Nov. 22, 1927.

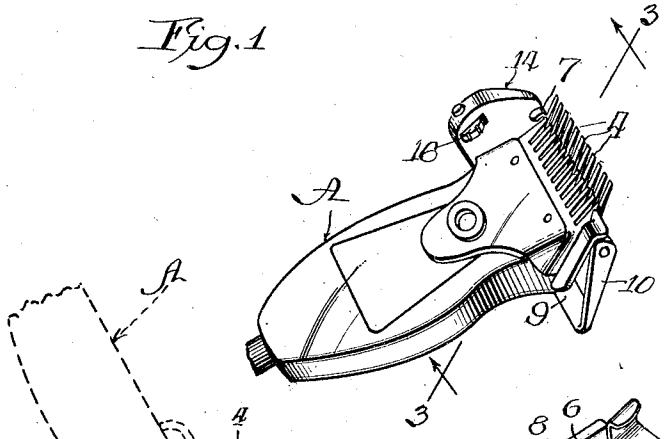
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W. O. YANCEY ET AL

GAUGING ATTACHMENT FOR HAIR CLIPPERS

Filed Nov. 26, 1926

Fig. 1



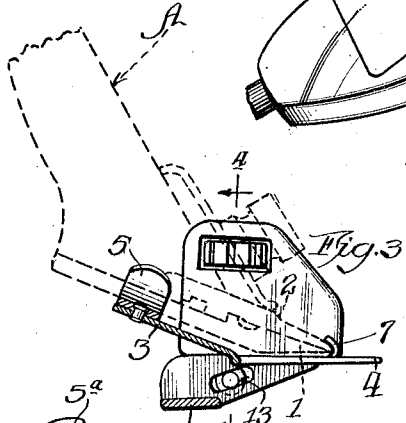


Fig. 3

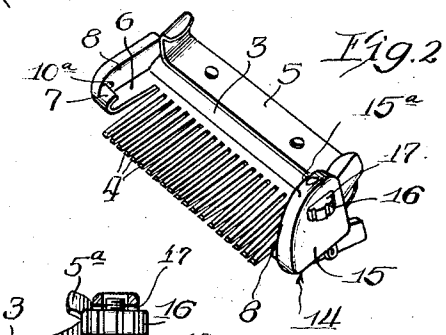


Fig. 2

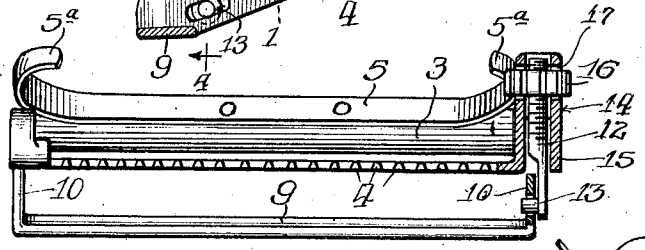


Fig. 4.

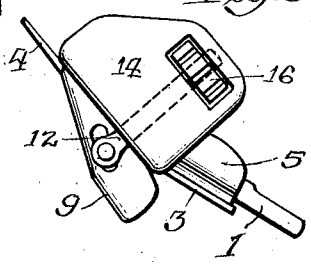


Fig. 5.

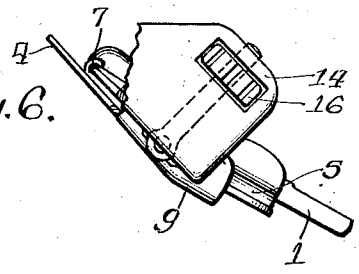


Fig. 6.

Witness:
Chas. R. Fourish.

Inventors,
William O. Yancey
Virgil L. Yancey
by Miller Libbey & Scott their Attys.

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UNITED STATES PATENT OFFICE.

WILLIAM O. YANCEY AND VIRGIL L. YANCEY, OF CHICAGO, ILLINOIS.

GAUGING ATTACHMENT FOR HAIR CLIPPERS.

Application filed November 26, 1926. Serial No. 150,745.

This invention relates to improvements in gauging attachments for hair clippers, and more particularly to a device to be used in conjunction with hair clippers as an aid in cutting hair to the desired length and with uniform graduation over various parts of the head.

The object of the invention is to provide means whereby the use of clippers may be extended to cut hair over those portions of the head which ordinarily require the use of scissors due to the inability of the operator to guide the clippers at the proper distance from the scalp except where the hair is to be closely cropped or cut very short. Moreover, it is difficult even for the expert operator to obtain uniform graduation in the length of the hair to be cut or trimmed, and especially to avoid the visible line which marks the division between that portion of the scalp which has been clipped and that portion which has been trimmed with scissors.

A preferred embodiment of the invention is disclosed in the accompanying drawings, in which

Figure 1 is a perspective view of a hair clipper with the gauging attachment applied thereto.

Figure 2 is a perspective view of the gauging attachment removed from the clippers.

Figure 3 is a view in cross-section taken on line 3—3 of Figure 2.

Figure 4 is an enlarged detail view in section taken on line 4—4 of Figure 3.

Figure 5 is a view in side elevation showing the relative position of the bottom plate of the clipper and the gauge bar.

Figure 6 is a view similar to Figure 5 showing the gauge bar in depressed position.

For the purpose of illustration, the attachment is applied to a power or electrically operated hair clipper A, although it may be used equally well with a hand clipper, the cutting action of both being substantially the same. In general, hair clippers whether hand or power operated, comprise a pair of fixed and movable cutting plates 1 and 2 having complementary rows of cutting teeth along their forward edges. The fixed plate 1 is on the bottom and slides in contact with the scalp, as the movable plate 2 travels crosswise of the fixed plate with a reciprocating movement, cutting the hair as it is fed between the teeth in the forward movement of the clippers.

As thus constructed, hair clippers are primarily intended for cutting the hair relatively close to the scalp, although a limited degree of variation is possible by using bottom plates of varying thickness, and as a result can only be used on relatively small parts of the scalp, leaving the major portion of the cutting to be done with scissors.

It is possible to adapt clippers to the cutting or trimming of longer lengths of hair, by placing a comb or the finger under the clippers and advancing the two together to space the clippers from the scalp. This expedient, however, requires considerable skill on the part of the operator in order to obtain satisfactory results and therefore is not ordinarily attempted.

In the present device, a portion which functions as a comb is attached directly to the bottom plate of the clipper and remains in a fixed plane. Located behind the comb is an adjustable bar which is shiftable toward and from the bottom of the clipper so as to gauge distance between the cutting teeth and the surface of the scalp.

Referring now to the construction of the attachment, it consists of a relatively thin metal plate 3 which bears flatwise against the bottom surface of the fixed plate 1 of the clipper, and is provided along its forward edge with a row of teeth 4 forming a section of a comb offset at a slight angle to the plate 3 to extend parallel to the plane of the beveled edge 1^a along the forward edge of the bottom plate 1 (Figure 3). The plate 3 covers only the forward portion of the bottom plate, and is removably attached thereto by a spring clip 5 riveted to the comb-plate 3 and having hooked ends 5^a, 5^a which engage the side edges of the bottom plate 1 of the clipper. Beyond the comb teeth and at each end of the plate 3, are forwardly extending prongs 6, 6 considerably wider than the comb teeth and slightly shorter, their end portions being bent upwardly in hooked form to provide stirrups 7, 7 into which the ends of the bottom plate are fitted to hold the attachment in place and the comb teeth in proper position with respect to the cutting teeth. Along the sides of the comb plate are upstanding walls 8, 8

which support the adjustable bar and adjusting means therefor, as will presently be described.

The teeth of the comb section 4 are designed to correspond accurately with the fixed cutting teeth of the bottom plate 1, that is, with the same spacing between them so that each comb tooth registers exactly with one of the fixed cutting teeth. Moreover, the comb teeth are preferably triangular in cross-section having relatively flat faces on their under sides and tapering to a beveled or substantial knife edge which face toward the beveled edges of the corresponding fixed cutting teeth of the bottom plate of the clippers. The comb teeth, moreover, are tapered from base to tip and are of greater length than the cutting teeth so that they project a quarter of an inch or more beyond the cutting teeth with the base of the comb section disposed back of the base line of the cutting teeth. This formation of the comb teeth, their spacing and registration with the cutting teeth, tends to promote a more uniform and smooth cutting action, as it properly divides the hair into small quantities and guides it between the cutting teeth as the clipper is advanced.

Immediately below the plate 3 is an adjustable gauge bar 9 extending transversely of the plate and rearwardly of the comb teeth 4. This bar is mounted for movement toward and from the plate 3, the following means being used for supporting and adjusting the bar to various positions. At the ends of the bar are arms 10, 10 extending forwardly exterior of the side plates 8, 8, the ends of the arms being pivotally connected to said plates as at 10^a. At one side of the device is an adjusting member consisting of a screw 12 pivotally connected at its lower end with the adjacent arm by means of a pin and slot connection as at 13. The screw 12 extends at right angles to the arm and upwardly into a casing 14, the inner wall of which is adjacent side wall 8, there being a corresponding wall 15 spaced from said side wall within a marginal flange 15^a to enclose the top and sides of the casing thus formed. Carried by the screw 12 is a thumb wheel 16, having its periphery projecting through slots 17 formed in the opposite side walls 8 and 15 of the casing 14. Thus by turning the wheel in either direction, the screw is moved endwise to elevate or depress the gauge bar to obtain the desired space between the bar and the bottom surface of the plate.

The gauge bar 9 is preferably flat on its underside and has a width of from one-fourth to three-eighths of an inch, thus affording sufficient bearing surface to enable the operator to guide the clippers over the scalp without varying the inclination of the comb and cutting teeth to any appreciable extent. By preference, the gauge bar is arranged so that in fully depressed position (Figure 6) it lies against the plate 3, and flush with the under face of the comb section 4.

As already suggested, the purpose of the gauging attachment is to enable the operator to regulate and thus control the length to which the hair is to be cut throughout different portions of the head. For example, when cutting a man's hair, it is customary to clip the hair rather close to the scalp at the back and sides of the neck, and over the ears, gradually increasing the length toward the top or crown of the head.

In the absence of the attachment, the operator finds it difficult to manipulate the clippers so as to obtain uniform and satisfactory results, without afterwards going over the clipped areas with scissors, this being particularly true where the portions of the head cut with the clippers merge with the portion which is merely trimmed with scissors. With the gauging attachment applied to the clippers, the operator can readily adjust the gauge bar to obtain the proper spacing of the cutting teeth from the scalp and thus obtain the desired length of hair. Manifestly, the proper manipulation of the clippers with the gauging attachment requires the exercise of some degree of skill on the part of the operator, although once familiar with its operation, is enabled to cut hair with greater ease, neatness and despatch than is otherwise possible.

Having set forth a preferred embodiment of our invention, we claim:

1. A gauging attachment for hair clippers comprising a comb-plate adapted to be secured to the bottom plate of said clippers and provided at its forward edge with a row of comb teeth registering with the fixed cutting teeth of said clippers and projecting beyond the ends of the same, a gauge bar extending transversely of said bottom plate rearwardly of said comb teeth and having pivotal connection with said plate for swinging movement toward and from the plane of said comb teeth, and means for shifting and holding said bar in various positions of adjustment.

2. A gauging attachment for hair clippers comprising a relatively fine comb adapted to be attached to the bottom of said clippers, with its teeth arranged to register with the fixed cutting teeth thereof, a gauge bar pivotally connected at its ends to swing about the ends of said comb and rearwardly thereof, and means for adjusting said bar.

3. A gauging attachment for hair clippers, comprising a comb plate adapted to be secured to the bottom plate of said clippers and having a plurality of comb teeth arranged to have the spaces therebetween register with the spaces between the fixed cutting

teeth at the forward edge of said bottom plate, said plate being provided with prongs adjacent the endmost comb teeth bent rearwardly to hook over the forward edge of said bottom plate beyond said cutting teeth, and an adjustable gauge bar having arms pivotally connected to said comb plate, and means for adjusting said bar.

4. A gauging attachment for hair clippers comprising a comb plate having side walls embracing the bottom plate of said clippers and comb teeth at its forward edge adapted to register with the fixed cutting teeth of said bottom plate, there being portions of said plate between said comb teeth and said side walls bent in hook form to engage the endmost cutting teeth of said bottom plate, a gauge bar spaced rearwardly of said comb teeth and having arms pivotally connected with said side walls adjacent the forward ends thereof, a screw connected with said gauge bar, and means for adjusting said screw to shift said bar toward and from said comb plate.

Signed at Chicago, Illinois, this 22d day of November, 1926.

WILLIAM O. YANCEY.
VIRGIL L. YANCEY.