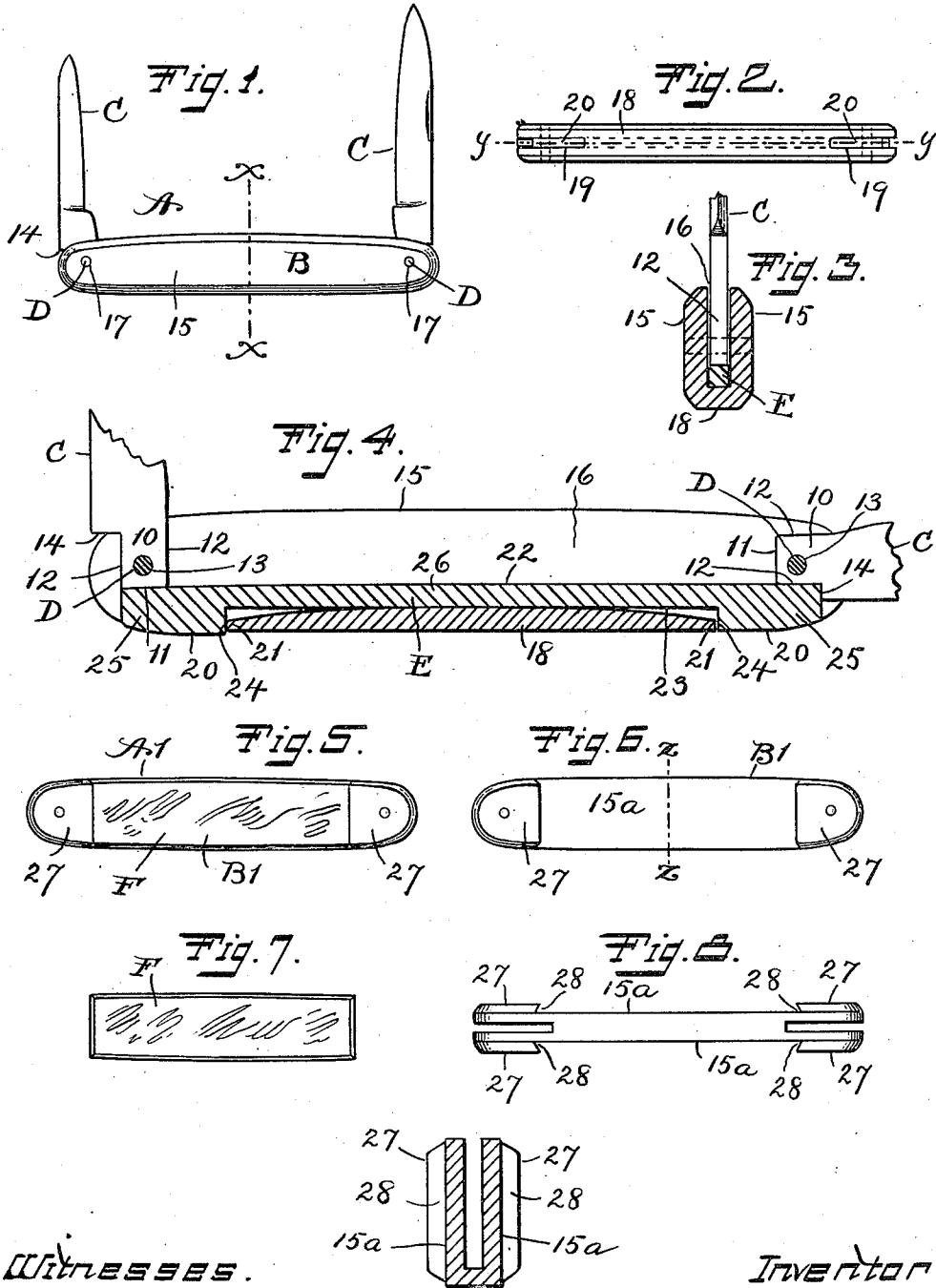


O. KALLIN.
POCKET KNIFE.
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1,043,438.

Patented Nov. 5, 1912.



Witnesses.

S. H. Clarke
James Shepard.

Fig. 9.

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UNITED STATES PATENT OFFICE.

OSCAR KALLIN, OF NEW BRITAIN, CONNECTICUT.

POCKET-KNIFE.

1,043,438.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, OSCAR KALLIN, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Pocket-Knives, of which the following is a specification.

My invention relates to improvements in pocket knives, and the objects of my improvements are simplicity and economy in construction and convenience and efficiency in use, and has particular reference to the production of a handle in one piece, including side plates generally conforming to the usual form of construction.

In the accompanying drawings:—Figure 1 is a side elevation of my improved pocket knife. Fig. 2 is a rear elevation of the same. Fig. 3 is a sectional view on the line *x x* of Fig. 1, on an enlarged scale. Fig. 4 is a sectional view on the line *y y* of Fig. 2, the blades being shown in side elevation and partly broken away, and one of the blades turned to the full open position. Fig. 5 is a side elevation of a modification, showing a separate handle scale, and on the same scale as Fig. 1. Fig. 6 is a similar view of the same, with the scale removed. Fig. 7 is a similar view of the handle scale. Fig. 8 is a backview of the handle with the scale removed. Fig. 9 is a sectional view on the line *z z* of Fig. 6, and on the same scale as Fig. 3.

A is my improved pocket knife and comprises a handle B and blades C pivotally and operatively connected thereto by means of pivotal pins D and spring means permitting of forcibly changing the position of the blades relatively to the handle alternatively as desired to the closed, half open or closed, and full open positions, and tending to retain the blades in the particular position to which the same have been placed. The inner end of the blade C is cut away in the usual manner on the rear side to form the shoulder 14 and the inwardly extending and generally square shaped ear 10, having the straight inner edge 11 at right angles to the longitudinal line of the blade C and the lateral edges 12 parallel to the said longitudinal line, and provided with a pivotal hole 13 midway between the said lateral edges 12 and fitting the pivotal pin D. The said inner edge 11, lateral edges 12 and shoulder 14 cooperate with the spring in the usual man-

ner in the different relative positions of the blade and handle as mentioned and the said shoulder 14 being operative in the extreme open position. The said handle B comprises a single integral body portion having a pair of side plates or walls 15 of suitable formation separated generally by a space 16 suitable for housing the blades when in the closed position and providing an operating space at the ends for the inner ends of the blades, and providing a housing for the spring E, the outer ends being provided with a hole 17 that is a fit for the pivotal pin D and in which the said pin is secured by riveting. The said side plates 15 are held together by their back edges by a back wall 18 which extends along the greater part of the length on each side of the middle, leaving a slot 19 at each end that is open and exposing the rear side of the ends 20 of the spring E. The said back wall 18 is relatively thick along the middle portion and tapered outwardly toward the ends 21 to provide free operating space for the spring E. As described, the said handle body B constitutes a channel piece comprising a pair of side plates 15 separated by a slot or space 16 and held together by the web 18 which constitutes the back wall and which back wall or web is continuous from end to end and is interrupted at the ends, providing the open slots 19 at the ends in extension of the said slot 16, and with the pivot holes 17 provided in the ends of the side plates. As described, the said back wall 18 extends longitudinally along the back of the handle body and the ends 21 thereof are appreciably inward from the ends of the handle body and also from the position of the pivotal pins D. I prefer to make the spring as shown, for a two bladed knife, of sheet metal of a thickness suitable for being readily admitted in the slot 16, having a straight inner edge 22 and cut away along the outer edge to form an elongated recess 23 suitable for inclosing the said back wall 18 and providing at the ends of the said recess shoulders 24 suitable for engaging with the ends 21 of the wall 18 and thereby limit the longitudinal movement of the spring E, and forming, at the ends of the spring, heads 25 suitable for filling the said slot extensions 19. The overall length of the spring E and the thickness of the body portion 26 are such that the in-

ner edge 22 will engage with the end of the blade in the manner described for holding the blade and changing the position thereof and to provide suitable resiliency to permit
 5 turning the blade from one position to the other.

As described, the blades C are operated in an ordinary manner, my handle is made in one piece, the spring is made in one piece,
 10 the spring lies loosely in the handle body and is positively prevented from displacement by the coöperation of the handle back and the blades.

My handle body as described may be cast
 15 or made of sheet material suitably punched and shaped.

In the modification A¹ shown in Fig. 5, the handle B¹ is provided with handle scales F, which extend along the middle portion of
 20 the handle body, the side plates 15^a being provided at the ends with bolsters 27.

As shown at 28 in Fig. 6 the said bolsters 27 are undercut and the end of the scale F is correspondingly shaped to prevent lateral
 25 separation.

While I prefer a pair of blades in coöperation with a single spring, it is evident that one of the blades can be dispensed with and the same operative features for the blade
 30 and spring such as described be retained.

It is apparent that some changes from the specific construction herein disclosed may be made and therefore I do not wish to be understood as limiting myself to the precise
 35 form of construction shown and described, but desire the liberty to make such changes,

in working my invention, as may fairly come within the spirit and scope of the same.

I claim as my invention:

In a pocket knife having a handle, a pair
 40 of blades and a spring E, the said handle comprising a one piece structure having a pair of side plates united by a back, the said back being continuous between the ends,
 45 provided with a relatively thickened middle portion, and extending along the greater portion of the length of the said side plates, the said blades pivotally mounted between
 50 the said side plates and adjacent the ends thereof, and provided with shoulders suitable for engaging with the said spring, the said spring having a straight edge along
 55 the inner side and in abutment with the blades, having a rectangular recess on the outer side loosely inclosing the said back and forming heads at the ends of the spring
 60 and a spring proper between the said heads having a uniform cross section, and the said heads relatively short and suitable to serve as an abutment between the said shoulders
 65 on the blades and the said ends of the back, whereby free movement of the heads is permitted in opening and closing the blades, a positive stop is provided between the blades and back, and free movement is provided for the spring proper between the said heads.

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Witnesses:

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 SHEFFIELD H. CLARKE.