W. T. WHITEHOUSE.

SLIDING-BLADE SHEATH-KNIVES.

No. 195,319. Patented Sept. 18, 1877.

Fig. 1.

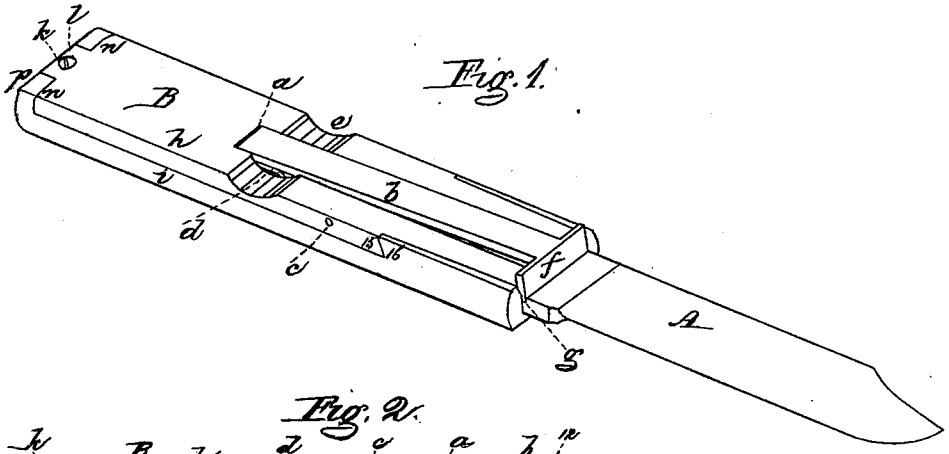


Fig. 2.

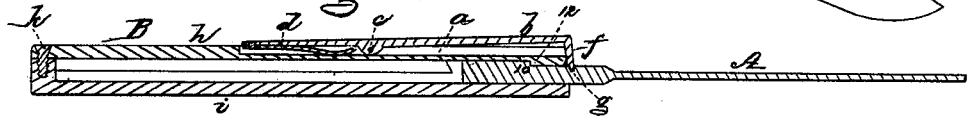


Fig. 3.

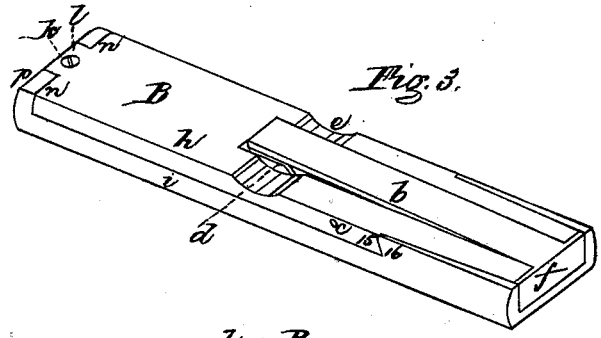


Fig. 4.

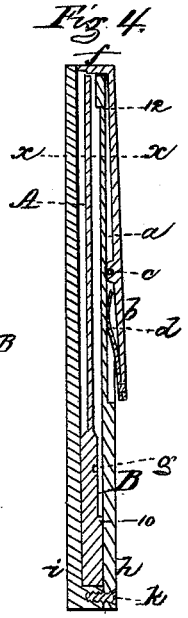


Fig. 6.

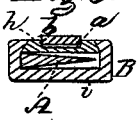
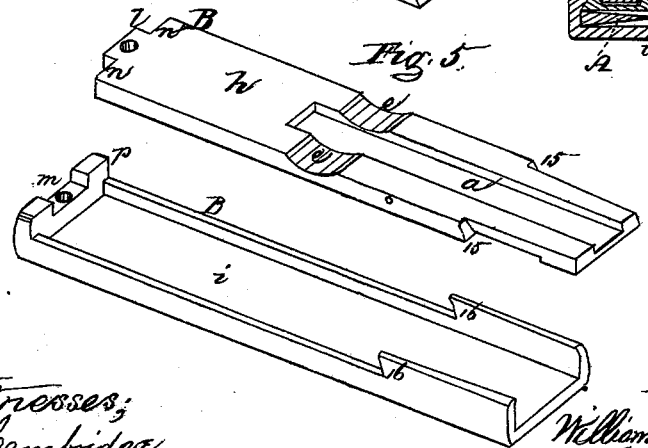


Fig. 5.



Witnesses;
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UNITED STATES PATENT OFFICE.

WILLIAM T. WHITEHOUSE, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SLIDING-BLADE SHEATH-KNIVES.

Specification forming part of Letters Patent No. **195,319**, dated September 18, 1877; application filed July 16, 1877.

To all whom it may concern:

Be it known that I, WILLIAM T. WHITEHOUSE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Sliding-Blade Sheath-Knives, &c., of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of a sheath-knife constructed in accordance with my invention, the blade being out of its sheath, in a position ready for use. Fig. 2 is a longitudinal section through the center of the same. Fig. 3 is a perspective view of the same, the blade being inclosed within the handle. Fig. 4 is a longitudinal section through the center of the same, with the blade in the same position as in Fig. 3. Fig. 5 represents, in perspective, the two portions of the handle detached. Fig. 6 is a transverse section on the line *x x* of Fig. 4.

My invention relates to that class of knives in which the blade slides in and out of a handle, which thus forms a sheath therefor.

My invention consists in the combination, with the handle and knife-blade or other implement, of a lever provided at its outer end with a projecting lip or plate, which is adapted to closely fit over the open end of the sheath, being kept in place by a spring, thus forming a lid or cover, which serves to retain the blade or implement within the handle when slid back therein, and also to hold the blade or implement firmly when drawn out in a position for use, while it also effectually excludes the dirt from the interior of the handle, which, in knives of this class as usually made, especially when carried in the pocket, soon obstructs the blade, and prevents it from sliding freely within the handle.

My invention also consists in the peculiar construction of the sheath or handle, which is formed of two parts, adapted to fit together, and secured at one end by a dovetail joint and at the other by a screw, as will be hereinafter more fully described and definitely claimed.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents a knife-blade, which is fitted within a metallic sheath, B, which also serves the purpose of a handle when the blade is drawn out, as seen in Fig. 1, the interior of the sheath being of rectangular form in cross-section, as seen in Fig. 6. Within a longitudinal recess, *a*, formed in one side of the sheath B, is fitted a lever, *b*, which is pivoted on a pin, *c*, a flat spring, *d*, bearing on the bottom of the recess *a*, and secured to the under side of the lever, serving to keep the rear end of the latter elevated, as seen in Fig. 4. *e* is a recess extending transversely across the sheath, and intersecting the recess *a*, the recess *e* affording a space which facilitates the depression of the lever *b* by means of the thumb.

The lever *b* is provided at its outer extremity with a lip or plate, *f*, which projects therefrom at a right angle, this plate being so formed as to exactly fit over and close the open end of the sheath B, in which position it is held by the spring *d*, and thus, when the blade A is slid back within the sheath, as seen in Fig. 4, the plate serves as a cover to retain it in place therein, a tight box or receptacle being thereby formed; and it will be seen that by closing the end of the sheath by means of the cover *f* all dirt is effectually excluded, and the liability of the sheath becoming choked up thereby, especially when carried in the pocket, which would interfere with the free sliding of the blade, is thus entirely avoided.

If desired, the inner side of the plate *f* may be covered with rubber or other suitable yielding material, to prevent the point of the knife from being dulled or broken by contact therewith when the parts are in the position seen in Fig. 4.

When it is desired to use the knife, it is simply necessary to hold it in one hand and press the rear end of the lever *b* against the resistance of the spring *d* with the end of the thumb, which causes the plate *f* to be withdrawn, so as to uncover the front end of the sheath B, when, by a sudden motion of the hand, the blade can be thrown out, its movement being arrested by a shoulder, 10, striking against a shoulder, 12, on the interior of the handle B, and, the thumb having been removed from the lever *b*, the edge of the plate *f* instantly springs into a groove, *g*, ex-

tending transversely across the heel of the blade A, the plate *f* thus serving to securely hold the latter in a position for use.

When the blade is thrown out, as seen in Fig. 1, a simple pressure of the thumb upon the rear end of the lever *b* will cause the edge of the plate *f* to be withdrawn from the groove *g* in the blade A, when, by inclining the point of the latter upward, it will readily slide back into the sheath by its own gravity, and as soon as the lever *b* is released the plate *f* instantly closes over the point of the blade, and securely confines it within the sheath B, as before stated; and my improved knife will be found extremely convenient in many positions where but one hand is at liberty, as it can be easily operated thereby.

The metallic sheath B is composed of two portions, *h i*, as seen in Fig. 5, the portion *h* being provided on each side with an inclined shoulder, 15, which fits snugly against a correspondingly-inclined shoulder, 16, on the portion *i*, while the edges of the front end of the portion *h* are beveled, and fit the correspondingly-beveled inner surface of the front end of the portion *i*, thus forming a dovetail joint, as seen in Fig. 6, by which the two portions of the handle are locked firmly together at the front end, the rear ends of the portions *h i* being secured together by a screw, *k*, passing through a tongue or projection, *l*, on the portion *h*, which fits into a recess, *m*, in the portion *i*, the shoulders *n* of the portion *h* fitting snugly against the projecting end *p* of the portion *i;* and by thus forming the handle of two pieces, and uniting them as described, a considerable saving can be effected, as the parts can be easily made by dies at a much less cost than a handle constructed of a single piece, bent to the required shape.

When it is desired to separate the two parts of the handle, the lever *b* must first be removed, as otherwise the front end of the portion *h* cannot be withdrawn from the portion *i*.

It is evident that a screw-driver, box-opener, corkscrew, or other implement may be substituted for the knife-blade A without departing from the spirit of my invention.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The lever *b*, with its spring *d* and covering plate or lip *f*, in combination with the handle B and blade or implement A, constructed to operate substantially in the manner and for the purpose described.

2. The handle B, formed of two parts, *h i*, locked together at one end by a dovetail joint and at the other end by a screw, *k*, substantially as and for the purpose set forth.

Witness my hand this 11th day of July, A. D. 1877.

WM. T. WHITEHOUSE.

In presence of—
P. E. TESCHEMACHER,
W. J. CAMBRIDGE.