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[54] **POCKETKNIFE**
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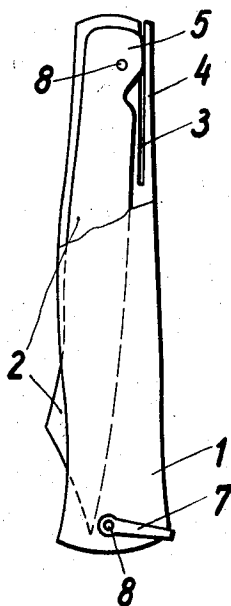
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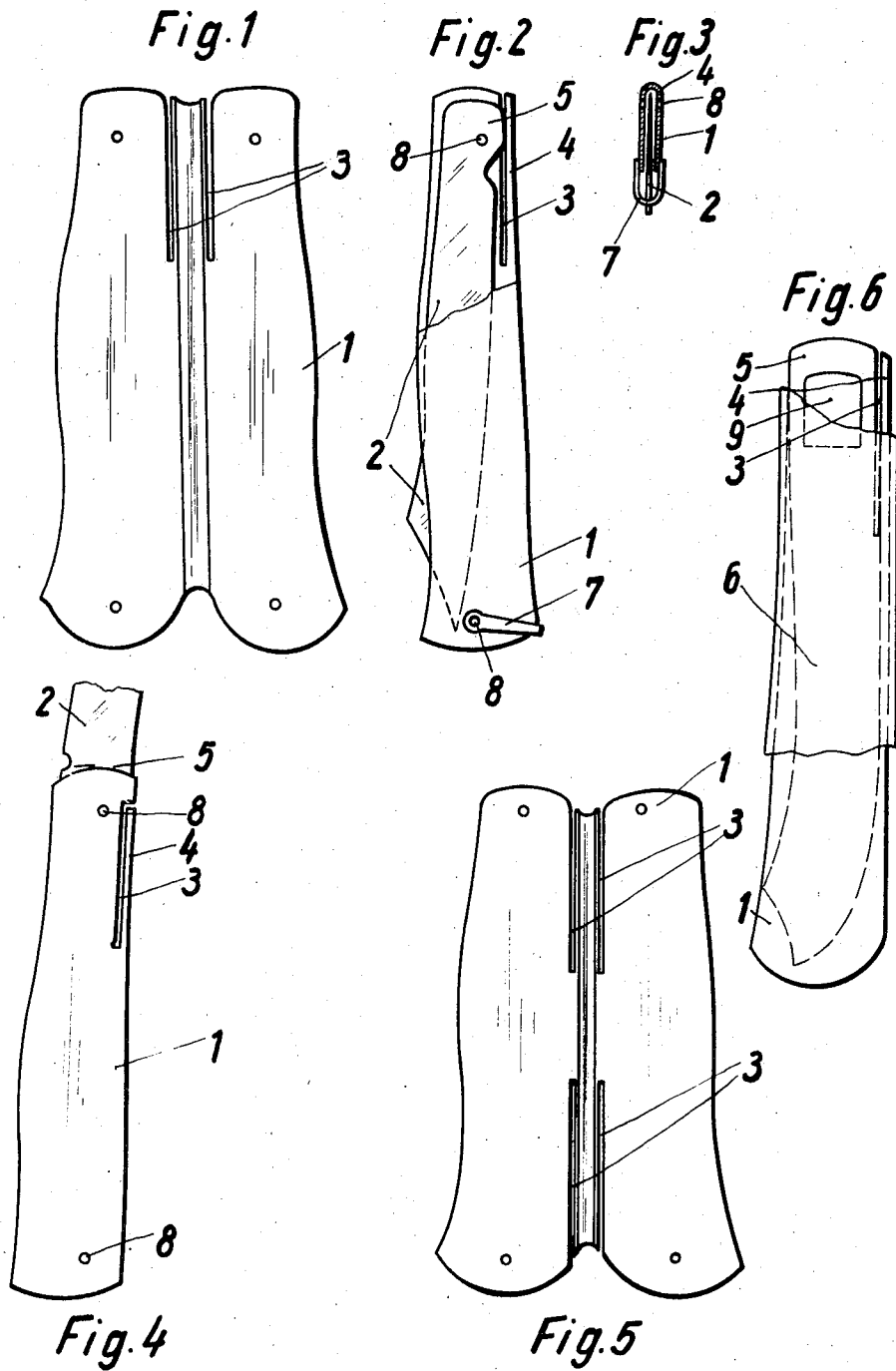
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[57] ABSTRACT

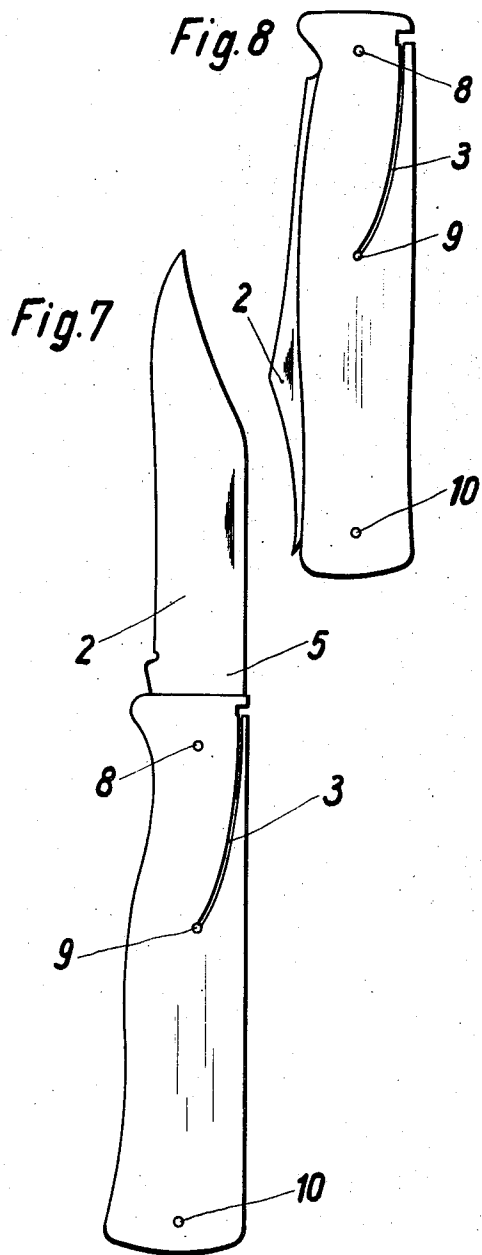
A pocketknife having a handle or a haft and a knife blade which can be folded and unfolded from the handle. The handle is formed out of sheet material which is bent to receive the knife blade between two sides when the blade is folded. A portion of the sheet material forms a spring which engages the knife blade to hold the blade in a fully unfolded or folded position as desired.

5 Claims, 8 Drawing Figures





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POCKETKNIFE

This invention relates to a pocketknife comprising a handle or haft and a knife blade which can be folded into and unfolded out of the handle or haft.

According to the invention there is provided a pocketknife comprising a handle or haft, and a knife blade which can be folded into, and unfolded out of the handle or haft. The handle or haft is formed out of sheet material which has been bent to receive the knife blade between its two sides when the blade is folded. A portion of the sheet material forms a spring which is engageable with the knife blade to hold the blade in a fully unfolded or folded position.

It is, therefore, an object according to the present invention to provide a pocketknife having a handle constructed of a sheet material which forms a spring engaged to the knife blade to hold the blade in a folded or unfolded position.

It is another object according to the present invention to provide a pocketknife which is simple in design, inexpensive to manufacture, and reliable in operation.

Other objects and features of the present invention will become apparent from the following detailed description considered in connection with accompanying drawings which disclose the embodiments of the invention. It is to be understood, however, that the drawings are designed for the purpose of illustration only and not as a definition of the limits of the invention.

In the drawings, wherein similar reference characters denote similar elements throughout the several views:

FIG. 1 shows the handle of the pocketknife in accordance with the invention before bending, with the two sides of the handle lying in approximately a single plane;

FIG. 2 shows the pocketknife with the handle of FIG. 1 cut away;

FIG. 3 is a cross section through the pocketknife of FIG. 2 with the hoop positioned over the blade;

FIG. 4 is a side view of the pocketknife of FIGS. 1 to 3 with the knife blade open;

FIG. 5 is a side view of a modified pocketknife in accordance with the invention before the sheet material has been bent;

FIG. 6 shows the pocketknife in accordance with the invention with portions of the sides of the handle pressed inwards, the handle being illustrated in cut-away form; and,

FIGS. 7 and 8 show a modified pocketknife in accordance with the invention with curved slits in its open and closed conditions.

Referring to FIGS. 1-6, the pocketknife has a box-shaped handle or haft 1, which is produced by bending sheet material and carriers one or more knife blades 2. Slits 3 are provided in the region of the back portion or fold of the handle, which is almost semicircular in shape, the slits being on opposite sides of the handle. These slits may extend in a straight line, as shown in FIGS. 1, 2, 4, 5 and 6 of the drawings they form at least one spring 4 which secures the respective knife blade 2 in its closed position and, if necessary, also in its open position.

Box-shaped handle 1 may consist of any desired flexible or resilient material, for example strip steel. One or more rivets 8 which hold the sides of the handle

together are arranged in the region of heel 5 of the knife blade, where rivet 8 serves as a pivot for the knife blade, in such a way that the blade is securely held by the spring 4.

Springs 4 may be provided in any desired number, shape, and size, at one or both ends of the handle, depending upon the number and arrangement of the knife blades. Springs 4 may also, for example, extend along curved lines as can be seen from FIGS. 7 and 8. This is particularly effective in securing knife blade 2 in its open and closed positions, since spring 4 becomes progressively stiffer from its free end to its fixed end as the distance between the slit and the fold increases. The straight slits in FIGS. 1, 2, and 4-6 are uniformly spaced from the fold and could also be slanted to obtain a similar progressive increase in the distance. In FIGS. 7 and 8, the number 8 designates rivets and the numbers 9 and 10 designate holes. It is also possible, for example, for two springs 4 to be provided side by side. The springs may be wider than the knife blade.

Slits 3 may either each extend from a position intermediate the handle ends to one end of the handle, as shown in FIGS. 1, 2, 5 and 6, or, as can be seen in FIGS. 4, 7 and 8, may form an angle at the end or be closed upon themselves. Each have their ends intermediate the handle ends, so that a reliable and particularly resistant location of the knife blade, which bears with its heel 5 against the handle, is obtained when the knife is open. If the spring 4 is constructed to be wider than the blade, the side of handle 1 may advantageously be pressed inwards in the vicinity of hole 9 in order to provide the blade with a lateral guide. In this and similar cases, a covering 6 of any desired material may be provided. Covering 6 also helps to improve the appearance.

It is also possible to provide, in the region of the point of the blade, a hoop 7 which forms an additional safeguard against unintentional opening of the knife blade and can be used for carrying the knife.

While only a few embodiments of the present invention have been shown and described, it will be obvious that many changes and modifications may be made thereunto without departing from the spirit and scope of the invention.

What is claimed is:

1. A pocketknife, comprising:

- a planar sheet of material, folded about its longitudinal axis so as to form a U-shaped handle having two parallel sides, and including at least two longitudinal slits, each disposed in one of the sides of said handle adjacent the folded portion of said sheet of material so as to form a U-shaped, cantilever spring integrally formed with said sheet of material and said handle; and
- a knife blade, pivotably secured in said handle between said sides thereof so that the blunt end of said knife blade engages said cantilever spring when said knife blade is pivoted outwardly from or inwardly into said handle.

2. The pocketknife as recited in claim 1, wherein said slits provided in said sheet of material are disposed parallel to the longitudinal axis of said handle and adjacent said folded portion thereof, and extend from a predetermined point inbetween the ends of said handle linearly to one end of said handle, thereby forming a U-

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shaped cantilever spring which extends from one end of said handle adjacent the blunt end of said knife blade so that the end of said knife blade is received in the U-shaped channel of said spring when said knife blade is pivoted outwardly from or inwardly into said handle.

3. The pocketknife as recited in claim 2, wherein said handle further comprises at least two additional slits disposed in said handle parallel to the folded portion thereof and the longitudinal axis of said handle, extending from a predetermined point between the ends of said handle to the other end of said handle, so as to form at least one additional U-shaped cantilever spring integrally formed with said handle and extending from the other end thereof, and further comprising an additional knife blade, pivotably secured in said handle at the other end thereof so that the blunt end of said knife blade engages the U-shaped channel of said additional cantilever spring when said knife blade is pivoted outwardly from or inwardly into said handle.

4. The pocketknife as recited in claim 2, wherein said slits are disposed parallel to the longitudinal axis of said handle adjacent the folded portion thereof and extend

between two predetermined points located between the ends of said handle, said slits being joined at one end above the pivotably secured blunt end of said knife blade by an additional slit provided in said sheet of material disposed perpendicular to said longitudinal slits, so as to form a single U-shaped slit in said sheet of material and a U-shaped cantilever spring disposed between the ends of said handle when said sheet of material is folded.

5. The pocketknife as recited in claim 2, wherein said slits are curved inwardly towards the center of the sides of said handle, and extend between two predetermined points located between the ends thereof, said sheet of material further comprising an additional slit provided therein disposed perpendicular to the ends of said longitudinal slits disposed adjacent the blunt end of said knife blade and joining the ends thereof so as to form a U-shaped slit in said sheet of material and a triangular-shaped cantilever spring between the ends of said handle.

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