Nov. 7, 1961 A. DE VERN AUSTIN 3,007,244

CUTTING BLADE HOLDER

Filed May 11, 1959

Fig. 1.

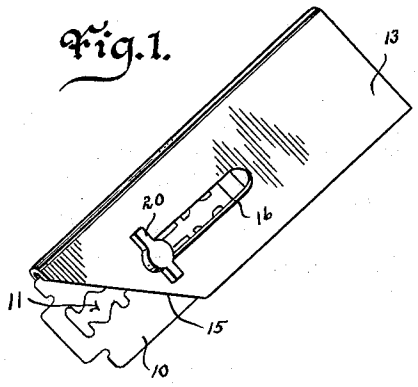


Fig. 2.

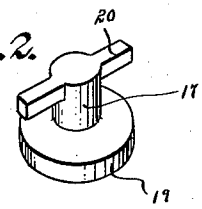


Fig. 3.

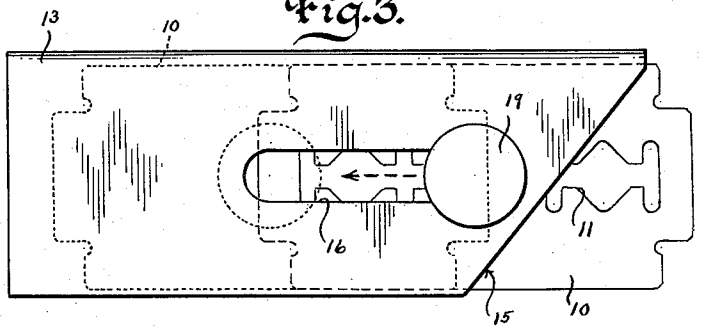


Fig. 4.

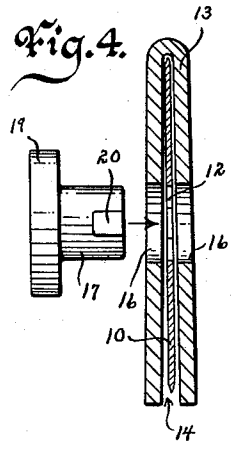


Fig. 5.

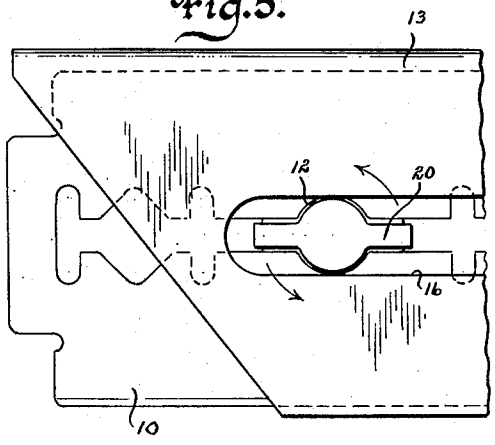
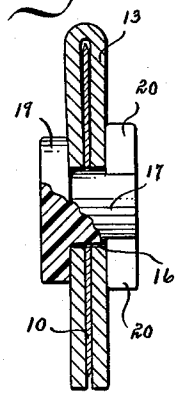


Fig. 6.



Witness
Edward P. Seeley

Inventor
Alfred DeVern Austin
by M. Talbert Dick
Attorney

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3,007,244
CUTTING BLADE HOLDER

Alfred De Vern Austin, 1119 Ravina Drive, Des Moines, Iowa

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2 Claims. (Cl. 30—162)

This invention relates to a blade holding tool and more particularly to a gripping means for adjustably holding a safety razor blade. Two edged safety razor blades are used for many tasks besides that of shaving. Perhaps the most extensive use of such razor blades by women is in cutting cloth, ripping out sewn seams, severing threads, and like. During such operations, the blade is grasped at each side, respectively, by the thumb and second finger, and with the first finger resting on the razor's upper edge for facilitating both the guiding of the blade and to force it downwardly. Obviously, in double edged safety razor blades, the upper edge of the blade is sharp and, if it does not cut the first finger, it at least is most uncomfortable.

Also, because the blades are quite thin, they are difficult to grasp and hold.

Therefore, one of the principal objects of my invention is to provide a razor blade holder that protects the user from accidental finger cutting.

A further object of this invention is to provide a safety razor blade holder that provides a good graspable casing for the user.

A still further object of my invention is to provide a safety razor blade holder that gives strength and stability to the thin razor blade.

A still further object of this invention is to provide a safety razor blade holder that permits the total sheathing of the blade when not in use.

A still further object of my invention is to provide a razor blade holder that yieldingly holds the blade in any desired position the blade is placed.

A still further object of this invention is to provide a safety razor blade holder that is capable of holding the blade in a variety of cutting positions.

A still further object of this invention is to provide a razor blade holder that permits rapid easy replacement of blades.

Still further objects of my invention are to provide a safety razor blade holder that is economical in manufacture, durable in use, and refined in appearance.

These and other objects will be apparent to those skilled in the art.

My invention consists in the construction, arrangements, and combination, of the various parts of the device, whereby the objects contemplated are attained as hereinafter more fully set forth, specifically pointed out in my claims, and illustrated in the accompanying drawings, in which:

FIG. 1 is a perspective view of my device ready for use;

FIG. 2 is a perspective view of the clamping member;

FIG. 3 is a side view of the holder;

FIG. 4 is a cross-sectional view of the device showing the method of inserting the clamping member;

FIG. 5 is a side view of one end portion of the device illustrating the rotation of the clamping member into a locked position; and

FIG. 6 is a cross-sectional view of the unit with blade and clamping member in place.

In these drawings I have used the numeral **10** to designate an ordinary double edged safety razor blade having the usual longitudinal center slit **11**. In all such blades there is a circular hole area **12** imposed in the center length of the slit, as shown in FIG. 4. The numeral **13** designates an elongated flat inverted U-strap shell which

forms the sleeve housing for the blade **10**. This sleeve housing is open at its bottom and the space **14** between its two flat sides is to accommodate the blade **10**, as shown in FIG. 4. This member **13** is elongated and has its forward end **15** extending forwardly and upwardly. The length of its bottom is greater than that of the length of the razor blade **10** so that the blade may be completely sheathed when desired, as shown by broken lines in FIG. 3. The vertical height of the member **13** is greater than that of the width of the razor blade. In each side center of the sleeve housing **13** is an elongated slot **16**, and parallel to the length of the sleeve housing. These two slots **16** are diametrically opposite from each other, and each has a width substantially that of the diameter of the hole area **12**.

The shell **13** is made of a material having spring characteristics so that normally its two sides will extend downwardly and spread slightly apart as shown in FIG. 4.

One of the chief phases of my device is the clamping member and which is made of flexible resilient material such as rubber, plastic, or like. The clamping member has a shaft portion **17**, a head **19** on one end of the shaft portion and a transversely arranged bar **20** on the other end of the shaft. The shaft portion has a diameter less than that of the diameter of the blade hole area **12**, and a diameter less than that of the widths of the slots **16**. The head **19** is of a diameter greater than that of the blade hole area **12** and greater than that of the widths of the slots **16**. The bar **20** is of a width less than that of the width of the blade slit **11**, and less than that of the widths of the slots **16**. The length of the bar **20** is greater than that of the widths of the slots **16**.

To place a razor blade in the holder, the bar **20** of the clamping member is rotated to a position parallel to the slits **16** as shown in FIG. 5, at which time the shaft and bar are withdrawn through the opposite side of the shell sleeve **13**. The razor blade is placed in the shell sleeve as shown in FIG. 4. The clamping member is then placed relative to the slots **16** as shown in FIG. 4, and inserted first through a slot **16**, thence through the razor blade, thence through the other slot **16**. This latter position is shown in FIG. 5. Next, the two lower sides of the shell sleeve are yieldingly forced together onto the blade and the bar **20** rotated a one-fourth revolution to bring the two end portions of the bar to extend above and below the adjacent slot **16**, as shown in FIG. 6. When the parts are so assembled, the sliding of the clamping member forwardly relative to the sleeve will carry the blade to an exposed protruding position beyond the sleeve as shown in FIG. 1. The adjustable positioning of the clamping member in such forward position area will provide the desired selected position of the protruding blade. By manually sliding the clamping member rearwardly relative to the sleeve housing **13**, will carry the blade into safety position and totally within the sleeve as shown by broken lines in FIG. 3. There are two important resilient features of the device, i.e., the spring characteristics of the sleeve **13** and the resilient clamping member. Both of these features aid in the successful functioning of the device. Firstly, the bar **20** will be yieldingly held in transverse relationship relative to the longitudinal lengths of the slots **16**. Secondly, the clamping member will be yieldingly held in any position it is placed in its sliding movement. Also the clamping member, due to its resiliency, will frictionally contact the outer side of the shell housing. This means that the blade will be safely yieldingly held in both exposed and sheathed positions. Also no tightening nuts are needed. The distance between the head and bar is less than that of the normal distance between the outer sides of the two sides of the shell in the area of the slots **16**. Furthermore, by the shell being of a spring character, it is clamped tightly

onto both sides of the blade. To remove a blade, it is merely necessary to rotate the bar **20** to a parallel position with the slots **16** at which time it is withdrawn from the tool and the blade will drop out. The clamping member by its construction, eliminates the problem of attempting to thread a small nut onto a small bolt means which would otherwise be necessary to hold the blade.

Some changes may be made in the construction and arrangement of my cutting blade holder without departing from the real spirit and purpose of my invention, and it is my intention to cover by my claims, any modified forms of structure or use of mechanical equivalents which may be reasonably included within their scope.

I claim:

1. In combination, an inverted elongated horizontal U-shaped flat shell housing adapted to embrace at least a part of a safety razor blade and having spring characteristics, a horizontal slot in each of the two sides of said shell housing; said two slots diametrically arranged relative to each other and extending longitudinally to the longitudinal length of said shell housing, a shaft detachably extending through said slots and adapted to extend through the hole area of a razor blade, a member on said shaft engaging one of the sides of said shell housing, and a member on said shaft engaging the other side of said shell housing; said shaft and each of its end members being of one integral piece of flexible resilient material and having said end members yieldingly engaging the sides of said shell housing.

2. In combination, an inverted elongated horizontal U-shaped flat shell housing adapted to embrace at least a part of a razor blade, a horizontal slot in each of the two sides of said shell housing; said two slots diametrically arranged relative to each other and extending longitudinally to the longitudinal length of said shell housing, a shaft detachably extending through said slots and adapted to extend through the hole area of a razor blade, a head member on said shaft engaging one of the sides of said shell housing, and a bar on said shaft engaging the other side of said shell housing and having a width less than that of the width of the slot in the side of the shell housing adjacent to and a length greater than that of the width of the slot in the side of the shell housing adjacent to it; said shaft, said head member and said bar being of one integral piece of flexible resilient material.

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