No. 727,724. PATENTED MAY 12, 1903.

J. WEIL.

POCKET KNIFE.

APPLICATION FILED OCT. 6, 1902.

NO MODEL.

Fig. 1.

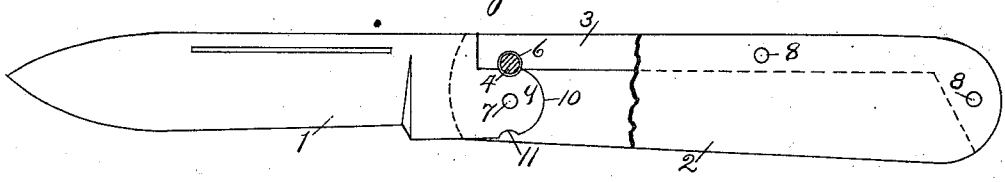


Fig. 2.

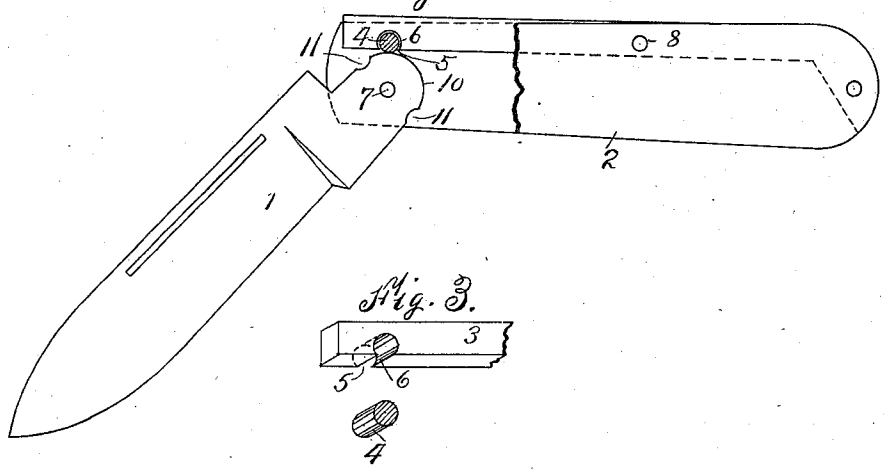


Fig. 3.

WITNESSES:

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No. 727,724. Patented May 12, 1903.

UNITED STATES PATENT OFFICE.

JOHN WEIL, OF MANSFIELD, OHIO.

POCKET-KNIFE.

SPECIFICATION forming part of Letters Patent No. 727,724, dated May 12, 1903.

Application filed October 6, 1902. Serial No. 126,144. (No model.)

To all whom it may concern:

Be it known that I, JOHN WEIL, a citizen of the United States, residing at Mansfield, in the county of Richland, State of Ohio, have invented certain new and useful Improvements in Pocket-Knives, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to pocket-knives, and particularly to means carried by the spring located in the handle for reducing the friction of the spring in contact with the butt of the blade and for retaining the blade in its opened and closed positions.

The invention has for its object to provide the spring at its free end with a recess adapted to receive a friction-roller which projects beyond the spring and travels upon a curved face at the butt of the knife-blade, so as to reduce the frictional resistance to the opening of the blade, said roller being adapted to seat in recesses formed in the curved face to hold the blade in either an opened or closed position.

Other and further objects and advantages of the invention will be hereinafter set forth, and the novel features thereof defined by the appended claims.

In the drawings, Figure 1 is an elevation of a pocket-knife with the blade open and a portion of the handle broken away to show the spring and butt of the blade. Fig. 2 is a similar view with the blade partially closed, and Fig. 3 is a detail perspective of the spring with the roller removed from the socket in the spring.

Like numerals refer to like parts in the several figures of the drawings.

The numeral 1 indicates the blade of a knife, which is pivoted in the usual manner, as shown at 7, within the case or handle 2, so that when closed the blade is contained within the case or handle in the usual manner. This case or handle may be of any desired construction or configuration and is provided with a spring 3, secured at one end to the handle by means of a bolt or rivet 8, and at its opposite free end provided with a socket 6 of curved outline and adapted to receive a roller 4, which projects beyond the under face of the spring, as shown in Figs. 1 and 2. The diameter of this socket is slightly greater than that of the roller, so as to permit the same to freely rotate therein, while the opening 5 at the lower portion of the socket is of less diameter than the roller, so that the same cannot pass through said opening, but is inserted within the socket from the side thereof. This is accomplished by extending the curvature of the socket beyond the face of the spring and permits a contact-face of the roller to extend beyond the spring and bear upon the butt 9 of the knife-blade 1. This butt is provided with a curved face 10, having recesses 11 therein adapted to receive and seat the blade when in its opened and closed positions.

In the operation of the invention it will be seen that this roller prevents the frictional contact of the spring with the butt of the blade, which frequently renders it very difficult to open the blade and results in the breaking of finger-nails and the consequent annoyance when it is desired to use the knife. Furthermore, the roller by seating in the recesses holds the knife in its opened and closed positions and permits the blade to be moved from said positions by a very slight pull or strain thereon. It will also be noted that this construction of roller simplifies the invention by dispensing with the necessity of a journal or pivot for a roller and secures a broad bearing entirely within the body of the spring, whereby the tension of the spring is borne upon the face of the roller and in the opening and closing of the blade a rolling contact secured.

It will be obvious that changes may be made in the details of construction of the knife to which this invention is applied without departing from the spirit thereof as defined by the appended claims.

Having described my invention and set forth its merits, what I claim, and desire to secure by Letters Patent, is—

1. In a pocket-knife, a case or handle, a spring secured at one end therein and provided at its opposite end with a transverse curved socket, a blade pivoted beneath said socket, and a roller adapted to be inserted in said socket from one side thereof and retained without pivoting devices, by the sides

of the knife-case to contact with the socket-wall and butt of the blade; substantially as specified.

2. In a pocket-knife, a case or handle, a spring secured therein at one end and provided at its opposite end with a transverse curved socket having a transverse opening upon the under face of the spring, a blade pivoted beneath said socket and provided with a curved butt having recesses therein, and a solid bearing-roller of less diameter than said opening to the socket adapted to be inserted therein from one side and retained without pivoting devices by the side walls of the knife-case; substantially as specified.

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

JOHN WEIL.

Witnesses:
A. A. DOUGLASS,
WM. M. HARRIS.