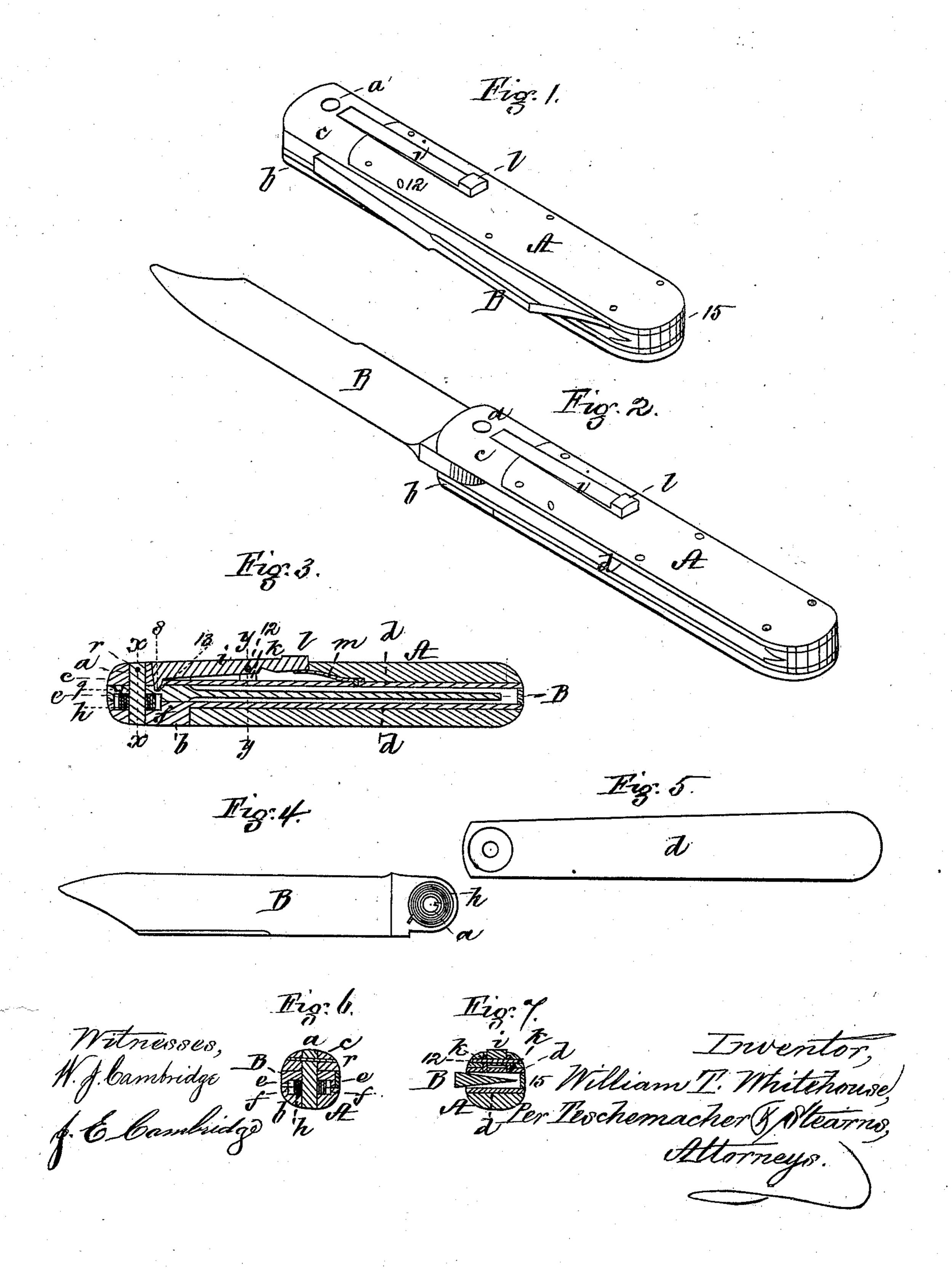
## W. T. WHITEHOUSE Pocket-Knife.

No. 199,766.

Patented Jan. 29, 1878.



## UNITED STATES PATENT OFFICE.

WILLIAM T. WHITEHOUSE, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN POCKET-KNIVES.

Specification forming part of Letters Patent No. 199,766, dated January 29, 1878; application filed October 25, 1877.

To all whom it may concern:

Be it known that I, WILLIAM T. WHITE-HOUSE, of Boston, in the county of Suffolk and State of Massachusetts, have invented a Self-Opening Knife, 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 my knife closed. Fig. 2 is a perspective view, representing the knife opened in a position ready for use. Fig. 3 is a longitudinal section. Fig. 4 is a plan of one side of the blade detached. Fig. 5 is a plan of the contiguous side of the lining and bolster. Fig. 6 is a transverse section on the line x x of Fig. 3. Fig. 7 is a transverse sec-

tion on the line y y of Fig. 3.

My prevent invention consists in a selfopening knife in which the blade is pivoted, and automatically thrown open by a spring interposed between the heel of the blade and the adjacent portion of the handle, the blade being released by means of a catch, which also serves to lock it securely when thrown open ready for use or closed within the handle, the knife being readily opened or closed by one hand, all as hereinafter more fully described and 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 the knife-handle, and B its blade, pivoted on a pin, a, passing through the bolsters b c, projecting from the ends of the lining d of the handle, the pin a being prevented from turning within the bolsters by a small lockingpin, r, extending transversely through it, or

in any other suitable manner.

The heel of the blade is provided with a circular recess, e, concentric with the aperture through which the pin a passes, and extending about half-way through the thickness of the blade, and in line with this recess e is formed within the contiguous bolster b a similar recess, f, the two recesses e f constituting a chamber for the reception of a flat coiled spring, h, one end of which is secured to the blade, and the other to the pin a, on which the blade is pivoted, the spring being of sufficient an occurrence.

strength and so coiled as to throw the blade out ready for use, as seen in Fig. 2, in which position it is locked securely by a catch-lever, i, having a projection, 8, at its outer end fitting into an aperture, 9, in the heel of the blade B.

The back 15 of the handle A does not act as a spring on the heel of the blade, the end of which is rounded, as seen in Fig. 4, and simply moves in contact with the back with-

out being actuated thereby.

The catch-lever i is pivoted at 12 between two lugs, k, projecting from the lining d, and fits in a recess formed in the handle, lying flush therewith, excepting a projection, l, at its inner end, which is depressed by the thumb, (against the resistance of a spring, m,) which withdraws the projection 8 from the aperture 9 in the blade, when it is free to be closed, it being merely necessary to continue the pressure on the projection l until in moving the blade the aperture 9 is carried out of line with the projection 8.

The operation of closing the blade serves to wind up the spring h, and when the blade is within the handle, as seen in Fig. 1, the projection 8 springs into an aperture, 13, (similar to that 9) in the heel of the blade, and the latter is thus securely locked in place, the two apertures 9 13 and pin a being in line with each other and longitudinal with the center of

the knife.

When it is desired to use the knife, it is simply necessary to hold it in one hand and press in the projection l of the lever i with the end of the thumb, which withdraws the projection 8 from the aperture 13 of the blade, when the latter is instantly thrown out by the automatic action of the spring h into a position ready for use, (see Fig. 2,) where it is securely locked by the projection 8 springing into the aperture 9, as before stated.

The spring m of the catch-lever i is sufficiently stiff to resist any ordinary pressure while in the pocket, and thus prevent the liability of the blade being accidentally released and thrown out by its coiled spring h; but, if desired, a slide can be used to lock this catchlever when the knife is in the pocket, thus effectually precluding the possibility of such

My improved knife is of simple construction and not liable to get out of order, and will be found extremely convenient in many positions where but one hand is at liberty, as it can be easily operated thereby.

I do not claim, broadly, a catch for locking the blade of a knife in an open or closed position, as such a device is shown in United States Letters Patent No. 195,319, granted to

me September 18, 1877.

What I claim as my invention, and desire

to secure by Letters Patent, is—

1. The spring h, interposed between the heel of a pivoted blade, B, and the adjacent portion of the handle A, for the purpose of auto-

matically throwing open the blade, substan-

tially as set forth.

2. The combination of the pivoted blade B, spring h, interposed between the heel of the blade and the adjacent portion of the handle A, and a catch, i, for locking the blade in an open or closed position, substantially as described.

Witness my hand this 18th day of October,

A. D. 1877.

WM. T. WHITEHOUSE.

In presence of— P. E. TESCHEMACHER,