Oct. 24, 1950 A. B. HITCHCOCK 2,526,867

BLADE HOLDER

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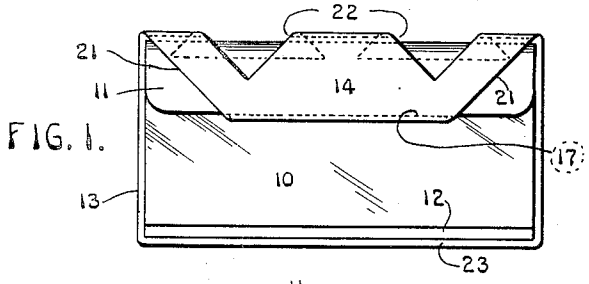


FIG. 1.

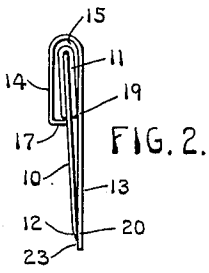


FIG. 2.

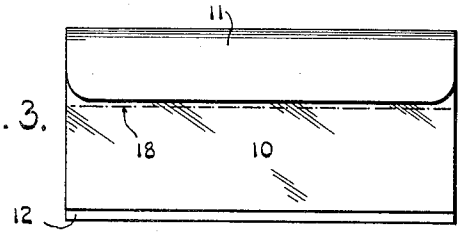


FIG. 3.

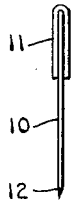


FIG. 4.

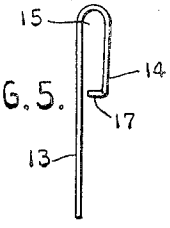


FIG. 5.

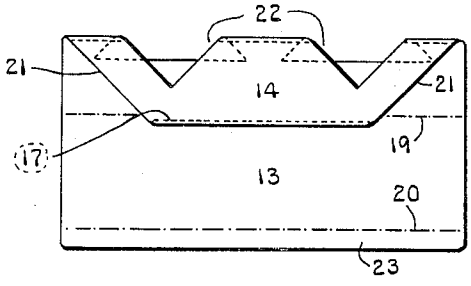


FIG. 6.

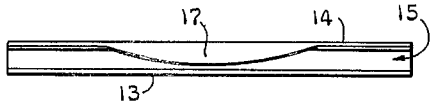


FIG. 7.

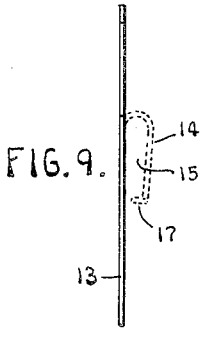


FIG. 9.

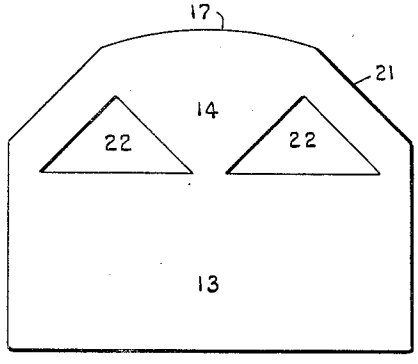


FIG. 8.

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BLADE HOLDER

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1 Claim. (Cl. 30—162)

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This invention relates to blade holders, and more particularly to holders for single edge razor blades. A conventional razor blade of this type is a rather substantial article having a longitudinal cutting edge and a folded reinforcing cap at the opposite longitudinal margin, so it can be conveniently handled like a knife for various cutting operations.

One of my objects is to produce a very simple holder, or case, for a blade of this kind adapted to be carried in a pocket or purse, and having special safety conditions which positively prevent accidental displacement of the blade in the holder, while allowing the blade to be easily withdrawn for use as a knife. I will hereafter describe a very light and small, compact holder which enables the blade to be quickly removed in one simple sliding motion, and returned to safety in a similar reverse movement.

More specifically stated, an object is to produce a holder comprising a spring clip which cooperates with the folded reinforcing cap of a conventional blade to prevent lateral displacement of the blade, while also forcing the cap and blade into firm frictional contact with a back member of the holder to prevent accidental longitudinal displacement, the cutting margin being firmly seated above a protective shield to avoid accidental cutting when the blade is confined by the holder.

A further object is to obtain the foregoing and other advantages from an extremely simple holder composed of a single sheet of metal including a spring clip forming a longitudinal pocket, or guide, for the relatively large folded cap of the blade, together with special cooperative details allowing the blade to be very freely inserted into and removed from the spring clip.

Fig. 1 is a front view drawn, to an enlarged scale, showing an ordinary single edge razor blade confined in a holder embodying features of this invention.

Fig. 2 is an end view of the same.

Fig. 3 is a face view of the blade.

Fig. 4 is an end view of said blade.

Fig. 5 is an end view of the holder shown in Figures 1 and 2.

Fig. 6 is a front view of the holder, the blade being omitted.

Fig. 7 is a bottom view of the holder.

Fig. 8 is a detail view of a single sheet of spring metal adapted to form all of the elements of the blade-holder.

Fig. 9 is an end view of the sheet shown in Fig. 8, with dotted lines showing folded marginal portions thereof.

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I will now describe specific details shown in the drawings, with the understanding that the scope of the invention extends to variations and modifications more broadly described by terms employed in the claim hereunto appended.

The single edge razor blade comprises a blade member 10 having a reinforcing cap 11 folded onto and united with one of its longitudinal margins, and a cutting edge 12 at the opposite longitudinal margin.

The clip device for detachably holding a blade of this kind in an inoperative condition is formed by a single sheet of spring metal shown in Figures 8 and 9. This simple sheet is bent as suggested by dotted lines in Fig. 9 to produce a flat back member 13 and a spring clip member 14, the latter being folded over a margin of the back member to form a longitudinal guideway 15 for the cap 11 of the blade. Both ends of this guideway 15 are entirely open to freely receive and permit longitudinal movement of the blade 10 and its cap 11. The blade can be easily extracted or entered by hand at either end, but when secured by spring pressure of the special clip device it cannot be accidentally displaced or thrown out of the holder.

The clip member 14 has an inturned marginal abutment lip 17 which contacts with the slidable blade at an imaginary line 18 (Fig. 3) adjacent to the cap 11, so as to positively limit lateral movement of the cap 11 and blade 10, while forcing the marginal cap and an oppositely disposed marginal portion of the blade onto the flat back member 13, as shown in Fig. 2. Study of these conditions in Fig. 2 will show that the spring pressure transmitted from the abutment lip 17 tilts the blade on a flat surface of the back member 13, and that there are only two lines of contact at said back member. More specifically stated, the inner edge of the marginal cap 11 is forced onto said back member as shown at 19 in Fig. 2, while a lower marginal portion of the tilted blade 10 is forced onto a bottom marginal portion of the back member, as shown at 20. Consequently, there are two parallel lines of contact at the back member 13, as suggested at 19 and 20 in Figures 2 and 6. All other areas of the tilted blade and its cap are separated from said back member, so the blade is relatively free to slide longitudinally on said lines 19 and 20 while being inserted into or withdrawn from the holder.

Furthermore, the inner edge of the lip 17 is

preferably curved, as shown most clearly in Fig. 7, so as to provide a central abutment edge portion which contacts with the blade, and inclined edge portions diverging from opposite sides of the central abutment. This tends to reduce friction at the lip 17 and permits free insertion of the slidable blade. The end edges of the spring clip member 14 are inclined at 21, and this tends to aid in allowing free insertion of the cap 11 into the guideway 15. It may be noted that said guideway 15 is substantially larger than the cap 11, to provide clearance around said cap.

The spring pressure of the folded clip member 14 can be broken up, or reduced, in any desired manner, but I prefer to accomplish this by forming openings 22 extending into the fold, and these openings may have inclined walls in order that an end edge of the blade cap may readily slip by, without being accidentally obstructed at said openings.

To prevent accidental cutting when the blade is confined in the holder, the back member 13 has a smooth, flat protective margin 23 extended beyond the line of contact 20, thereby forming a smooth shield for the cutting edge. This safety condition is well adapted to cooperate with the conditions which tilt the blade as shown in Fig. 2, to practically locate the extremity of the cutting edge in contact with the back member.

I claim:

In a pocket knife device, a blade having a reinforcing cap united with its top longitudinal margin and a cutting edge at its bottom longitudinal margin, and a clip device to forcibly confine said cutting edge in an inoperative position, said clip device including a flat back member and a spring clip member extended laterally and

downwardly from the top longitudinal margin of said back member to provide a longitudinal passageway to slidably receive a bottom edge of the reinforcing cap and the cutting edge of the blade along two parallel longitudinal lines of contact, said blade having its cap slidable in said passageway but separated from the downwardly extended portion of the spring clip member to allow the blade and its cap to occupy a tilted position on the back member, said spring clip member having an inturned marginal lip provided with an extended middle edge portion contacting with the blade at a line adjacent to the cap, so as to confine the cap in said passageway while forcibly tilting said cap and cutting edge to contact said parallel longitudinal lines of contact, said inturned marginal lip also having inclined edge portions diverging from its extended middle portion to permit free insertion of the blade, and said back member being provided with a protective bottom margin extended downwardly beyond its line of contact with the cutting edge of the tilted blade to form an extended shield for the cutting edge.

ARTHUR B. HITCHCOCK.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
540,319	Kampfe et al.	June 4, 1895
1,552,488	Kattell	Sept. 8, 1925
1,552,887	Simpson	Sept. 8, 1925
1,643,757	Wallenbeck	Sept. 27, 1927