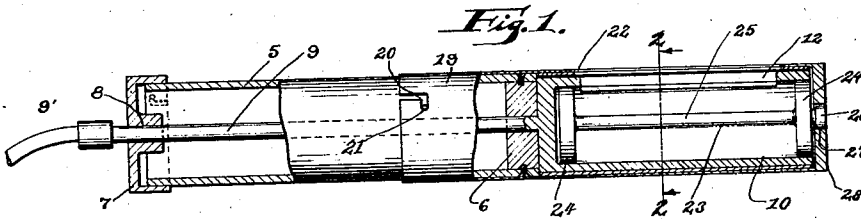
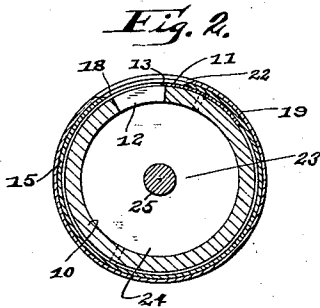
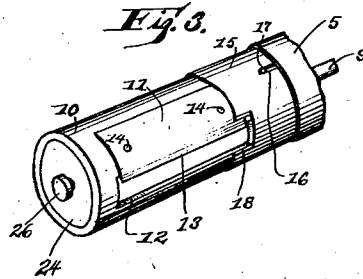
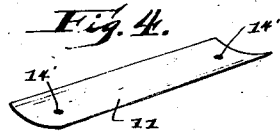


A. C. HANSON.
 ROTARY SAFETY RAZOR.
 APPLICATION FILED NOV. 12, 1919.

1,353,160.

Patented Sept. 21, 1920.



Inventor.
 Andrew C. Hanson.
 By Mossell & Keeney,
 Attorneys.

UNITED STATES PATENT OFFICE.

ANDREW C. HANSON, OF RACINE, WISCONSIN.

ROTARY SAFETY-RAZOR.

Specification of Letters Patent. Patented Sept. 21, 1920.

1,353,160.

Application filed November 12, 1919. Serial No. 337,514.

To all whom it may concern:

Be it known that I, ANDREW C. HANSON, a citizen of the United States, and resident of Racine, in the county of Racine and State of Wisconsin, have invented new and useful Improvements in Rotary Safety-Razors, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The present invention relates to certain new and useful improvements in razors, and refers more particularly to what may be termed a rotary safety razor.

One object of my invention is to provide a device of this type in which the blade carrying head or member is mounted to rotate, the same being power driven and so constructed as to operate smoothly, rapidly and with safety, and the construction being such that the device may be used upon a smooth or tender skin without endangering same either through cutting or scraping.

Another object of the invention is to provide a device of this type in which the razor blades may be readily removed and in which sufficient safeguard is provided to eliminate danger of cutting by the razor when in use.

A further object of the present invention is to provide a device of this type having suitable means for readily removing lather accumulated after using the device.

A still further object of the present invention is to provide a power driven rotary safety razor of the class described which will be neat in appearance, compact in size and efficient in operation.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts, substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention constituted according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a view of my improved razor, parts being broken away and in section to more clearly illustrate the various details of construction.

Fig. 2 is a transverse sectional view through the cutting head of my razor, said view being taken on the line 2—2 of Fig. 1.

Fig. 3 is a perspective view of the cutting head of my razor with the guard casing cover removed and with parts broken away to illustrate structural details, and

Fig. 4 is a perspective view of the razor blade I employ in connection with my razor.

Referring now more particularly to the drawing, 5 designates a tubular handle member having one end closed by means of a bearing member 6 and its other end closed by a removable cap 7 having a bearing 8 formed centrally thereof and providing, with the bearing member 6, journals for a driven shaft 9. The driven shaft 9 has secured to its end adjacent bearing 6 a revoluble member 10 having means for detachably securing thereto a cutting blade 11. The revoluble member 10 has an elongated slot or opening 12 in the side wall thereof and the cutting blade 11 is positioned with its cutting edge 13 adjacent the slot 12 by means of pins 14 carried by the member 10 and engaging apertures 14' in the blade. The blade 11 is retained in position by means of a sleeve member 15 which is engageable over the member 10 and has its inner end positioned by engagement of a slot 16 therein with a positioning stud 17 carried by the revoluble member. The sleeve member 15 has an elongated aperture or slot 18 therein for register with the slot 12 of the revoluble member whereby the cutting edge of the blade 11 will be exposed.

As best shown in Fig. 1 the entire cutting head of my razor is inclosed by a guard casing or cover 19, which has its inner end readily detachably secured to the handle 5 by means of a key way slot 20 engaging a locking pin 21. The casing 19 has an elongated slot or aperture 22 in its side wall adapted to intermittently register with the aligned apertures of the members 10 and 15 when the same are revolved through the medium of the drive shaft 9.

The drive shaft 9 is connected with an electrical motor or other source of power by means of a driven cable 9' and in operation the razor is positioned with the slot 22 of the guard casing 19 adjacent the skin of the user and rotation of the member 10 will intermittently register the cutting blade 11 with said opening and thus readily remove the beard. The lather

removed by the cutting blade in its operation enters the interior of the member 10 and may be readily removed by the novel means now about to be described.

- 5 A spool member 23 consisting of two spaced apart flanged members 24 having a snug fit with the inner walls of member 10 and connected together by a rod 25 provides the means for removing the lather from the interior of the member 10 and as will be readily apparent the lather will be positioned between the ends 24 and thus the removal of the spool member 23 will remove the lather. A knob or handle 26 is formed on the outermost end 24 of the spool 23 to provide means for readily removing the same and said knob 26 projects through an aperture 27 in the closed outer end of the cover 19 when the same is in position.
- 20 When it is desired to sharpen the blade 11 the motor (not shown) connected with the cable 9' is reversed and the slot 22 of the cover 19 is positioned next to the surface of a strap and thus the blade will be readily sharpened as will be obvious.

What I claim for my invention is:

1. A razor comprising a handle, a revoluble tubular member mounted thereon and having a slot in its side wall communicating with a lather receiving compartment therein, a cutting blade carried by said revoluble member and having its cutting edge adjacent said slot, and a bodily removable member disposed within the lather receiving compartment of the revoluble member for removing lather collected by the revoluble member.
2. A razor comprising a handle, a revoluble member mounted thereon, a cutting blade carried thereby, a sleeve member carried by the revoluble member and having a slot therein exposing the cutting edge of the blade, and a casing carried by the handle and providing a guard for the cutting blade, said casing being substantially rigid with the handle.
3. A razor comprising a handle, a revoluble tubular open ended member mounted thereon, means for revolving said member, a cutting blade carried by said revoluble member and having its cutting edge disposed adjacent an opening in the side wall of said member, a sleeve member engageable over the revoluble member and cutting blade and having an opening in register with the opening in said revoluble member, and a guard cover casing inclosing said revoluble and sleeve members and having an opening therein for intermittent registration with the alined openings of said revoluble and sleeve members, said guard cover casing being rigid with the handle.
4. A razor comprising a handle, a revoluble tubular open ended member mounted thereon, means for revolving said member in either of two directions, a cutting blade carried by said revoluble member and having its cutting edge disposed adjacent an opening in the side wall of said member, a sleeve member engageable over the revoluble member and cutting blade and having an opening in register with the opening in said revoluble member, and a guard cover casing inclosing said revoluble and sleeve members and having an opening therein for intermittent registration with the alined openings of said revoluble and sleeve members, said guard cover casing being rigid with the handle.
5. A razor comprising a handle, a revoluble tubular open ended member mounted thereon, means for revolving said member, a cutting blade carried by said revoluble member and having its cutting edge disposed adjacent an opening in the side wall of said member, a bodily removable clean-out member disposed within the revoluble member, a sleeve member engageable over the revoluble member and having an opening in line with the opening of said revoluble member, and a cover casing inclosing said members and having an opening therein for registration with the alined openings of said members, said cover casing being substantially rigid with the handle.
6. A razor comprising a handle, a revoluble tubular member having its inner end closed and its outer end open, a drive shaft projected from said closed end and journaled in the handle, means engageable with said shaft to revolve it and said tubular member, a cutting blade carried by said tubular member and having its cutting edge disposed adjacent an elongated opening in the side wall of said member, a guard casing inclosing the revoluble member and having an elongated opening therein for intermittent registration with the opening of said revoluble member, said casing being rigid with the handle, and a spool member removably positioned in said revoluble member with its ends outwardly of the ends of the elongated opening in said member, whereby the removal of the spool member will clean out the lather in said tubular member.

60 oluble and sleeve members, said guard cover casing being rigid with the handle.

65 in either of two directions, a cutting blade carried by said revoluble member and having its cutting edge disposed adjacent an opening in the side wall of said member, a sleeve member engageable over the revoluble member and cutting blade and having an opening in register with the opening in said revoluble member, and a guard cover casing inclosing said revoluble and sleeve members and having an opening therein for intermittent registration with the alined openings of said revoluble and sleeve members, said guard cover casing being rigid with the handle.

80 ble tubular open ended member mounted thereon, means for revolving said member, a cutting blade carried by said revoluble member and having its cutting edge disposed adjacent an opening in the side wall of said member, a bodily removable clean-out member disposed within the revoluble member, a sleeve member engageable over the revoluble member and having an opening in line with the opening of said revoluble member, and a cover casing inclosing said members and having an opening therein for registration with the alined openings of said members, said cover casing being substantially rigid with the handle.

90 ble tubular member having its inner end closed and its outer end open, a drive shaft projected from said closed end and journaled in the handle, means engageable with said shaft to revolve it and said tubular member, a cutting blade carried by said tubular member and having its cutting edge disposed adjacent an elongated opening in the side wall of said member, a guard casing inclosing the revoluble member and having an elongated opening therein for intermittent registration with the opening of said revoluble member, said casing being rigid with the handle, and a spool member removably positioned in said revoluble member with its ends outwardly of the ends of the elongated opening in said member, whereby the removal of the spool member will clean out the lather in said tubular member.

In testimony whereof I affix my signature.
ANDREW C. HANSON.