Jan. 27, 1942. L. J. WAHL 2,271,053

LUBRICATION OF BLADES IN HAIR CLIPPERS

Filed June 21, 1940

Fig. 1

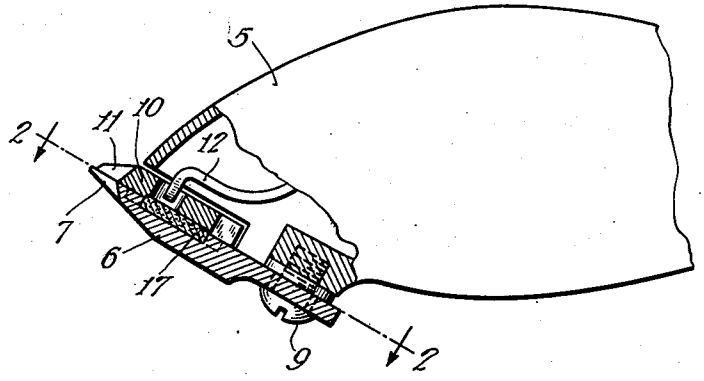


Fig. 2

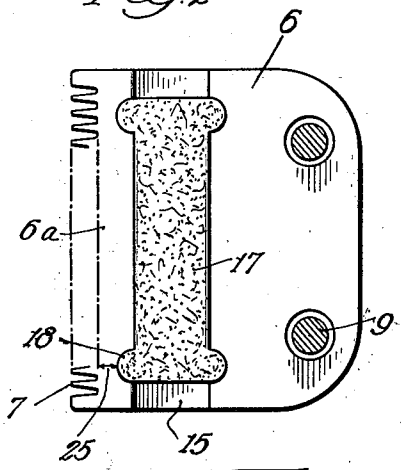


Fig. 3

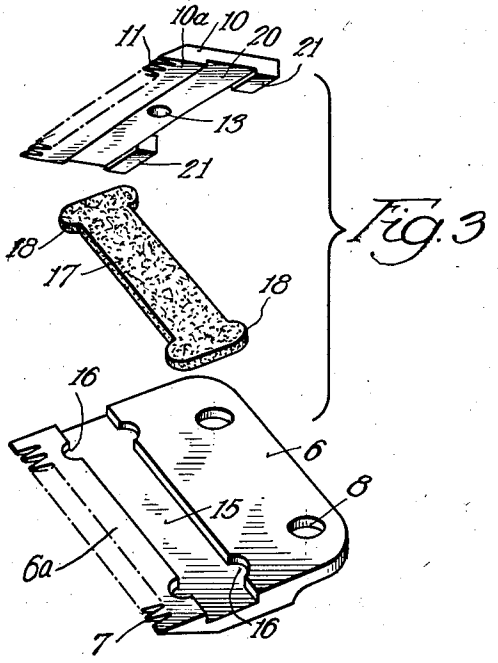
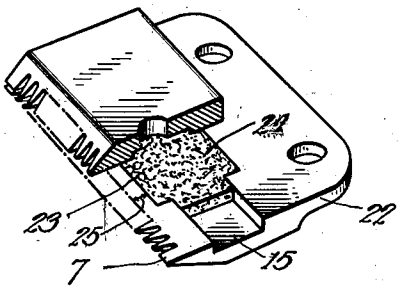


Fig. 4



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LUBRICATION OF BLADES IN HAIR CLIPPERS

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5 Claims. (Cl. 30—224)

The present invention relates to hair clippers and is particularly directed toward an improved means for lubricating the blades of an electric hair clipper.

In the use of present day electric hair clippers it is customary for the barber to lubricate the blades on the average of about once for each hair cut. This is necessary because the cut hair quickly absorbs the low viscosity oil customarily used so that the blades become dry and sticky. Such frequent lubrication is objectionable because of the loss of time and also because any excess oil that might be applied is liable to get on the hair or head of the customer.

The principal object of the present invention is to provide an improved hair clipper which requires lubrication only at four or five day intervals and which will not be liable to transfer oil to the hair or head of the customer. To this end the invention contemplates an oiling system whereby the bearing surfaces between the comb and cutter blades will be supplied with oil in such fashion that the flow of oil is from a supply source across the bearing surfaces toward the teeth. The cut hair absorbs just that oil which has passed between the bearing surfaces. Since the spread of oil is toward the teeth it keeps the bearing surfaces clean.

The present invention comprises essentially a piece of felt or other oil absorbent material which is seated in a recess which extends across the comb blade in a direction parallel to the line of teeth. This recess is usually in the form of a groove of substantial width which runs from side to side of the comb blade. In the present invention the recess is oppositely extended at spaced points in a direction at right angles to the main recess. The piece of felt which seats in the main recess is provided with oppositely extending spaced ears which seat in the extended parts of the recess so as to position the felt piece and prevent its displacement. The extensions of the recess and the ears of the felt piece also form the means for getting the lubricant between the bearing surfaces of the comb and cutter blades. The reciprocating cutter blade in wiping across the edges of the recesses draws oil from the extended recesses and gradually spreads the oil between the bearing surfaces.

Other features and advantages of the invention will appear more fully as the description proceeds, reference being had to the accompanying drawing wherein a preferred form of the invention is shown. It is to be understood, however, that the drawing and description are illustrative only and are not to be taken as limiting the invention except insofar as it is limited by the claims.

In the drawing:

Fig. 1 is a side view, partly in cross section, of a hair clipper embodying the present invention;

Fig. 2 is a view on the line 2—2 of Fig. 1;

Fig. 3 is a perspective view showing the relationship between my lubricating means and the comb and cutter blades; and

Fig. 4 is a perspective view showing a modified form of the invention.

Referring now to the drawing, my hair clipper includes a hollow shell 5 within which is mounted the power unit (not shown). The head end of the shell 5 is provided with a comb blade 6 having a bearing surface 6a for the comb blade and having a row of teeth 7 along one side edge of the bearing surface. The comb blade 6 is provided with holes 8 through which pass screws 9 holding the blade securely to the shell. A cutter blade 10 having a row of teeth 11 cooperating with the teeth 7 bears on the top surface of the comb blade. A bearing surface 10a on the cutter blade engages the bearing surface 6a. A reciprocating arm 12 extends from the power unit and has its end seated in seat 13 in the cutter blade 10. As will be understood, vibrations from the power unit are transmitted through the arm 12 and cause reciprocation of the cutter blade 10 on the stationary comb blade 6.

A recess 15 of substantial width extends from side to side in the top surface of the comb blade. The recess 15 is provided with spaced recesses 16 extending laterally from the main recess 15. A piece of felt or other oil absorbent material 17 having ears 18 is provided to fit snugly within the recess 15 and recesses 16. The depth of the recesses and the thickness of the felt are substantially equal so that the top surface of the felt is flush with the top surface of the comb blade.

A complementary recess 20 of relatively slight depth is provided in the cutter blade directly above the recess 15 in the comb blade. The side of the cutter blade opposite the row of teeth 11 has its inner portion cut away up to the recess 20 thereby providing bearing surfaces 21 for the cutter blade which bear on the comb blade over the lateral recesses 16.

To lubricate the blades of my improved hair clipper the operator saturates the piece of felt 17 with usual low viscosity oil. The bearing surfaces of the cutter blade 10 wipe across the saturated ears of the felt in the lateral recesses 16. The reciprocating cutter blade in wiping across

the edges of the lateral recesses draws oil from the felt and gradually spreads the oil between the bearing surfaces thereby providing effective lubrication. As will be understood, the amount of oil contained in the felt is sufficient to provide such lubrication for several days before it is necessary to again saturate the felt.

In the form of the device shown in Fig. 4 the recess **15** in the comb blade **22** is provided with an enlarged portion **23** which extends forwardly and rearwardly into the bearing surfaces on the comb blade. A sheet **24** of oil absorbent felt is fitted in the enlarged portion **23**. The rear bearing surface of the cutter blade is continuous across the blade.

In both forms of the invention the width of the bearing surfaces between the teeth of the blades and the extended recesses **16** and **23** is indicated at **25**. The spread of the oil between the bearing surfaces causes it to work out to the teeth of the blades. Here the cut hair may absorb the oil. It will be noted that only such oil as has passed between the bearing surfaces **6***a* and **10***a* reaches the teeth. Also, the flow of oil is such as to tend to keep the bearing surfaces clean.

From the foregoing description it is believed that the construction and operation of the present invention will be readily apparent to those skilled in this art. Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a hair clipper, a comb blade having teeth, a reciprocating cutter blade having teeth and bearing on said comb blade, and means for lubricating said blades, said means including a recess in the bearing surface of one of said blades, a portion of said recess extending across the direction of reciprocation of said cutter blade, and an oil saturated material seated in said recess.

2. In a hair clipper, a comb blade, a reciprocating cutter blade bearing thereon, said comb blade having a recess in the surface thereof extending across the direction of reciprocation of said cutter blade, and an oil saturated material seated in said recess.

3. In a hair clipper, a comb blade, a reciprocating cutter blade bearing thereon, said comb blade having a recess in its bearing surface extending in the direction of reciprocation of said cutter blade, recesses extending laterally from said first recess across the direction of reciprocation of said cutter blade, and oil saturated material seated in said recesses.

4. In a hair clipper, a comb blade, a reciprocating cutter blade bearing thereon, said comb blade having a recess in its bearing surface extending in the direction of reciprocation of said cutter blade, recesses extending laterally from said first recess across the direction of reciprocation of said cutter blade, and oil saturated material seated in said recesses, said cutter blade having surfaces bearing on said comb blade and extending over said second recesses.

5. In a hair clipper, a comb blade having teeth, a reciprocating cutter blade having teeth and bearing on said comb blade, and means for lubricating said blades, said means including a recess in the bearing surface of said comb blade, a portion of said recess extending across the direction of reciprocation of said cutter blade, and an oil saturated material seated in said recess, said cutter blade having surfaces bearing on said comb blade and extending over the said extending portion of the recess.

LEO J. WAHL.