

(No Model.)

H. M. BRIGHAM.
POCKET KNIFE.

No. 492,084.

Patented Feb. 21, 1893.

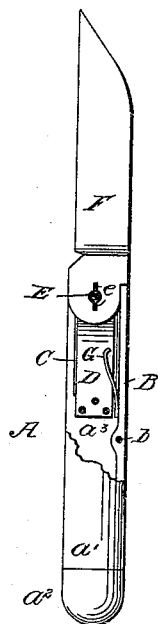


Fig. 1.

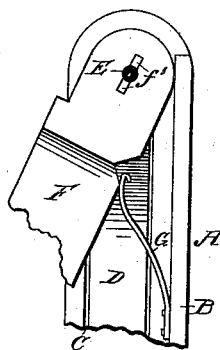


Fig. 3.

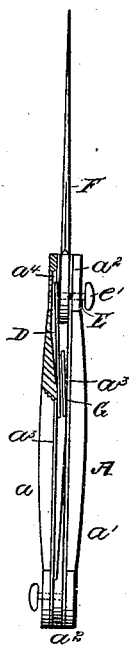


Fig. 2.

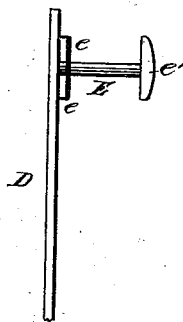


Fig. 4.

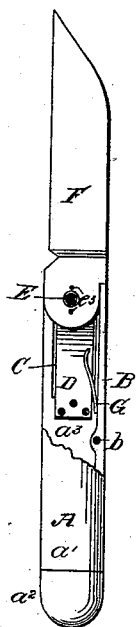


Fig. 5.

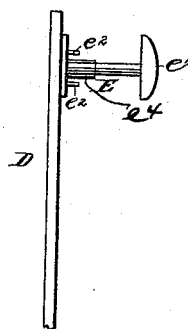


Fig. 6.

WITNESSES:
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UNITED STATES PATENT OFFICE.

HENRY M. BRIGHAM, OF BROOKLYN, NEW YORK.

POCKET-KNIFE.

SPECIFICATION forming part of Letters Patent No. 492,084, dated February 21, 1893.

Application filed March 4, 1892. Renewed January 17, 1893. Serial No. 458,735. (No model.)

To all whom it may concern:

Be it known that I, HENRY M. BRIGHAM, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Knives, of which the following is a specification.

My invention, although applicable to all kinds of knives in which the blades are arranged to fold into, or be sheathed in, the handle, relates more particularly to that class of knives adapted to be carried in the pocket and, for that reason, called pocket knives.

The invention consists in the provision of means, of a simple and durable nature, for opening the blades of a knife, by the release of a spring, to such an extent as to allow them to be grasped and fully opened by the fingers.

The invention further consists in the provision of means for locking the blades in their opened and closed positions.

To this end, the invention further consists in the construction and arrangement of the several parts as will be hereinafter fully described with reference to the drawings forming part of this specification.

In the drawings Figure 1 is a side view of a knife embodying my invention, a portion of the lining and cover of one side being broken away. Fig. 2 is an edge view partly in section. Fig. 3 is an enlarged detail view of one end of the knife, the lining and cover of one side being removed and the blade being partly opened. Fig. 4 is an enlarged detail view of the locking mechanism. Fig. 5 is a side view of a knife embodying a modification of the invention the lining and cover of one side being broken away, and Fig. 6 is an enlarged detail view of the locking mechanism of the modification.

Referring to the drawings in which similar letters of reference denote corresponding parts A designates the handle of the knife consisting of the coverings a a' , end plates a^2 a^3 and lining plates a^3 a^3 .

B designates the main spring forming the back of the handle. This spring is pivoted at b in the usual manner.

The cover a is provided with a recess a^4 . The lining plate a^3 is formed with an elongated longitudinal slot C through which projects a portion of the spring D which is se-

cured to the inner surface of said lining plate by any suitable means. This spring has transverse movement in the recess a^4 .

Secured to that end of the spring D which is within the recess a^4 is the locking mechanism consisting of the axle pin E and studs e e . The pin E is provided, on its free end, with a button e' and forms the axle upon which the blade F hinges. As will be seen this pin projects through the lining plate and cover and the button e' is therefore outside the handle.

G designates an auxiliary spring, the office of which is to throw the blade outward. This spring may be secured at one end to the main spring B and its free end bears against the blade F preferably near its fulcrum or in such manner as not to injure its edge. The blade F is provided with recesses f f communicating with the perforation forming the bearing of the axle pin E. These recesses are of such a size as to allow the studs e to fit snugly within them to lock the blade.

In the modification I have shown, instead of the studs e e , outwardly projecting pins e^2 e^2 . When this form is used the blade F is provided with perforations e^3 on each side of the axle bearing to permit of the insertion of the pins e^2 and the axle pin E is provided with a sleeve e^4 upon which the blade is hinged, thus saving wear upon said axle pin E.

The operation of my invention is as follows: when the blade is pressed into the handle the spring D, exerting its inward pressure causes the studs e to enter the recess f' thereby locking the blade in its closed position. The spring is then in its normal condition. To open the blade, the button e' is pressed inward. This forces the spring D back into the recess a^4 and the studs e are withdrawn from the recesses f' in the blade. The auxiliary spring G acting upon the blade forces it outward into the position illustrated in Fig. 3. The blade may now be grasped by the fingers and opened to its full extent when the studs e will again enter the recesses f' and retain it in that position.

The operation of the device illustrated in the modification is similar to that above described the pins e^2 acting in the same manner in conjunction with the perforations e^3 formed in the blade F.

I do not confine myself to the exact construction herein described as I may find it desirable to vary the same in many details. For instance, it may be desirable to provide
5 the knife with two or more blades at each end. In this event the pin E may be provided with two or more pairs of studs *e* one pair being preferably smaller than the other and provision being made to release or lock
10 one blade independently of the other or others.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A pocket knife provided with a spring,
15 having an axle pin secured thereto extending through the blade and handle, a blade provided with recesses and a stud or studs secured to said spring or axle pin and adapted

to operate in connection with said recesses substantially as described. 20

2. A knife provided with a spring having an axle pin secured thereto extending through the blade and handle, a blade provided with recesses, a stud or studs secured to said spring or axle pin and adapted to operate in connection with said recesses and a spring bearing
25 against said blade and tending to throw such blade outward substantially as shown and described.

In witness whereof I have hereunto affixed
30 my hand and seal, this 27th day of February, 1892, in the presence of two witnesses.

HENRY M. BRIGHAM. [L. S.]

Witnesses:

FANNIE R. PERKINS,

HENRY M. CUMMINGS.