

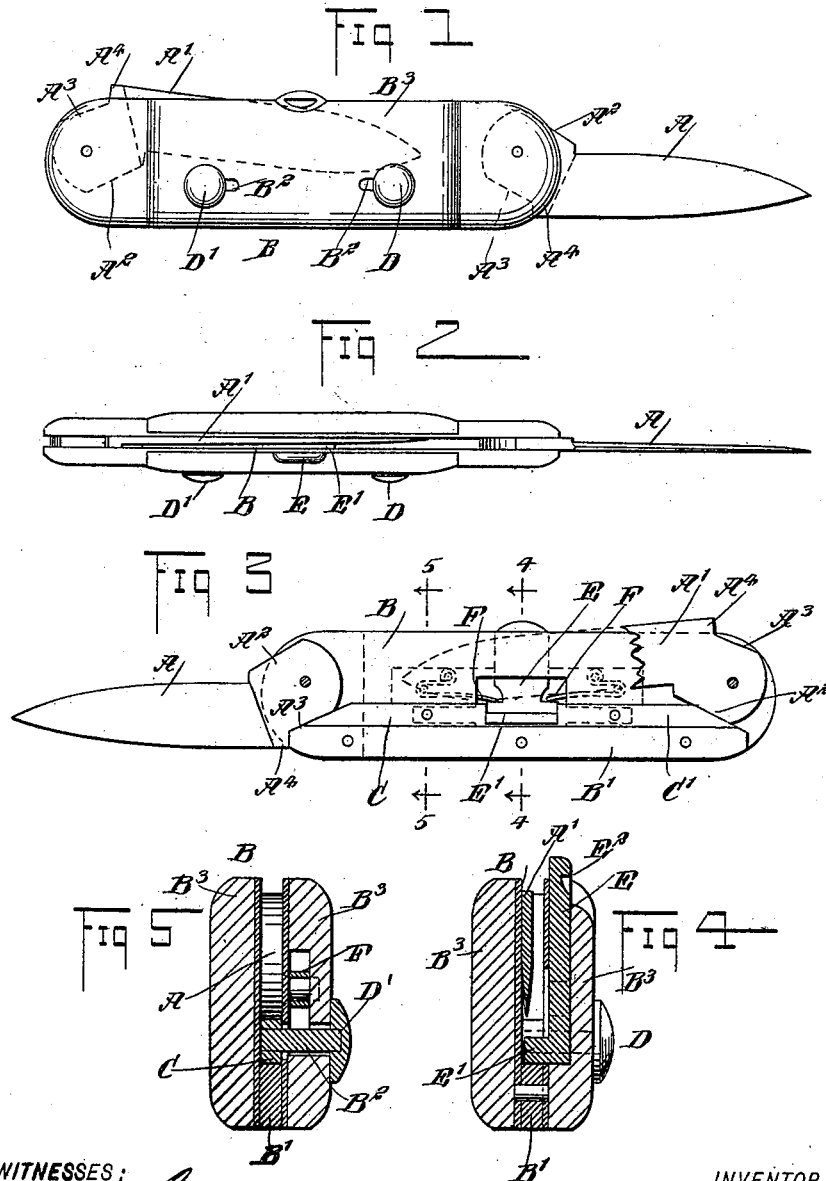
No. 645,563.

Patented Mar. 20, 1900.

M. L. HEATH.  
POCKET KNIFE.

(Application filed July 6, 1899.)

(No Model.)



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

MARK L. HEATH, OF JASPER, COLORADO.

## POCKET-KNIFE.

SPECIFICATION forming part of Letters Patent No. 645,563, dated March 20, 1900.

Application filed July 6, 1899. Serial No. 722,959. (No model.)

*To all whom it may concern:*

Be it known that I, MARK L. HEATH, of Jasper, in the county of Rio Grande and State of Colorado, have invented a new and improved Pocket-Knife, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved pocket-knife arranged to securely lock the blade or blades in either an open or closed position.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of my invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement arranged as a two-blade knife. Fig. 2 is a plan view of the same. Fig. 3 is a rear elevation of the same, with one cover of the handle removed and part of one blade broken out. Fig. 4 is an enlarged transverse section of the same on the line 4 4 in Fig. 3, and Fig. 5 is a similar view of the same on the line 5 5 in Fig. 3.

The pocket-knife illustrated in the drawings is provided with two blades A A', pivoted in the ends of the knife-casing B; but it is evident that the improvement hereinafter more fully described may be applied to a knife having a single blade or to a knife having more than the two blades shown. The fulcrum end of each blade A A' is formed with straight parallel sides A<sup>2</sup> A<sup>3</sup> and with a shoulder A<sup>4</sup>, adapted to abut against a fixed bar B', forming the back of the casing B at the time the blade is open, as illustrated in Figs. 1 and 3 relatively to the blade A. The sides A<sup>2</sup> and A<sup>3</sup> are adapted to be engaged by the wedge-shaped ends of bolts C C', respectively fitted to slide in the casing B, at the bar B' thereof, and said bolts are provided with buttons D D', respectively, having their shanks extending through elongated slots B<sup>2</sup>, formed in the casing B, the buttons being located at the outside of one of the covers B<sup>3</sup> of the casing, as will be readily understood by reference to the drawings.

In order to hold the bolts C C' in an outermost position and to lock the same against a return or inward movement, I provide a locking-abutment E, fitted to slide vertically in a suitable guideway formed in the casing B, preferably between one side thereof and the cover B<sup>3</sup>, on which the buttons D D' appear. The abutment E is formed at its inner end with a transversely-extending foot E' to engage the inner ends of the bolts C C' when the latter are in their outermost positions, the wedge ends thereof engaging either of the sides A<sup>2</sup> A<sup>3</sup>. Springs F, held in the casing B, press on the abutment E, so as to hold the same normally in an innermost position—that is, with the foot E' in engagement with the inner ends of the bolts C C'. The outer end of the abutment extends somewhat at the top of the casing and is provided at this end with a shoulder E<sup>2</sup> for convenient engagement by the operator to pull the abutment E outward against the tension of the springs F and move the foot E' out of locking engagement with the inner ends of the bolts C C'. When the blades A A' are in a closed position, then the wedge-shaped ends of the bolts C C' engage the sides A<sup>2</sup>, and as the foot E' is then in engagement with the inner ends of said bolts it is evident that the said blades A A' cannot be swung open and are consequently held in a locked or closed position.

In order to open one of the blades or both, it is only necessary for the operator to pull the abutment E outward to move the foot E' out of engagement with the bolts C C', and then the corresponding bolt or both bolts are moved longitudinally in an inward direction by the operator pushing a button or buttons D D' in a like direction. In doing so the bolt or bolts are moved with their wedge-shaped ends out of engagement with the sides A<sup>2</sup>, and the knife-blades A A', or either of them, can then be swung into an open position—that is, the blade is swung outward until the shoulder A<sup>4</sup> abuts against the bar B'. When this has been done, the bolt or bolts C C' can again slip outward by the operator pressing the buttons D D' in a like direction, so that the wedge-shaped ends of the bolts engage the sides A<sup>3</sup>, and when the bolts move into this position the abutment E is pressed

upon by its springs F to engage by the foot E' the ends of the bolts C C', so as to lock the same in position and thereby the blade A or A'.

When only one of the knife-blades is to be opened and locked in an open position, it is only necessary to withdraw the abutment E, as described, and then slide the corresponding bolt C or C' inward to unlock the knife-blade and to allow of swinging the same into an open position, after which the bolt is returned to its forward position, and the abutment E is allowed to move back to its innermost position for locking the bolt in place.

For closing a blade it is first necessary to move the abutment E outward and then slide the corresponding bolt inward and to then close the blade, after which the bolt is again moved outward and locked in place by the inwardly-moving abutment E.

The device is very simple and durable in construction, is composed of but few parts, is not liable to get out of order, and permits the operator to securely lock either or both the blades of the knife in an open or closed position and without the use of a spring.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A pocket-knife, provided with a bolt mounted to slide longitudinally in the knife-casing and adapted to engage the fulcrum end of the blade and lock the latter in either an open or closed position, and an abutment for said bolt and mounted to move at an angle to the bolt and adapted to engage the same and lock it against return movement, substantially as shown and described.

2. A pocket-knife provided with a casing, a blade pivoted therein and having two oppositely-arranged straight side edges at the fulcrum end, and a bolt mounted to slide longitudinally between the said casing and having a wedge-shaped end adapted to engage either of said side edges of the blade, as set forth.

3. A pocket-knife provided with a casing, a blade pivoted therein and having two oppositely-arranged straight side edges at the fulcrum end, a bolt mounted to slide longitudinally between the said casing and having a wedge-shaped end adapted to engage either of said side edges of the blade, and a spring-pressed abutment held to slide in said casing at an angle to said bolt and adapted to engage the latter and lock it against movement in the casing, as set forth.

4. A pocket-knife comprising a casing, a knife-blade pivoted therein and having at its fulcrum end two oppositely-arranged straight side edges, a bolt mounted to slide longitudinally in said casing at the back thereof, the bolt having a wedge-shaped end adapted to engage either of the knife-blade edges, a button on said bolt for shifting it longitudinally in the casing, and a spring-pressed abutment fitted to slide in the casing at a right angle to the bolt and adapted to engage the rear end of the bolt, to hold it against longitudinal movement in the casing, substantially as shown and described.

MARK L. HEATH.

Witnesses:

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