

April 7, 1931.

J. KAUFMANN

1,799,907

HAIR CLIPPER

Filed May 9, 1927

Fig. 4.

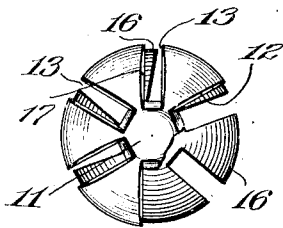


Fig. 3.

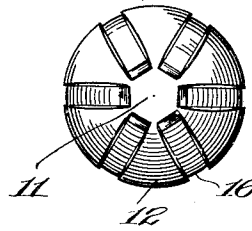


Fig. 2.

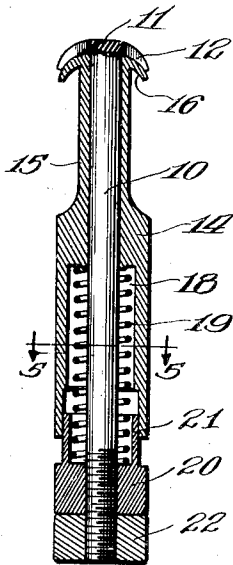


Fig. 1.

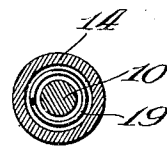
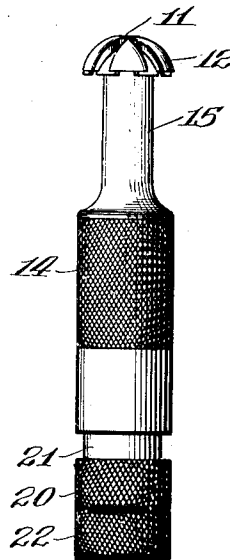


Fig. 5.

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# UNITED STATES PATENT OFFICE

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## HAIR CLIPPER

Application filed May 9, 1927. Serial No. 189,883.

This invention relates to a device for clipping hair growing in recesses and places not easy of access, such as the nostrils and within the ears, and has for one of its objects the provision of such a device which shall be easy to operate, economical to manufacture, sanitary in use, and which shall be of improved construction.

Other objects and advantages will appear from the following description.

The invention is exemplified in the combination and arrangement of parts shown in the accompanying drawing and described in the following specification, and it is more particularly pointed out in the appended claims.

In the drawing—

Fig. 1 is an elevation of a hair clipper embodying the present invention;

Fig. 2 is a vertical longitudinal section of the device shown in Fig. 1;

Fig. 3 is a plan view of the clipper head;

Fig. 4 is a view similar to Fig. 3, but showing the blades of the clipper in a different position relative to each other from that shown in Fig. 3; and

Fig. 5 is a section on line 5—5 of Fig. 2.

The removal of superfluous hair from recesses and cavities, such as in the nostrils and ears, is difficult with instruments heretofore employed for this purpose. To operate a pair of shears in such position is not only inconvenient, but also encountered with a degree of danger because of the sharp points of the shears. The present invention provides a rotary clipper head which can be easily inserted, the head being rounded so that it will automatically accommodate itself to the interior surface of the cavity.

As illustrated in the drawing, the numeral 10 designates a shaft or bar having a head 11 at the end thereof provided with outwardly projecting blades 12. The blades 12 are sector-shaped, being wider at their peripheries than at their points of connection to the head. The side edges 13 are slightly beveled to give a good cutting edge and the blades are rounded backwardly and inwardly toward the shaft 10, as shown in Fig. 2, to form a clipper head having a convex surface. The shaft 10 is ro-

tatably fitted in a sleeve 14 having a reduced neck portion 15, from the end of which blades 16 project in position to engage the rear or inner surfaces of the blades 12. The blades 16 are shaped somewhat similar to the blades 12 and are provided with cutting edges 17 in position to co-operate with the edges 13 of the blades 12.

The sleeve 14 is provided with a recess 18 for receiving a spring 19, one end of which bears against the inner end of the recess 18, while the other end bears against a cap 20 threaded on the end of the shaft 10. The cap 20 is provided with a sleeve 21 which telescopes with the end of the sleeve 14 for adjusting the compression of the spring 19. A lock nut 22 is threaded on the end of the shaft 10 and locks the cap 20 in place.

In operating the device, the cutter-head 11 is inserted into the nostril or ear and the cap 20 and lock nut 22 are held stationary while the sleeve 14 is rotated. By moving the head over the inner surface of the cavity and by tilting it to various angles, the latter is permitted to enter the slots between the blades 12 and 16 and upon rotation of the blades 16, the hair will be severed.

To clean the cutter-head from any severed hair or other matter caught in the blades, it is only necessary to hold the sleeve 14 between the first and second fingers and press inwardly on the lock nut 22. This will separate the blades 12 and 16 so that any matter caught between the blades will readily escape. This relative movement of the two sets of blades permits the device to be easily cleaned and sterilized. It will be seen that the shoulder on the sleeve 14 formed by the reduced neck portion permits the device to be held between two fingers while the thumb presses inwardly on the lock nut 22. With the parts in this position the clipper head may be immersed in hot water or other sterilizing fluid.

It will be seen from Fig. 4 of the drawing that the blades 12 and 16 are so shaped that the edges 13 and 17 contact at the outer periphery of the cutting head first so that the point of contact between the cutting edges travels inwardly toward the center of the

head as the two sets of blades are relatively rotated. This produces a shearing action and at the same time tends to move any hair caught between the edges inwardly, preventing escape of the hair. The slots between adjacent blades of each set have substantially parallel sides, but since the outer peripheries of the heads have a greater relative movement than the portions further in toward the center, the edges of the blades will contact adjacent the outer peripheries prior to contact at points further in toward the center.

I claim:—

1. A hair clipper comprising co-axial relatively rotatable members having radially extending blades at the ends thereof, the outer surfaces of the blades on one of said members engaging the inner surfaces of the blades on the other of said members, said engaging surfaces being inclined backwardly relative to the axis of said members, and a spring for holding said engaging surfaces together, said spring being yieldable to permit separation of said surfaces by relative axial movement of said members.

2. A hair clipper comprising a sleeve, a shaft journaled in said sleeve and movable axially relative thereto, clipper blades projecting radially at the end of said sleeve and shaft, respectively, and having engaging faces, a spring for drawing said clipper blades together, said sleeve having a shoulder thereon, and a contact member at the end of said shaft to facilitate relative axial movement of said shaft and sleeve to separate said clipper blades against the force of said spring.

3. A hair clipper comprising a shaft, a sleeve surrounding said shaft and having a reduced neck portion at one end thereof, clipper blades projecting radially from the end of said reduced neck portion, co-operating clipper blades extending radially from the end of said shaft, said blades being inclined upwardly toward said reduced neck portion to provide laterally directed cutting faces, a spring surrounding said shaft within said sleeve, a cap threaded on said shaft enclosing the end of said sleeve, said cap having a flange telescoping with the end of said sleeve, and means for locking said cap in position on said shaft.

4. A hair clipper comprising a pair of relatively rotatable members having radially extending blades, said blades being formed by slots of substantially uniform width extending in a radial direction from the axis about which said members are rotatable.

5. A hair clipper comprising a pair of relatively rotatable members having radially extending blades, said blades being formed by slots of substantially uniform width extending in a radial direction from the axis about which said members are rotatable, and the opposite sides of said slots being inclined

away from each other and away from the adjacent surfaces of said rotatable members.

6. A hair clipper comprising a disc-shaped member, a rod upon which said disc-shaped member is fastened, a sleeve rotatably mounted on said rod, a second disc-shaped member on said sleeve, radial slots in said disc-shaped members, means for holding the adjacent surfaces of said disc-shaped members in engagement with each other, said slots being of substantially uniform width throughout their entire length and forming cutting edges on each of said disc-shaped members so that as the disc-shaped members are rotated relatively to each other, co-operating cutting edges on each of said disc-shaped members form a means for clipping hairs or the like introduced therebetween.

7. A hair clipper comprising a disc-shaped member, a rod upon which said disc-shaped member is fastened, a sleeve rotatably mounted on said rod, a second disc-shaped member on said sleeve, radial slots in said disc-shaped members, a spring arranged co-axially with said rod and sleeve to urge said rod and sleeve in opposite directions and thereby cause said disc-shaped members to be held yieldingly in engagement with each other, said slots being of substantially uniform width throughout their entire length and forming cutting edges on each of said disc-shaped members so that as the disc-shaped members are rotated relatively to each other, co-operating cutting edges on each of said disc-shaped members, form a means for clipping hairs or the like introduced therebetween.

In testimony whereof I have signed my name to this specification on this 7th day of May, A. D. 1927.

JOHN KAUFMANN. 105

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