Sept. 2, 1930. A. B. THOMAS 1,774,680

HOLDER FOR SAFETY RAZOR BLADES

Filed Oct. 11, 1929

Fig. 1.

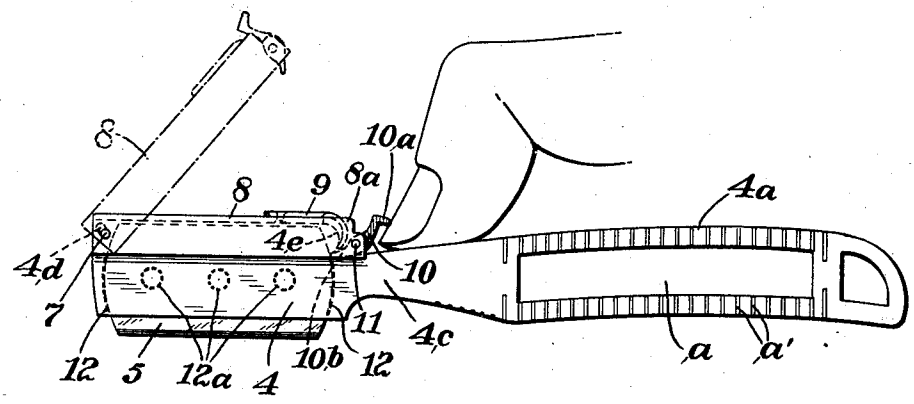


Fig. 2.

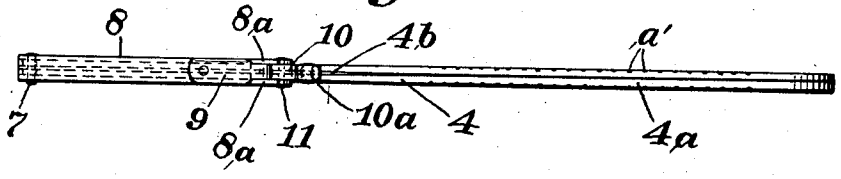


Fig. 4.

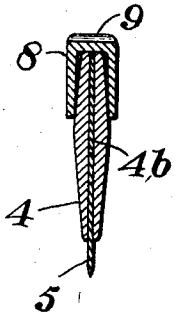
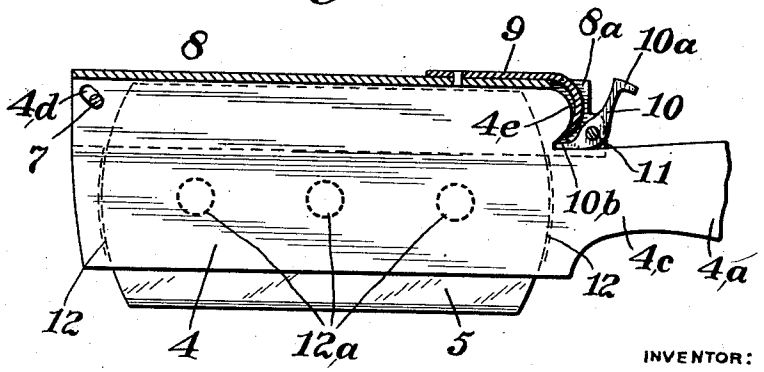


Fig. 3.



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UNITED STATES PATENT OFFICE

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HOLDER FOR SAFETY-RAZOR BLADES

Application filed October 11, 1929. Serial No. 398,945.

The present invention is in the nature of an improvement upon the blade holder which forms the subject of Letters Patent of the United States granted to me on the 21st day of January, 1919, under Number 1,292,150.

The present invention aims to provide improved means for more securely holding the cap piece in blade clamping position, and also means for enabling it to be more readily moved outward to release the blade, and the invention comprises the novel construction hereinafter described and defined by the appended claims.

A blade holder constructed in accordance with my present invention is illustrated in the accompanying drawing, in which:

Figure 1 is a side elevation of the blade holder showing the cap piece in its raised position in dotted lines.

Fig. 2 is a top edge or plan view.

Fig. 3 is a sectional detail view and Fig. 4 is a transverse sectional view.

Referring by reference characters to this drawing, the numeral 4 designates the blade holding portion of the device, the blade being shown in position and designated by the numeral 5. The blade holding portion is slitted or divided longitudinally as indicated at 4^b to receive the blade, and as the most convenient manner of forming the blade holding portion and handle I form the same of two parts, the parts of handle forming portion 4^a being secured together in any convenient manner as by brazing, welding, or riveting, and the blade holding parts being unconnected except as they are held by the handle parts.

The handle parts may have the center cut away as indicated at *a* for lightness and may be serrated as indicated at *a'* to afford a better grip. I do not, however, limit myself to this manner of forming the holders and handle as the same may be constructed in various ways as indicated in my aforesaid patent.

The blade holding parts extend above and below the relatively narrow shank 4^c of the handle and the upper or rear outer faces of the upwardly projecting parts are adapted to cooperate with a cap piece 8 with a wedging action to press the blade holding parts together to firmly clamp the blade therebetween. Preferably this action is secured by making the outer faces of said upper parts inclined towards each other or converging, and making the inner cooperating walls of the cap piece correspondingly flared.

Thus when the cap piece is swung upwardly or outwardly into the position shown in dotted lines in Fig. 1, the parts of the holder automatically separate sufficiently to enable the blade to be inserted therebetween or removed therefrom, while when it is swung down into the position shown in full lines, the blade is clamped firmly in position.

The cap piece is preferably hinged to the holder at the outer end by means of a pin 7 having its ends firmly held in openings in the walls of the cap piece as by upsetting, and having its intermediate portion passing freely through an elongated slot 4^d in the blade holders.

The portions of the blade holders above and adjacent the shank are rounded to form approximately semicircular abutments 4^e which are designed to cooperate with the locking and releasing means carried by the free or inner end of the cap piece.

The said free or inner end is bifurcated as indicated at 8^a to provide two parallel projecting walls and the locking device comprises a spring member 9 which has a straight portion resting upon the top of the cap piece and firmly secured thereto in any suitable manner as by riveting. The free end of the spring member is curved downwardly to coact with the curved abutment 4^e, the spring in the closed position lying between the two side flanges and its free end lying against the lower backwardly inclined or curved portion of the abutment.

In this position the spring not only holds by its frictional contact but gives a stronger holding action by reason of its inwardly curved end underlying the curved face of the abutment.

To enable the cap piece to be readily swung upward against the resistance of the spring, I provide a releasing device or member in the form of an approximately bell crank shaped lever 10 located between the walls of the bi-

furcation and pivoted upon pin 11 carried by said walls. One arm of the bell crank extends upwardly and is provided with a head portion 10^a which is extended laterally to form a flange or lip, while the other arm 10^b is extended inwardly to underlie the abutment when the cap piece is in closed or locking position.

With the parts in closed position and desiring to open the cap piece, it is only necessary for the operator to place the thumb of the right hand under the lip 10^a while grasping the holder with the remaining fingers, and press outwardly, whereupon the bell crank lever is rocked and its end 10^b forced downwardly against the top of the shank portion adjacent the abutment, which action forces the pivot pin 11 and the free end of the cap piece upward against the resistance of the spring. A reverse movement effects the closing action. This leaves the other (left) hand free for inserting and removing the blades.

When the cap piece is closed, the end 10^b rides on the top of the shank and is forced inward thereby.

In order that the blades, which are generally of the "Gillette" type, may be properly positioned in the holder, I provide the latter with position indicating marks which may take the form of indentations on curved lines corresponding to the curved ends of the blades as indicated at 12 or circularly arranged indentations corresponding to the holes in the blades, as indicated at 12^a, or both.

I claim:

1. A device for holding safety razor blades during sharpening comprising a handle and a pair of clamping members, a channeled cap piece hinged at one end to one end of said clamping members and constructed and adapted when swung upon said members to press them towards each other to clamp the blade therebetween, a spring catch adjacent the free end of the cap piece for holding the same in closed position, and a movable member adjacent the free end of the cap piece for moving the said free end outward against the resistance of the friction catch.

2. A device for holding safety razor blades during sharpening comprising a handle and a pair of clamping members, a channeled cap piece having walls to coact with the walls of the clamping members, one set of said walls being inclined to produce a wedging action, said cap piece being hinged to said clamping members at one end, a spring catch adjacent the free end of the channel member, and a rocking lever adjacent the free end of the channel member for forcing the latter outward against the resistance of the catch.

3. A device for holding safety razor blades during sharpening comprising a handle and a pair of blade clamping members having rear portions inclined towards each other, and a channeled cap piece having inclined walls to coact with said inclined portions, said cap piece being hinged to the outer end of said clamping members, a spring catch adjacent the handle end of the cap piece for holding the same in closed position, and a finger pivoted to the handle end of the cap piece and having a part adapted to bear on the clamping members for forcing said end outwardly against the resistance of the friction catch.

4. A device for holding safety razor blades during sharpening comprising a handle and a pair of blade clamping members having rear portions inclined towards each other, and a channeled cap piece having inclined walls to coact with said inclined portions, said inclined walls having rounded ends forming shoulders above the handle shank and said cap piece a bifurcated end projecting beyond said shoulders, a spring catch lying in the bifurcation for engaging said shoulders, and a finger lever pivotally mounted in the bifurcation and having an upwardly extending arm for finger engagement and a downwardly extending arm to engage the handle shank.

5. A device according to claim 4 in which the spring catch serves as a stop to limit the movement of the upwardly extending portion of the finger lever in one direction, and the downwardly extended arm of the finger is inclined towards the rounded shoulders.

In testimony whereof, I affix my signature.

ALMER B. THOMAS.