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RAZOR BLADE HOLDER AND SHEATH

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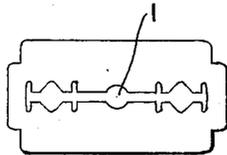


FIG. 1a

FIG. 1

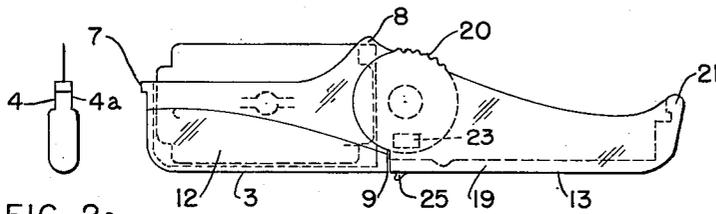


FIG. 2a

FIG. 2

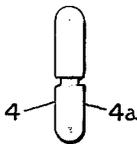


FIG. 3a

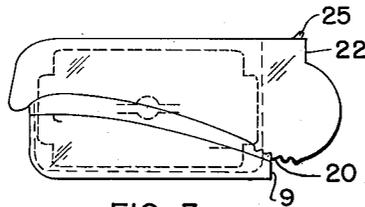


FIG. 3

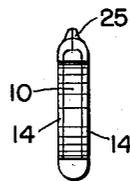


FIG. 3b

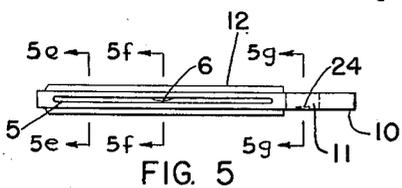


FIG. 5



FIG. 5e



FIG. 5f

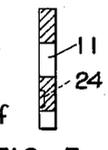


FIG. 5g

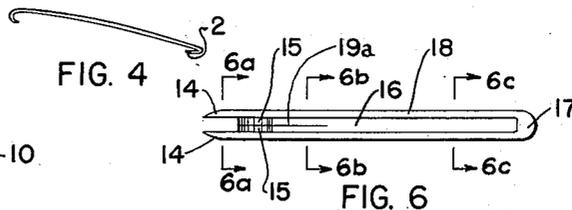


FIG. 4

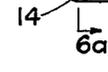


FIG. 6

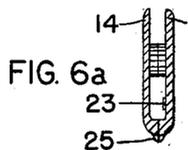


FIG. 6a

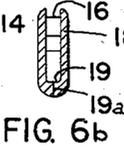


FIG. 6b

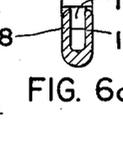


FIG. 6c

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RAZOR BLADE HOLDER AND SHEATH

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1 Claim. (Cl. 30—156)

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My invention involves an article or device for encasing and holding a safety razor blade with an edge protruding in a manner adapted for general cutting utilization, and with means for sheathing and unsheathing the cutting edge readily, so combined as a unit to form a compact article for carrying in pocket or bag without danger of involuntary unsheathing of the cutting edge, and providing an article for handy manipulation when unsheathed.

My invention provides in a unitary structure a sheathed compact article little larger in area than a razor blade, so little thicker as to readily slip into a vest pocket or the like, easily lifted from a table, advantageous for many uses and adapted to easy manufacture. In particular, my invention provides a device into which a regular double edge safety razor blade without alteration is easily inserted, firmly held laterally and endwise sheathed against accidental uncovering of its cutting edge, easily unsheathed when desired for cutting use and replacement of blade.

My device comprises a unitary structure of parts including a holder or support for clamping in precise position and protecting a readily insertable and removable cutting edge, and articulated thereto a part serving in one relative position to guard or sheath a cutting edge and in extended relative position a firm handle in conjunction with the holder part. Such structure providing means for reception, encasing and rigid holding of an entire two-edge safety razor blade with one sharp edge protruding for ordinary cutting. My device serves as a durable permanent means for the rigidity required for support of a renewable cutting edge which is the only portion of a knife blade serving its essential and primary utility. Thus instead of repeated sharpening of an ordinary knife blade, only the wearing part, namely the cutting edge portion, is renewed without wear on the permanent parts of my device and without altering the relation of the cutting edge with parts providing handy grasp for manipulation.

Other objects are to provide simplicity of manufacture, low cost of production and permanent assembly, avoidance of any separable parts, security and simplicity of inserting and accurately positioning of a safety razor blade in the device, and ready replacing or renewal of blades, firm interlocking of parts when closed or opened subject to easy voluntary release, and other objects and advantages that will appear from the more detailed description herein or that may be realized in the practice of my invention.

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In all, my device provides for conservation of billions of slivers of most highly processed steel that have a very transient use for the purpose for which they are originally most meticulously fashioned. It provides means for a further and long life of usefulness of blades discarded for shaving, by conversion to a compact, safe universal cheap cutting instrument for manifold uses.

10 My device is preferably made of plastic materials, and injection molding services well to economically fashion its parts to a stiff hard finish, with the slight flexibility where desired or needed. Any desired color, embossing, lettering is readily provided in the moulding and may be effected on forming the parts. The casing or pocket for the blade is preferably made as one part and the sheath or cover as another part. These may be fashioned so that slight flexing permits assembling in one simple operation by sliding a bifurcated end of one part over a portion of the other part until studs snap into a hole to form a hinge, thus completing the means for articulated interconnection and forming a permanently unitary structure.

A typical embodiment of my invention is shown in the accompanying drawings. While many variations of my invention may be made, the form herewith illustrated is approximately full size, details and dimensions and configuration will be adapted to ranges of fancy or methods of manufacture or assembly, and the materials used.

The drawings show in

Figure 1 a typical two edge safety razor blade;

Figure 1a the end view thereof;

Figure 2 is a side elevation of the razor blade combined holder and articulated sheath opened for use in cutting;

Figure 2a is one end view of Fig. 2 showing the protruding cutting edge of a blade in the holder;

Figure 3 is a side view of device closed with blade edge covered;

Figure 3a is one end view and Fig. 3b the view of the other end;

Figure 4 is a side view of a retriever, being a thin flat strip of metal or other suitable stiff material with a barbed end to insert beside the blade in its holder and engage the hole in the blade to extract dulled blades for replacements;

Figure 5 is a top view of the blade holder part, and Fig. 5e, Fig. 5f and Fig. 5g are cross sections of Fig. 5;

Fig. 6 is a top view, when in open position, as

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in Fig. 2 of the sheath part of the device, and Fig. 6a, Fig. 6b and Fig. 6c are cross sections of Fig. 6.

It will be noted that double edged safety razor blades usually, have apertures 1 along their medial major dimension, as shown in Fig. 1, which I may use as a means for retracting or retrieving dulled blades from a snug fit in the slit in my holder by inserting the device shown in Fig. 4 until the barb 2 engages an aperture as 1 to pull the blade out of the slit.

In the device illustrated, the blade holder 3 has walls 4, 4a thinner along the outer edge of the slit, as shown in Fig. 2a, with their inner sides 5 separated to form a slit the length of the blade and of a breadth, forming a tight fitting pocket for the blade laterally and limiting endwise movement. Or the slit may be narrower than the blade thickness, and walls 4 and 4a be slightly yielding to pinch the blade tightly. To assure a firm locking in of the blade I may fashion the bulge 6 on the inner surface of one wall of the slit in position to engage any recess such as the hole 1 in the blade. At one end of 3 I fashion a tit 7 to snap into the end 21 of the sheath when in closed position. At the other end of holder 3 a protuberance 8 forms a guard above the sharp adjacent corner of the blade. At the lower corner a stop 9 limits the swing of the sheath portion of the device when opening it.

At one end of the holder 3 a flat hinge portion 10 adapted to fit into the butt of the sheath portion has a hole 11 for pivots or hinge pintles in the engaging end of the sheath. On the lower part of the holder, closed for bearing and encasing of the inserted edge of the blade, I prefer to form the walls 12 thicker than the open slit walls, to give stiffness and to match the handhold with the extending thickness of the sheath portion for firm handling.

The sheath 13 is a cover part for the protruding blade edge when the device is closed for carrying in the pocket or the like. It is formed at one end with cheeks 14 separated to exactly fit hinge part 10 and has bosses 15 formed on each cheek, which form a pintle to engage hole 11 in the adjacent end of the holder member to provide the hinge. The pintle may be formed on one cheek 14, when making this part as by molding in plastic. The closed edge of back 19 of the sheath 13 is slit for a short distance as shown at 19a, so that the cheeks 14 can be spread apart to permit the pintle portions 15 to slide over the end 10 of the holder member and snap into engagement with the hole 11.

Thus simply by hand connecting of the two parts is the only assembling operation to produce the finished useful unitary article, i. e. a firm blade holder and a secure sheath to protect the edge, voluntarily operable.

The sheath has the cavity 16 open from one side to snugly fit over walls 4, 4a of the body of the holder, with the closed end 17 and thin walls or sides 18 preferably forming a spring fit with the outside of the holder upper portion having its wall edges tapered inwardly to ease the clasp upon closing the device to complete the encasing of the blade.

At 20 on the cheeks 14 I preferably serrate a part for thumb or finger feel to warn against accidental hinging of the two parts when manipulating the opener device. At the outer end is

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fashioned a snap protrusion 21 to engage the tit 7 on the holder and lock the device closed against involuntary opening.

The limit to open hinging of the two parts is set by engagement of the notch 22 on sheath 13 with the stop 9 on the holder. When so opened, for its utility manipulating, spring pawl 23 snaps into a sharp edged recess 24 on the side of the holder end 10 and locks the parts open. To close the sheath over the holder a tit 25 serves to release the pawl 23 of one or both parts of the bifurcated end of the sheath; or one of the cheeks 14 may have a pawl engaging a notch on the face of hinge portion 10, the flexibility of the material of the cheek 14 permitting the necessary displacement for release of the pawl.

While I prefer the advantages of plastic material especially as to cost and for functioning and manufacturing of my device, parts or all may be otherwise fashioned. It may be designed for varying protrusion of blade edge suited to general use or for specific uses.

In all I provide an article for extensive use, safe, compact, light, adapted besides its utility for advertising display, and durable, to conserve for practical uses vast quantity of heretofore waste safety razor blades.

I claim:

A compact unitary pocket article consisting solely of a holder and a sheath member for a double cutting edge safety razor blade connected for articulation to protect a protruding cutting edge of a blade and alternatively free the edge for cutting and afford a manipulating holder therefor, said holder member having a narrow slot open its full length on one side and closed at both ends and its bottom to receive one knife edge of a razor blade laterally, and the yielding walls of the slot being adapted to spring apart when the blade is inserted to maintain a clasp fit on its sides, and said sheath member having a laterally open pocket extending lengthwise to cover the protruding edge of a blade in the holder member and having one end partly bifurcated with a yielding cheek and a pintle boss on the inside thereof adapted to be spread over one end of the holder for the boss to register with and snap onto a bearing on said end of the holder, thereby providing the hinge for articulation of both members and forming a two-piece unitary article, and a snap catch formed at the other end of the sheath to retain both members of the article in closed position while permitting ready manual release to expose the blade.

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