Sept. 22, 1931. E. M. FINN 1,824,338

SAFETY RAZOR

Filed June 20, 1930

Fig. 1.

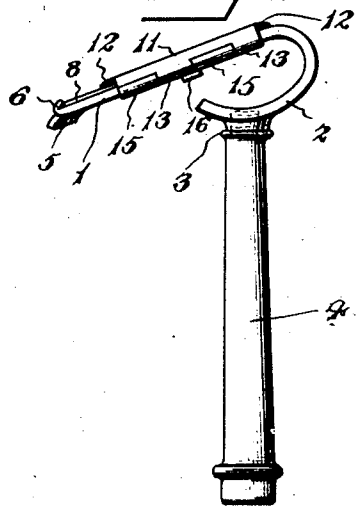


Fig. 2.

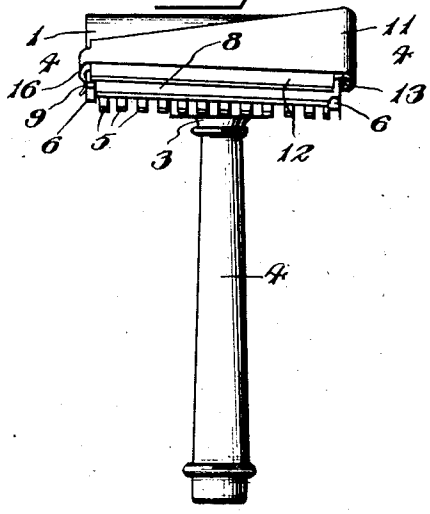


Fig. 3.

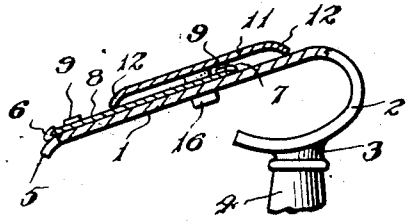


Fig. 4.

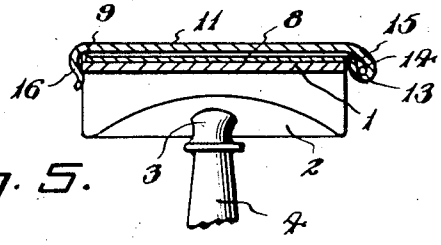
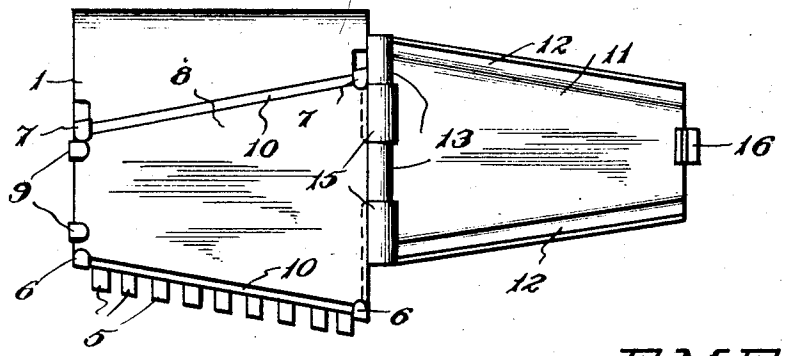


Fig. 5.



Inventor

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UNITED STATES PATENT OFFICE

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SAFETY RAZOR

Application filed June 20, 1930. Serial No. 462,638.

This invention realtes to cutlery and more particularly to a shaving implement of the type known as a safety razor, and one object of the invention is to provide a safety razor having an improved type of guard to which a blade is to be applied and also improved blade-engaging means carried by the guard and an improved clamp for holding the blade in place against the guard.

Another object of the invention is to so form the guard that when the blade is applied thereto its exposed cutting edge will extend diagonally and thereby cause a slicing stroke to take place when the razor is in use. By this arrangement the razor will shave very easily and have a very good cutting action.

Another object of the invention is to provide the razor with a blade of such formation that either sharpened side edge may be disposed for use and the exposed edge always disposed at an incline.

Another object of the invention is to so form the guard and its blade-engaging means that the blade may be easily set in place or removed but will be prevented from slipping out of place when the clamp is secured in an operative position.

The invention is illustrated in the accompanying drawings, wherein.

Figure 1 is a side elevation of the improved razor,

Fig. 2 is a view showing the improved razor in front elevation,

Fig. 3 is a fragmentary sectional view through the razor,

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 2, and

Fig. 5 is a plan view showing the clamp swung to an opened position.

The guard 1 of this razor is formed of sheet metal and consists of a strip of metal having one end portion rolled to form a back 2 extending downwardly and forwardly beneath the guard and terminating in spaced relation to the under face thereof. A socket 3 which is internally threaded is formed near the free forward end of the back and receives the threaded upper end of a handle 4. Therefore, the handle may be detached in order that the razor may be packed in a small receptacle. The forward edge of the guard extends at an incline, as clearly shown in Figure 5, and this forward edge portion is cut to form teeth 5. When the forward end of the guard is cut to form the teeth 5, the end teeth are bent upwardly and inwardly to form overhanging tongues 6 and adjacent the rolled back the plate or strip from which the guard is formed is cut to form tongues 7 which are bent to extend forwardly in overhanging relation to the guard. It should be noted that the tongues 6 and 7 at one side edge of the guard are closer together than the corresponding tongues at the other side edge of the guard. Therefore, a blade 8 which tapers towards one end may be set in place against the outer face of the guard with its end portions overlapped by the tongues 6 and 7. Other tongues 9 overhang the guard between the tongues 6 and 7 which engage the narrow end of the blade and these tongues 9 extend longitudinally of the blade and serve to engage its narrow end and limit movement of the blade toward the left in Figure 5. The side edges 10 of the blade are sharpened and these edges extend in such converging relation to each other that when the blade is slid into place beneath the tongues 6, 7 and 9 the forward or outer sharpened edge of the blade will extend parallel to the forward edge of the guard with the teeth 10 projecting from the sharpened edge of the blade. It should be noted that the teeth are bent, as shown in Figure 3, so that they project from the body portion of the guard at an incline to the sharpened edge of the blade. Since the blade is tapered as shown in Figure 5 and its forward edge extends parallel to the forward edge of the guard, the forward cutting edge of the blade will be disposed at such an incline that when the razor is held by its handle and moved along a person's face a slicing action will take place instead of a straight pulling action and the blade will very easily cut through hair upon a person's face. While only one sharpened edge of the blade is exposed for use at a time, the blade may be set in place with either sharpened edge disposed forwardly and if during a shaving operation it is found that the blade

does not cut easily it may be moved and replaced in a reversed position.

In order to firmly hold the blade in place after being applied to the guard with edge portions engaged beneath the tongues, there has been provided a clamp 11 consisting of a metal plate tapered towards one end and along its sides being bent to form flanges 12. At its wider end the clamp is formed with hinge ears 13 to receive a pin 14 which also passes through hinge ears 15 formed at the right hand side of the guard between the tongues 6 and 7 and from the narrow end of the clamp extends a tongue bent to form a resilient latch 16 adapted to engage the guard, as shown in Figure 4, and securely but releasably hold the clamp in an operative position with the forward flange 12 of the clamp bearing against the blade in spaced parallel relation to the front edge thereof and the other flange of the clamp bearing against the guard rearwardly from the blade, as shown in Figure 3. By this arrangement the blade will be firmly held against the guard. It should be further noted that when the clamp is moved to the operative or closed position its pivoted end bears against the wide end of the blade and firmly braces the blade so that it cannot slip longitudinally. Therefore, danger of cutting a person's face due to the blade moving upon the guard will be eliminated.

When this razor is in use, the handle is screwed into the socket 3 and the clamp swung to the open position shown in Figure 5. The blade is grasped by its wide end and slid along the guard into place beneath the tongues 6 and 7 with its narrow end bearing against and overlapped by the tongues 9. The clamp is then swung to the closed or operative position where it is held by its latch engaging the guard, as shown in Figure 4. After lather has been applied to a person's face the razor is held by its handle and applied to the face with the teeth contacting with the skin. The razor is then moved downwardly and since the toothed edge of the guard and sharpened edge of the blade extend at an incline a slicing stroke will take place which will cause the blade to very easily cut through the beard. If it is found that the forwardly presented edge of the blade does not cut properly, the clamp is swung to an open position and the blade can then be withdrawn and after being reversed replaced and the clamp then again closed. This will cause the second sharpened edge of the blade to be presented forwardly instead of the one previously in use. After the shaving operation has been completed the clamp is swung to an open position and the blade can then be withdrawn so that the razor may be thoroughly cleaned and reassembled for use.

Having thus described the invention, I claim:

A safety razor comprising a guard having its forward edge extending at an incline, a clamp pivoted at one end to one side of said guard and extending across the guard when in an operative position, said clamp having flanges along its front and rear edges, the guard having teeth along its front edge and the front flange of said clamp being spaced rearwardly from the teeth, a blade disposed against said guard and having sharpened front and rear edges, said blade being tapered towards one end and having its front edge overlapping rear ends of said teeth, tongues at the side edges of said guard to overlap front and rear edges of the blade at the ends thereof, other tongues carried by said guard to overlap the narrow end of said blade longitudinally thereof, and means to releasably secure the clamp in an operative position with its front flange bearing against the blade rearwardly from the front edge thereof and its rear flange bearing against the upper face of the guard rearwardly from the blade, the pivoted end of the clamp engaging the wide end of the blade to hold the blade firmly in place beneath the tongues.

In testimony whereof I affix my signature.

EDWARD M. FINN. [L. S.]