the comb-like structure. It is to be observed that the device can as readily be dismantled whenever it is desired to replace a blade.

The improved device is especially effective in affording a smooth, even tapering hair cut or trim over the entire head including that portion of the head in close relationship to the ears, as well as in affording what is commonly termed a "feathered edge" finish on the neck. Due to the fact that the blade is almost completely encompassed between the combining plate and the base, and the further fact that the cutting edge of the blade is counter-sunk and embedded in the teeth of the comb-like structure leaving only those portions of the cutting edge of the blade between the teeth exposed, danger of injury to the user of the device is prevented. Moreover, by virtue of the tight interlocking fit between the base and the plate, there are no spaces remaining in which hair that has been cut can accumulate.

I claim:

1. A compact hair cutting and trimming device comprising a base having an upper surface which is upwardly curved, a threaded stud extending at substantially right angles from said surface, a blade removably disposed on said surface with its cutting edge extending beyond the front of said base, a plate removably overlying said blade and including a plurality of elongated, spaced teeth extending from the front thereof; said teeth being recessed on their under sides for receiving the cutting edge of said blade when flexed, inclined guides formed on said plate between adjacent teeth for conveying hair that has been cut away from the cutting edge of said blade, and a handle detachably connected to said stud for holding said plate, blade and base together and for drawing the cutting edge of the blade at any desired angle with respect to the scalp; said handle being adapted, when affixed to said stud, to flex said blade to bring the cutting edge thereof into the recesses of said teeth.

2. A compact hair cutting and trimming device comprising a base, a threaded stud on said base

and extending at substantially right angles thereto, a blade removably disposed on said base with its cutting edge projecting in front thereof, a plate removably overlying said blade and including a plurality of elongated, spaced teeth extending from the front thereof; said teeth being recessed on their under sides to receive the cutting edge of said blade when flexed, and a handle detachably connected to said stud for holding said plate, blade and base together and for drawing the cutting edge of said blade at any desired angle with respect to the scalp; said handle being adapted, when affixed to said stud, to flex said blade to bring the cutting edge thereof into the recesses of said teeth thereby limiting the extent of exposure of the cutting edge of said blade.

HARRISON LEWIS.