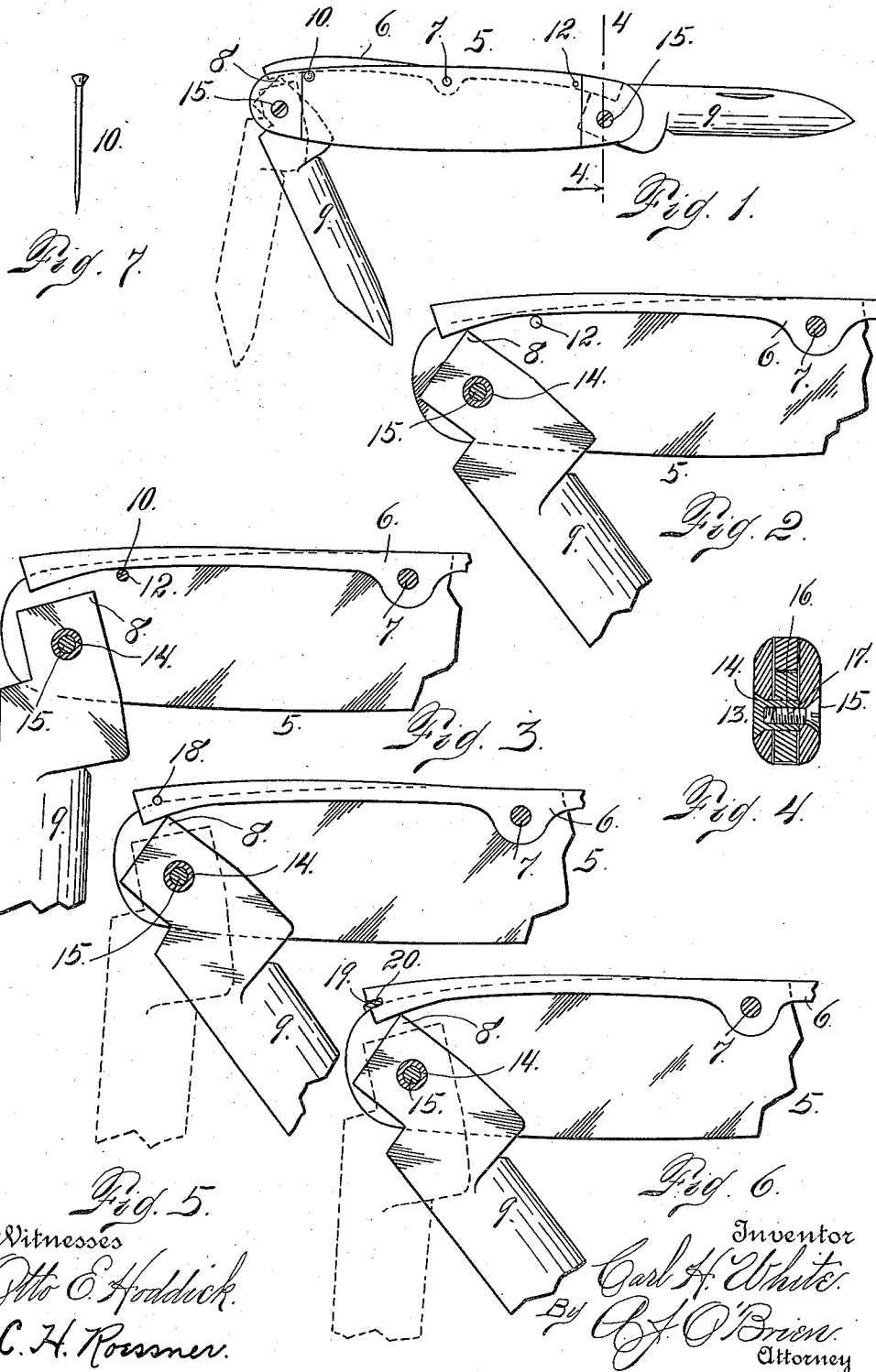


C. H. WHITE.
TAKE-DOWN POCKET KNIFE.
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1,014,927.

Patented Jan. 16, 1912.



Witnesses
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UNITED STATES PATENT OFFICE.

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TAKE-DOWN POCKET-KNIFE.

1,014,927.

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To all whom it may concern:

Be it known that I, CARL H. WHITE, a citizen of the United States, residing in the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Take-Down Pocket-Knives; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in take-down pocket knives and includes equipping the handle of the knife with detachable pivot pins, whereby the blades may be removed.

In order to relieve the blades from the tension of the spring when the blade is in certain positions, I make provision for inserting a pin in such position that the spring is held at its outer limit of movement when acted on by either corner of the blade. Hence when the blade assumes either the wide-open position, the position at right angles to the handle, or the closed position, the spring is held away from its shank, thus making it practicable to readily detach the pivot pin, which as illustrated in the drawing is composed of two members having the relation of male and female, one of which is threaded into the other and provided with a screw head, the heads of both members being countersunk in the handle.

Various forms of the construction whereby the blade is relieved of the tension of its spring may be employed without departing from the spirit of the invention, which will now be described in detail.

In the drawing: Figure 1 is a side elevation of a knife equipped with my improvements, one of the blades being open and acted on by the spring, while the other blade is shown in two positions, in one of which it acts to throw the main spring outwardly to its limit of movement, while in the other position the blade is loose and relieved of the tension of the spring. Fig. 2 is a fragmentary view on a larger scale showing the blade in position to force the spring outwardly. In this view one side of the handle is removed and the pins are shown in cross section. Fig. 3 is a similar

view except that the blade is shown in the position where it is relieved from contact with the spring, the latter being held outwardly by a pin suitably located. Fig. 4 is a section taken on line 4—4 Fig. 1, the parts being shown on a larger scale. Fig. 5 is a fragmentary view showing one of the blades in two positions, as in Fig. 1, but on a larger scale. In this view a modified form of construction is employed for holding the spring at its outward limit of movement. Fig. 6 is a similar view showing still another form of construction. Fig. 7 is a detail view illustrating a pin that may be employed in connection with my improvement.

The same reference characters indicate the same parts in all of the views.

Let the numeral 5 designate the knife handle and 6 the main spring, which as shown in the drawing is secured to the handle by means of a rivet 7 in the ordinary manner. In the form of construction shown in Figs. 1, 2 and 3, when the spring is thrown outwardly to its limit of movement by the action of the corner 8 of the shank of a blade 9, it may be held in this position by means of a pin 10 passed through an opening 12 formed in the handle and in such position to be uncovered by the main spring when the latter is acted on by the blade as shown in full lines in Figs. 1 and 2. When the spring is in this position the knife blade will be completely relieved from contact therewith when either in the closed position, the wide-open position or the position at right angles to the handle. This makes it practicable to remove the pivot pin 13 which as illustrated in the drawing is composed of a female member 14 and a male member 15. The female member has an enlarged head which is countersunk in the knife handle. It is also provided with an interiorly threaded recess 16 adapted to receive the screw shank 17 of the male member. In order to detach this two-part pivot pin it is only necessary to unscrew the member 15 from the member 14. The blade may then be taken out and a new blade substituted, after which the pivot pin may be restored to its position. The blade may then be moved to the position shown in full lines in Figs. 1 and 2, thus relieving the retaining pin 10 from the tension of the main spring, whereby it becomes practicable to readily remove the pin.

In the form of construction shown in Fig. 5 the spring is provided at each extremity with an opening 18 which when the spring is thrust outwardly by the action of the blade 9 when in the position shown in Fig. 5, will throw this opening, or at least a part of it, beyond the handle of the knife, thus making it practicable to insert the pin 10 through the opening in the spring outside of the handle, and hold the spring extremity at its outward limit of movement. Hence when the blade is thrown to the dotted line position in Fig. 5, or to either the closed or wide-open position, the blade will be entirely relieved from the action of the spring, thus making it easy to remove the pivot pin which holds the blade as heretofore explained. If desired the outer edges of the sides of the handle may be slightly recessed to allow the pin to enter, so that the opening 18 need not be entirely beyond the handle in order to insert the pin.

In the form of construction shown in Fig. 6, the outer extremity of the spring is provided with a recess 9 which occupies a position just beyond the outer edges of the sides of the handle when the end of the spring is thrust outwardly to its limit of movement, or when the blade is in the position shown in Fig. 6. This recess is open at its outer extremity to receive a small retaining device 20 consisting of a small plate of sufficient width to engage one or both sides of the knife handle when the spring is in the position shown in this figure. It will be evident that when this de-

vice is inserted the spring will be held in such position that it cannot return to its normal location, when the blade is thrown to the closed, wide-open or right angle positions.

Having thus described my invention, what I claim is:

1. In a take-down pocket knife, the combination with a blade, of a removable blade-holding pivot pin, and a spring, the shank of the blade being of rectangular shape, and the corners of the shank being arranged to come into contact with the spring to lift the same into such a position as to be free from the shank of the blade, when the blade is in the half-open wide open or closed positions, and a pin for retaining the spring in such raised position, substantially as described.

2. In a take-down pocket knife, the combination of a removable blade, a spring, the shank of the blade being of approximately rectangular shape and the corners of the blade being arranged to come into contact with the spring to lift the same into such a position as to be free from the shank of the blade when the blade is in the half-open wide-open or closed positions, and means for retaining the spring in such raised position.

In testimony whereof I affix my signature in presence of two witnesses.

CARL H. WHITE.

Witnesses:

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HORTENSE UHLRICH.