June 26, 1934. G. ADELMO 1,964,019

ATTACHMENT FOR HAIR CLIPPERS

Filed April 26, 1933

Fig. 1.

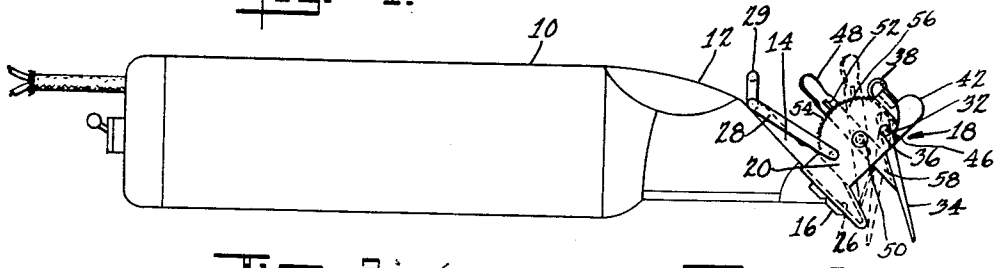


Fig. 2.

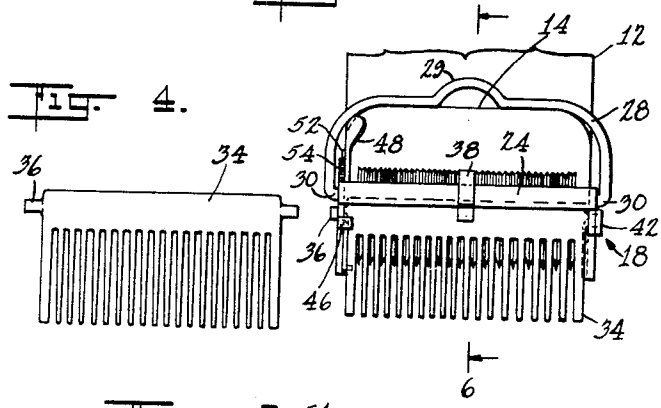


Fig. 3.

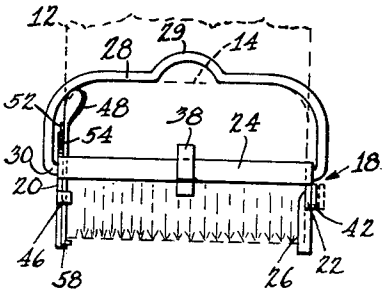


Fig. 4.

Fig. 6.

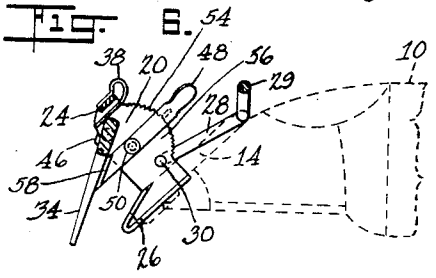


Fig. 5.

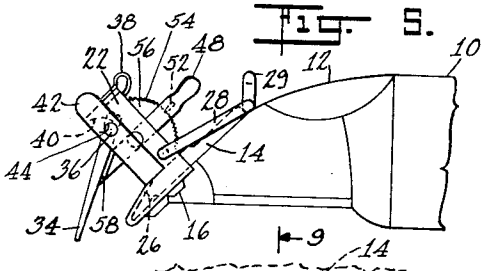


Fig. 7.

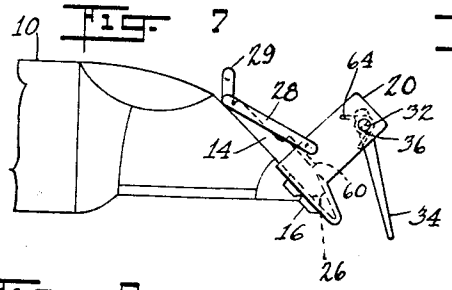


Fig. 8.

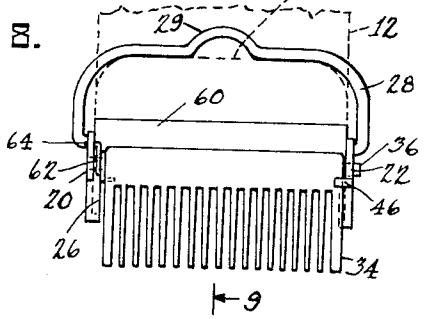
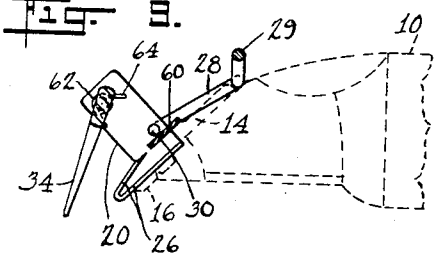


Fig. 9.



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ATTACHMENT FOR HAIR CLIPPERS

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Application April 26, 1933, Serial No. 668,002

6 Claims. (Cl. 30—1)

My invention relates to improvements in attachments for hair clippers.

An object of my invention is to provide a comb attachment for hair clippers adapted for having the comb swingably mounted whereby the comb may be moved toward or away from the cutting blade when the clippers are in operation for gradually varying the depth of the cut of the hair.

A further object is to provide a comb attachment for hair clippers of the type referred to which embodies means for retaining the comb in a fixed position with respect to the cutting blade, whereby the hair may be cut to a uniform length when the clippers are operated.

A further object is to provide a comb attachment for hair clippers of the type referred to, in which the comb may be quickly and easily detached from the comb-retaining structure.

Other objects relate to various features of construction and arrangement of parts which will be apparent from a consideration of the following specification and accompanying drawing, wherein

Figure 1 is a side elevation of an electric clipper and my invention connected therewith,

Figure 2 is a top plan view of my device taken obliquely from the right of Figure 1,

Figure 3 is a plan view similar to Figure 2 with the comb removed,

Figure 4 is a plan view of the comb,

Figure 5 is a side elevation of my device opposite to that shown in Figure 1,

Figure 6 is a vertical section taken along the lines 6—6 of Figure 2,

Figure 7 is a side elevation of another form of my invention,

Figure 8 is a top plan view of the structure shown in Figure 7 taken obliquely from the right of Figure 7, and

Figure 9 is a vertical section taken along the lines 9—9 of Figure 8.

In the embodiment selected to illustrate my invention I make use of a conventional hair clipper 10 of the electrically driven type which is provided with a head 12 having a top plate 14 and a reciprocal cutting blade 16. The structure recited does not constitute any part of my invention, but sets forth the device with which my invention is adapted for use.

My invention comprises a comb-retaining member 18 having a pair of spaced apart side members 20 and 22 which are joined together by a connecting member 24 connected with the top portions thereof. The side members 20 and 22 have the lower ends thereof provided with inwardly extending flanges 26 adapted for engaging the top and bottom sides of the plate 14 for connecting the side members with the plate. The flanges 26 are also adapted for properly positioning the side members with respect to the plate and cutting blade.

A fastening member 28 is formed for providing connecting portions 30 receivable in openings in the side members 20 and 22. The fastening member is adapted for engaging the rear edge of the plate 14 for retaining the comb-retaining member 18 in connection with the plate 14.

The side members 20 and 22 are provided with aligned openings 32. A comb 34 is provided with aligned projecting end portions 36 receivable in the openings 32 for swingably connecting the comb with the side portions 20 and 22. A spring 38 is connected with the connecting member 24 and extends therebeneath for engaging the comb 34 for yieldingly retaining the teeth of the comb in a spaced apart position with respect to the lower end of the plate 14.

The opening 32 in the side portion 22 is recessed as shown at 40 for receiving one of the projecting portions 36 of the comb whereby the comb may be removably positioned between and connected with the side portions 20 and 22. A retaining member 42 comprises a resilient strip of material having its lower end connected to the outer side of the side portion 22 and is provided with an opening 44 therein for receiving a projecting portion 36 of the comb for retaining the projecting portion in the slotted opening 40.

By moving the retaining member 42 to its dotted line position shown in Figure 3, the projecting portion 36 of the comb is moved out of the opening 44 in the retaining member thereby permitting the comb to be removed from the side portions. The side portion 20 is provided with a lug 46 which extends over and engages the comb when the comb is swung to its outermost position for limiting the outward movement thereof.

An arm 48 is pivotally connected with the side portion 20 by a headed pin 50 and is provided with a lug 52 receivable between teeth 54 of a segment 56 connected with the side portion 20 for retaining the arm 48 in a selected position with respect to the side portion 20. The end 58 of the arm 48 is adapted for engaging the comb on the under side thereof when the arm is positioned as shown in Figure 1 for fixedly retaining the comb in its outermost position shown in Figure 1. The arm 48 is of resilient material so that it may be sprung inwardly for moving the lug 52 out of engagement with the teeth 54, thereby permitting the

arm to be moved to its dotted line position shown in Figure 1, or to intermediate positions at which time the comb 34 may be swung to its dotted line position shown in Figure 1 or intermediate positions.

In Figures 7, 8 and 9, I have shown another form of my invention in which the parts corresponding to that form shown in Figures 1 to 6 have been given corresponding numbers.

In this form of my invention, however, the connecting member 24 is dispensed with and instead a connecting member 60 is joined to the side portions at the lower ends thereof so that it will be positioned in juxtaposition to the plate 14, as clearly shown in Figure 9. In this form of my invention, however, the opening in the side portion 22 for receiving the projecting portion 36 of the comb is not slotted and the retaining member 42 is dispensed with. If desirable, however, these features may also be included in this form of my invention. The outstanding difference, however, between this form of my invention and that previously referred to is that the spring 38 is dispensed with and instead a coil spring 62 is positioned on one of the projecting portions 36 between the comb and the side portions 20, and has one end 64 thereof extending through an opening in the side portion 20 and the other end thereof in engagement with the under side of the comb 34, thereby tending to normally retain the comb in the spaced apart position with respect to the plate 14 as shown in Figures 7 and 9.

In employing my invention the plate 14 is first inserted between the side portions 20 and 22 so that it is receivable between the flange portions 26. The fastening member 28 is then snapped over the back of the plate 14 for holding the comb-retaining member in fixed connection with the clipper plate. The clipper is then held in the hand of the operator in a manner similar to that for holding a pencil and the teeth of the comb placed against the hair, so that the comb will be positioned nearly flat upon the head but at a slight inclination with respect to the head so that the comb may be swung in the comb-retaining member.

The clipper is moved from the top of the head downwardly for cutting the hair, the distance that the teeth of the comb are spaced from the plate determining the depth of the cut. If it is desired that the hair be cut a uniform length, then the arm 48 should be positioned as shown in Figure 1, for retaining the comb in the position shown in Figure 1, and preventing the comb from being moved toward the plate if excessive pressure is applied thereto during the cutting operation.

If, however, the operator desires to vary the depth of cut as the comb travels from the top of the head downwardly the arm 48 may be moved to its dotted line position shown in Figure 1, at which time it is positioned out of engagement with the comb so that as the operator exerts increasing pressure against the comb during its travel, it may be moved from the solid line position shown in Figure 1 to the dotted line position, at which time the hair will be cut relatively short.

Thus it will be seen that in utilizing my invention the hair may be cut to a uniform length, or cut to a gradually varying length from the top of the head downward. It will also be noted that if the operator desires to cut the hair beginning at the neck and moving the clipper upwardly, the clipper may be held in the hand so that the teeth of the comb point upwardly; as the operator begins moving the clipper he may exert sufficient pressure thereon to move the comb to the dotted line position shown in Figure 1 at which time the clipper will make its shortest cut, and as the clipper is moved upwardly, the pressure against the comb may be gradually released, thereby decreasing the depth of cut so that the hair will be gradually cut longer as the clipper is moved upwardly.

When the operator desires to remove the comb such as for the purpose of replacing it by a finer or coarser comb, the retaining member 42 is moved to its dotted line position in Figure 3, at which time the projecting portion 36 of the comb may be swung through the slot 40 and clear of the side portion 22, at which time the other projecting portion 36 of the comb may be withdrawn from the opening in the side portion 20.

When it is desired to disconnect the comb from the side portions in the form of my invention shown in Figures 7, 8 and 9, either one or both of the sides 20 and 22 may be sprung outwardly so that the projecting portions 36 of the comb may be moved out of the openings in the side portions. It will, of course, be necessary to move the end 64 of the spring out of the opening in the side portion so that the comb may be removed. It will be seen, therefore, that the side portions 20 and 22 in the form shown in Figures 7 to 9, are preferably constructed of a resilient material.

When the operator desires to remove the attachment from the clipper, he merely lifts the fastening member 28 by the offset portion 29 for moving the fastening member out of engagement with the end of the plate 14.

I claim:

1. An attachment for hair clippers comprising a comb-retaining means having a pair of spaced apart side portions adapted for being connected with an end of the clippers, said side portions being provided with aligned openings therein, a comb positioned between the side portions and provided with a pair of aligned projecting portions receivable in the aligned openings for movably connecting the comb with the side portions, said comb being swingable toward and away from the clippers, spring means cooperating with the comb-retaining means and the comb for yieldingly retaining the comb in spaced relation with respect to the clippers, and a locking arm pivotally connected with one of said side portions and adapted for engagement with the comb for retaining the comb in its outermost position away from the clippers or limiting the yielding movement of the comb toward the clippers.

2. An attachment for hair clippers comprising a comb-retaining means having a pair of spaced apart side portions adapted for being connected with an end of the clippers, said side portions being provided with aligned openings therein, a comb positioned between the side portions and provided with a pair of aligned projecting portions receivable in the aligned openings for movably connecting the comb with the side portions, said comb being swingable toward and away from the clippers, spring means cooperating with the comb-retaining means and the comb for yieldingly retaining the comb in spaced relation with respect to the clippers, a locking arm pivotally connected with a side portion and adapted for engagement with the comb for retaining the comb in its outermost position away from the clippers or limiting the yielding movement of the comb from said outermost position toward the

clippers, and means for retaining the locking arm in selected positions.

3. An attachment for hair clippers comprising a comb-retaining means having a pair of spaced apart side portions adapted for being connected with an end of the clippers, said side portions being provided with aligned openings therein, a comb positioned between the side portions forwardly of the clipper blade and provided with a pair of aligned projecting portions receivable in the aligned openings for movably connecting the comb with the side portions, said comb being swingable toward and away from the clippers, and spring means cooperating with the comb-retaining means and the comb for yieldingly retaining the comb in spaced relation with respect to the clippers, one of the openings in a side portion being a recessed opening for receiving one of the projecting portions of the comb, whereby the comb may be detachably connected with the side portions, and means for retaining said projecting portion in said opening.

4. An attachment for hair clippers comprising a comb retaining device having a pair of side members adapted to be attached to the clippers for supporting a comb in position forwardly of the clipper blade, one of said members having a series of locking recesses therein, a comb pivotally carried by said side members and adapted to be swung in directions to cause the teeth thereof to approach or recede from the teeth of the clipper blades, a spring tending to swing said comb away from said blade, a manually operable lever pivoted to one of said side members and having a stop for limiting the movement of said comb toward said clipper blade or locking said comb in outermost position with respect thereto, and means carried by said lever for selectively engaging said locking recesses of said side member for holding said stop in adjusted position.

5. An attachment for hair clippers comprising a comb retaining device having a pair of side members adapted to be attached to the clippers for supporting a comb in position forwardly of the clipper blade, one of said members having a series of locking recesses therein, a comb pivotally carried by said side members and adapted to be swung in directions to cause the teeth thereof to approach or recede from the teeth of the clipper blades, a spring tending to swing said comb away from said blade, a manually operable lever pivoted to one of said side members and having a stop for limiting the movement of said comb toward said clipper blade or locking said comb in outermost position with respect thereto, and means carried by said lever for selectively engaging said locking recesses of said side member for holding said stop in adjusted position, said lever being flexible laterally for releasing said means from said recesses.

6. An attachment for hair clippers comprising a comb retaining member provided with a pair of side members having means for engaging the forward ends of the side teeth of a clipper plate, means carried on said side members for engaging a rear portion of the clippers and cooperating with said first named means for detachably securing the retaining member in position, a comb disposed between said side members and pivotally supported thereby forwardly of the clipper teeth for movement in an arcuate path toward and away from the forward end of the clipper plate, a spring carried by said retaining member in engagement with said comb and tending to swing the latter away from the teeth of the clipper plate, and an adjustable stop member carried by one of said side members and movable into the path of the comb to limit movement of the same toward said plate.

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