

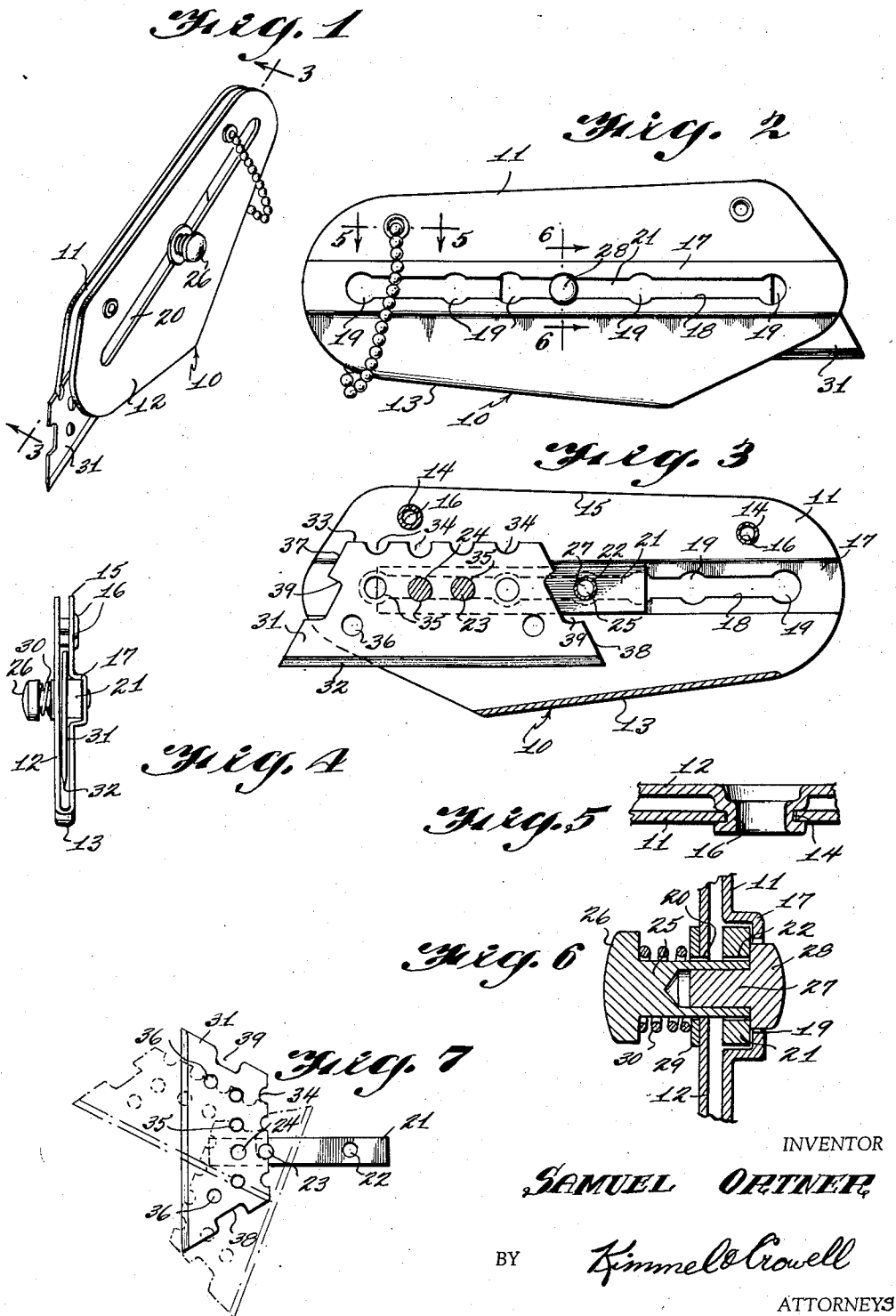
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POCKET SAFETY KNIFE

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1

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POCKET SAFETY KNIFE

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2 Claims. (Cl. 30—162)

The present invention relates to pocket safety knives, and particularly to knives of this type having replaceable blades.

The primary object of the invention is to provide a vest pocket safety knife having a blade which may be secured to the knife in a plurality of positions.

Another object of the invention is to provide a knife of the class described above in which the blade is detachably secured in retracted position as well as extended position.

Another object of the invention is to provide a vest pocket safety knife of the class described above which is inexpensive to manufacture, simple to use, and which permits the knife blade to be used in a plurality of positions.

Other objects and advantages will become apparent in the following specification when considered in the light of the attached drawings, in which:

Figure 1 is a perspective view of the invention.

Figure 2 is a front elevation of the invention.

Figure 3 is a longitudinal cross-section taken along the line 3—3 of Figure 1, looking in the direction of the arrows.

Figure 4 is an end elevation of the invention.

Figure 5 is an enlarged fragmentary horizontal cross-section taken along the line 5—5 of Figure 2, looking in the direction of the arrows, with the chain omitted.

Figure 6 is an enlarged fragmentary vertical cross-section taken along the line 6—6 of Figure 2, looking in the direction of the arrows, with the blade omitted.

Figure 7 is a side elevation of the blade and blade carrier illustrating in full and dotted lines several positions of adjustment possible with the present invention.

Referring now to the drawings in detail wherein like reference characters indicate like parts throughout the several figures, the reference numeral 10 indicates generally a pocket safety knife constructed in accordance with the invention.

The pocket safety knife 10 includes a pair of flat walls 11, 12 arranged in spaced parallel relation and integrally connected by a bight 13. The wall 11 is provided with a pair of bores 14 arranged in spaced apart relation adjacent the edge 15 of the wall 11 opposite the bight 13. The wall 12 is provided with a pair of extruded portions 16 which extend through the bores 14 and are riveted over the wall 11, as illustrated in Figure 5, securing the walls 11, 12 in spaced parallel relation.

The wall 11 is provided with a longitudinally extending channel 17 intermediate the bight 13 and the edge 15 and opening away from the wall 12. An elongated longitudinally extending slot 18 is formed in the channel 17 and is provided with a plurality of spaced apart circular enlargements 19.

The wall 12 is provided with an elongated longitudinally extending slot 20 arranged in aligned relation to the slot 18. An elongated flat rectangular bar 21 is positioned in the channel 17 between the walls 11, 12 and is arranged

2

for longitudinal sliding movement therein. The bar 21 is provided with a bore 22 adjacent one end thereof and has a pair of spaced apart upstanding circular lugs 23, 24 integrally formed on the opposite end thereof.

A hollow boss 25 is provided at one end with a head 26 and extends through the slot 20 in the wall 12 and into the bore 22 of the bar 21. A shaft 27 is pressed into the hollow boss 25 and carries a head 28 integrally thereon at the end thereof opposite the head 26. The fit of the shaft 27 in the hollow boss 25 is such that it can be readily dislodged.

A washer 29 encompasses the boss 25 and engages against the wall 12, as best seen in Figure 6, and a coil spring 30 engages the under side of the head 26 and the washer 29 to normally urge the boss 25 away from the washer 29. The head 28 on the shaft 27 is of a size to engage in the enlarged circular portions 19 of the slot 18, while the boss 25 is of a size to move freely through the slot 18.

The boss 25 is moved longitudinally of the slots 18 and 20 by pressing the head 26 inwardly against the tension of the spring 30, thus moving the head 28 out of the enlarged circular portion 19 of the slot 18 so that the boss 25 can slide longitudinally in the slots 18 and 20. Upon release of pressure on the head 26, the spring 30 will move the head 26 outwardly away from the washer 29 and cause the head 28 to seat in a selected one of the circular enlargements 19 of the slot 18.

A relatively thin blade 31 has an isocetes trapezoidal configuration with the longest side thereof sharpened as at 32. The edge 33 of the blade 31 parallel to the sharpened edge 32 is provided with a plurality of equispaced semi-circular notches 34.

A plurality of bores 35 extend longitudinally of the blade 31 in equispaced aligned relation spaced from the edge 33. The space between adjacent bores 35 is equal to the space between adjacent notches 34 and to the space between a notch 34 and its respective adjacent bore 35.

The blade 31 is provided with additional bores 36 arranged in equispaced relation respectively to the outermost of the bores 35 and positioned between the bores 35 and the sharpened edge 32 on a line parallel to the end edges 37 and 38 of the blade 31. The end edges 37, 38 of the blade 31 are provided with elongated notches 39, as best seen in Figure 3.

In assembling the pocket safety knife 10, the blade 31 has an adjacent pair of the bores 35 engaged over the circular lugs 23, 24, as seen in Figure 3, and by use of the boss 25, the blade 31 is drawn inwardly of the device so that it lies between the walls 11, 12 with the cutting edge 32 thereof completely protected.

As can be seen in Figure 7, the blade 31 can be mounted on the bar 21 in any one of a plurality of positions involving one of the notches 34 and one of the bores 35, any adjacent pair of bores 35, the bores 35 at the outer end thereof and the adjacent bore 36, and finally the outer bores 35 and bores 36 with the notches 39. With the plurality of positions possible for mounting the blade 31 to the bar 21, almost any desired angle for the cutting edge 32 may be obtained.

Having thus described the preferred embodiment of the invention, it should be understood that numerous structural modifications and adaptations may be resorted to without departing from the scope of the appended claims.

What is claimed is:

1. A pocket safety knife comprising a pair of spaced apart parallel walls, a bight integrally securing said walls together along one edge thereof, means adjacent the opposite edges of said walls extending between said walls and securing said walls in spaced parallel relation, a lon-

3

gitudinally extending inwardly opening channel formed in one of said walls, said walls having aligned longitudinal slots formed therein with one of said slots opening through said channel, a bar slidably mounted in said channel, said longitudinal slot in said channel having a plurality of longitudinally spaced enlarged circular portions, means carried by said bar extending through said slots having a head detachably engaging in said circular portions of said slot in said channel to detachably secure said bar in longitudinally adjusted position, a blade positioned for sliding movement between said walls, said blade having a plurality of angularly related pairs of apertures formed therein, a pair of lugs rigidly mounted on said bar and selectively engaging in a pair of said apertures positioning said blade in one of a plurality of angularly adjusted positions with respect to said bar.

4

2. A device as claimed in claim 1 wherein the means carried by said bar extending through said slots projects beyond said walls to provide means for moving said bar longitudinally with respect to said walls.

References Cited in the file of this patent

UNITED STATES PATENTS

2,133,087	Ericsson	Oct. 11, 1938
2,242,936	Beaver	May 20, 1941
2,267,059	Voigt	Dec. 23, 1941
2,640,260	Taylor	June 2, 1953
2,788,574	Marcmann	Apr. 16, 1957