This invention relates to cutting or severing implements, and, more particularly, to such an instrument using a well-known type of double-edged razor blade as the cutting element.

It is the chief purpose and object of the invention to provide a holder for a razor blade of the type mentioned, and which is relatively simple and inexpensive to fabricate but, nevertheless, extremely effective and versatile for its intended purposes, in firmly holding the blade in position for cutting, ripping, scraping and innumerable other uses.

A further object is to provide a razor blade holder as aforesaid, which acts to completely enclose the blade when not in use, so that it may be handled and carried in a purse or pocket with safety and which may be instantly readied for use.

Yet another object is to provide a holder which is safe in use because of the facts that (a) it conceals and protects the edge of the blade not used and (b) provides the user with a firm grip upon the blade, which grip increases with the force exerted by the user upon the casing half containing the blade.

Still another object is to provide a holder for a double-edged razor blade in which either cutting edge may be instantaneously exposed for use, as desired, and the concealed or protected cutting edge may be exposed and the other edge encased, without touching the blade.

A further object is to provide a blade holder as aforesaid, wherein the cutting edges of the blade when not in use, are completely protected from contact with the casing and thus remain sharp, and wherein the concealed edge of the blade is similarly protected when the opposite edge is in use.

Another object is to provide a holder of the type stated, wherein the substitution of one blade for another as, for example, a sharp blade for one which has become dulled in use, may be effected quickly, easily and safely.

Yet another object is to provide a holder which, while possessing all the characteristics and advantages inherent in the aforesaid objects, is readily, simply and inexpensively fabricated from low cost materials and which can be produced at a cost making it possible to dispense the holders, when desired, as souvenirs or for advertising purposes.

Other objects and advantages of the invention will become clear to those skilled in the art, after a study of the following detailed description in connection with the accompanying drawings.

In the drawing:

FIGURE 1 is an exploded perspective view showing a double-edged razor blade and clamp plates in positions for assembly;

FIGURE 2 is a plan view of the assembled plates, with a blade clamped between them;

FIGURE 3 is a section taken in a plane identified by line 3—3, FIGURE 2;

FIGURE 4 is a section taken in a plane identified by line 4—4, FIGURE 2;

FIGURE 5 is a plan view of one of the two duplicate casing elements for holding and enclosing the blade and its clamp plates;

FIGURE 6 is a section taken in a plane identified by line 6—6, FIGURE 5;

FIGURE 7 is an elevation of one of the two casing halves, with a blade and its clamp plates held therein, ready for use;

FIGURE 8 is an elevation corresponding to FIGURE 7, but showing the second casing half in position to enclose the blade and its clamp plates;

FIGURE 9 is a section taken in a plane identified by line 9—9 FIGURE 8; and

FIGURE 10 is a perspective view to a reduced scale, showing how the casing halves are separated to leave the blade and plates in one of the halves ready for use, and subsequently re-assembled.

Referring in detail to the drawing, 1 identifies a conventional double-edged razor blade having the usual projecting squared ends 2 and 3. A pair of clamp plates 4 and 5 are provided; and since these plates are duplicates, a description of one of them will suffice. Plate 4 is a generally rectangular item of thin sheet metal having lugs 6 and 7 which are fixedly attached by visible means from respective diagonal corners. The lugs extend outwardly in the same direction from the plane of the plate. The remaining two diagonal corners are slotted as indicated at 8 and 9. It will be noted that each slot extends parallel with the longitudinal center line of the plate and has a length equal to the corresponding dimension of the lugs 6 and 7.

Plates 4 and 5 are so dimensioned and correlated with the lugs and slots thereof, and with the blade, that when brought together from the separated position shown upon FIGURE 1, to the assembled position of FIGURES 2, 3 and 4, each lug of one plate fits smoothly in and through a corresponding slot of the other. Furthermore, the pair of lugs such as 6, 11 at one end of the assembly, pass smoothly and with close tolerance over the respective straight longitudinally extending edges of the squared ends of the blade. In addition, when the plates and blade are in the assembled relation of FIGURE 2 the ends of the cutting edge portions of the blade fit smoothly between each pair of lugs such as 7, 11 and 6, 10. Thus in such assembled relation the plates and blade are rigidly fixed against relative displacement in all directions in the planes thereof, and can be separated only in a direction normal to said planes.

Referring more particularly to FIGURE 1, each of the plates has a protuberance, 14 for plate 4 and 15 for plate 5, struck outwardly from the central area thereof. Referring to FIGURE 2 especially, it is noted that the protuberance 15 for example, lies across the transverse center line of its plate and a little above the longitudinal...
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Consequently in the assembled relation the protuberances 14, 15 are laterally offset by a distance equal to twice the width of each, at each point of contact from the longitudinal center line. These protuberances are preferably in the form of short ridges parallel with the longitudinal center line and, in a manner subsequently explained, act to releasably hold the assembled plates and blade within the casing.

This casing, as clearly shown upon FIGURE 5, is generally identified at 16 and consists of two identical halves or parts 17 and 18, of metal, plastic or other suitable tough flexible material. Since the two parts are identical, a detailed description of part 17 will suffice. This part is in the general form of a thin elongated right parallelepiped having a hollow interior forming a recess 22 opening through one end wall thereof. Thus, referring to FIGURES 5 and 6, the recess is seen to define relatively thin flexible side walls 17a, 17b. As clearly shown upon FIGURE 5 the recess has a bottom surface 19 and ends 20, 21. Reference to FIGURES 5 and 6 show that these ends are transversely enlarged with respect to the central portion of the recess, and terminate short of bottom surface 19. The dimensions and relations are such that (a) the overall length of recess 22 is slightly greater than the corresponding dimension of plates 4, 5; (b) the depth of the recess is appreciably greater than one-half the width of the blade; (c) the width of the recess is closely equal to the combined thickness of the blade and plates in assembled contact; (d) the dimension of each enlarged end measured parallel with bottom wall 19 parallel to the plane of FIGURE 5, is equal to or slightly greater by a few thousandths of an inch, than the length of the lugs 6, 7, 10 and 11; (e) the width of the enlarged ends, that is, their dimension in the vertical plane in the plane of FIGURE 6, is a little greater than the height of the lugs 6, etc.; (f) the depth of the enlarged ends is such that when the assembly of FIGURE 2 is inserted into casing half 17, for example, the end portions of the longitudinal edges of the plates rest on the bottoms of these enlarged ends, with the contiguous cutting edge of the blade out of contact with bottom surface 19; (5) when the assembled plates and blades are fully inserted into casing half 17, for example, the planar surface 25 through which recess 22 opens, coincides with the center line of the blade.

From FIGURES 5 and 6 in particular, it is noted that one side of the recess in casing part 17 is provided with a short groove 23 centrally disposed, parallel with the longitudinal axis of the part, and offset from surface 25 by the same distance that protuberance 15 is offset from the center line of plate 5. Thus in the assembled relation of FIGURE 7, protuberance 15 fits snugly in groove 23 and effectively but releasably holds the assembled plates and blade within recess 22. Since protuberance 14 of plate 4 fits into a similar recess in the inner wall of casing part 18, it follows that the casing parts must be assembled as in FIGURE 8, in the same relation, that is, with the same side surfaces coplanar. Such feature is advantageous, for example, where the assembled casing bears advertising material different on the two sides and it is desired that the casing parts be united so that the matter on each side reads correctly. Where the advertising or other matter is the same on both sides it will in general be immaterial how the halves are assembled.

Casing half 18 is a duplicate of 17 just described, so that it is sufficient to point out bottom surface 26 thereof and groove 27, FIGURES 8 and 9. The end surfaces of the casing halves are roughened or knurled as indicated for example at 28, FIGURES 5, 7 and 8. The exterior side walls may also be roughened or knurled if desired.

FIGURE 10 shows how the two casing halves with plates and blade therein may be separated for use, or assembled for storage. When in the assembled relation of FIGURE 8, one protuberance such as 14 is seated in the groove of half 18 for example, while the other protuberance is seated in the groove in half 17. Thus the two parts arefirmly but releasably held with their confronting surfaces in contact and with the blade completely engaged.

When the implement is to be used, the side walls of part 17 are gripped and pressed between the and the forefinger of one hand to thus hold one protuberance within its groove in this part. The other part is gripped at its ends between the thumb and forefinger of the other hand and pressed. This causes the side walls of this part to flex or bow outwardly thus substantially releasing the other protuberance from its groove in part 18. A slight pull is then sufficient to separate part 18 as shown at FIGURE 10, leaving part 17 with the blade and blade therein and one cutting edge of the blade exposed ready for use.

In using the implement for cutting, ripping, etc., part 17 is gripped and pressed as shown, between the thumb and fingers and manipulated as desired or necessary for the job. Force tending to move the blade farther into the casing part is resisted by engagement of the ends of the longitudinal edges of the plates with the bottom surfaces of the enlarged ends, FIGURE 10, causing the casing part to be firmly but releasably held with their confronting surfaces in contact and with the blade completely engaged.

Features especially to be noted is that either cutting edge may be used. For instance, referring to FIGURE 8, when the cutting edge within part 18 is to be used, the other protuberance is gripped and the ends of part 17 are pressed together so that part 17 is separated without the blade and plate assembly. Hence it is not necessary to touch the plates and blade assembly except when it is desired to substitute a new blade. However, substituting a new blade is easily, safely and quickly effected at FIGURE 11, merely by pressing the ends of part 17 with the thumb and forefinger of one hand, pressing plates 4 and 5 together with the other hand, withdrawing the assembly, separating the plates as in FIGURE 1, substituting another blade, reassembling as in FIGURE 2, and inserting the assembly into the casing part.

Since both plates 4 and 5 are duplicates, as well as casing parts 17, 18, manufacture and fabrication are facilitated and simplified. Likewise only two replacement parts need be kept in stock.

I have thus disclosed a blade holder which fulfills all of the objects stated. While I have disclosed the invention in the form presently preferred by me, various changes or shape, form and size, substitutions of equivalents, and modifications will readily occur to those skilled in the art, after a study of the disclosure. Hence the disclosure is to be taken in an illustrative sense only; and it is my desire and intention to reserve all changes within the scope of the subjoined claims.

What I claim and desire to secure by Letters Patent is:

1. A holder for a generally rectangular flat blade having a cutting edge and a central longitudinal axis parallel with said edge, first and second rectangular clamp plates, first means integral with said plates and interengaging when said plates are applied to respectively opposite sides of the blade in essentially coplanar relation therewith, to fix said plates and blade against relative movement in their common plane and with said cutting edge exposed, and casing means having a recess to receive the assembled plates and blade to prevent lateral separation thereof, said plates being duplicates, said first means comprising first and second lugs at respective corners of each plate and offset in the same direction from the plane thereof, and first and second apertures each at a respective one of the remaining corners of each said plate, each lug of one plate entering a respective aperture of the other plate when said plates are applied to opposite sides of the blade, said lugs engaging corresponding edges of the blade to prevent movement thereof relatively to the plates.

2. The holder of claim 1, said casing means comprising
first and second duplicate halves each having a recess opening through one edge surface thereof, and conjointly forming an enclosure when said halves are assembled with said recessed edge surfaces in contact, and second means releasably securing one said plate to said first casing half and the other said plate to said second casing half when said halves are assembled as aforesaid.

3. The holder of claim 2, said second means comprising a protuberance on each of said plates centrally disposed between end edges thereof and offset from the central longitudinal axis thereof, each of said protuberances entering a groove in the inner wall of each respective casing half when the assembled plates and blade are emplaced within the enclosure formed conjointly by said casing halves therein.

4. The holder of claim 1, said casing means comprising first and second duplicate, thin, generally parallelepipedal halves each having a recess opening through the surface of one side edge thereof, said recesses conjointly forming an enclosure for said plates and blade when said one side edge surfaces are in registering contact, each of said recesses having a length equal to the length of the plates and a depth a little greater than one-half the width of the blade.

5. The holder of claim 4, each of said recesses having a width equal to the combined thickness of said plates and blade, and enlarged ends of a width equal to the dimension of each lug normal to the plane of the plate, said enlarged ends having a depth equal to one-half the width of the plates.

6. The holder of claim 2, said casing halves having flexible side walls, pressure on the ends of either half acting to flex the side walls thereof to release said second means.

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