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- (21) Application No. 15803/77
- (22) Filed 15 April 1977
- (23) Complete Specification filed 2 Feb. 1978
- (44) Complete Specification published 8 Oct. 1980
- (51) INT. CL³ B26B 1/04
- (52) Index at acceptance
B4B 130E 130J 130QX
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(54) AN IMPROVEMENT IN OR RELATING TO CLASP KNIVES

(71) We, GEORGE IBBERSON & COMPANY LIMITED, a British Company, of 63 Stalker Lees Road, Sheffield 11, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to clasp knives and has for its object to provide an improvement therein.

According to the invention, there is provided a clasp knife having a handle and a pivotally connected blade, and having a spring plate element constituting locking means for retaining the blade in open condition, the spring plate element having a root portion and a connected abutment plate member which lies alongside the blade when the knife is in its folded condition but which springs sideways into an operative position in alignment with and acting against a side edge of a root portion of the blade when the blade is opened. The root portion of the spring plate element will preferably have a hole through which a pivot pin for the blade extends. The handle will preferably be of moulded plastics construction with a longitudinal slot for the reception of the blade, and the spring plate element will preferably be located in a depression formed in a side wall of the slot in the region of the pivot.

In order that the invention may be fully understood and readily carried into effect, the same will now be described, by way of example only, with reference to the drawings accompanying the Provisional Specification, of which:—

Fig. 1 is a perspective view of a clasp knife embodying the invention, shown in open condition,

Fig. 2 is a view of the knife in a closed condition, and

Fig. 3 is an exploded view of component parts of the knife which will be referred to.

Referring now to the drawings, the clasp knife there illustrated has a moulded synthetic plastics handle 10 with a slot 12 extending from one end for the reception of a blade 14, a root portion of the blade being pivotally

located in the handle by means of a two-part pivot pin which comprises a headed tubular part 16 and a headed stud part 17. A resilient back spring element 18 is located in a pocket 20 near the open end of the slot in the handle, the back spring element having a projection 19 which engages a local depression at the bottom of the pocket 20 to locate the back spring element against endwise movement. In addition, a spring plate element generally indicated 22 is located in a depression 24 in the side wall of the slot in the region of the pivot, the spring plate element constituting locking means for retaining the blade in open condition.

The spring plate element 22 has a root portion 26 and a connected abutment plate member 28 which is very slightly "set" relative to the root portion as shown by the shade lines in Fig. 3. The root portion has a hole 30 through which the pivot pin 16, 17 extends.

When the knife has been assembled, and is in its closed condition as shown in Fig. 2, the spring plate element 22 is located entirely to one side of the blade. However, when the blade is opened, the abutment plate member 28 is able to spring sideways into its operative position in alignment with and acting against a side edge of the root portion of the blade, as shown in Fig. 1. In this position the abutment plate member securely locks the blade in its open condition and the blade can only be folded back into the handle when the abutment plate member has been displaced laterally, as shown in chain-dotted lines in Fig. 1. The abutment plate member is not difficult to displace laterally by thumb pressure when the user wishes to fold the blade back into the handle. As soon as the root end of the blade overlaps the side of the abutment plate member to the slightest degree thumb pressure can be released from the abutment plate member and the blade can be folded normally into the handle.

It will be seen that the outline shape of the handle in the illustrated example lends itself ideally to the incorporation of the invention because although the shape of the abutment

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plate member projects only slightly from the outline shape of the blade when the knife is folded it projects considerably from the outline shape of the handle when the knife is in open condition (but the curved shape of the abutment plate member does not at all intrude into the comfortable hand grip afforded by the shape of the handle when the knife is being used).

Various modifications may be made. For example, in the illustrated embodiment, the one piece moulded handle is shown to be provided with a narrow slot 32 which extends through a solid end part remote from that in which the blade is pivotally located (the slot being provided so that it can be used by a yachtsman for engaging and tightening or loosening the screwthreaded pin of a shackle, such a shackle conventionally having a head with flats which can be engaged in such a slot). However, it will be understood that the knife need not necessarily be provided with such a slot and that the handle may be made in a different shape if desired.

WHAT WE CLAIM IS:—

1. A clasp knife having a handle and a pivotally connected blade, and having a spring plate element constituting locking means for retaining the blade in open condi-

tion, the spring plate element having a root portion and a connected abutment plate member which lies alongside the blade when the knife is in its folded condition but which springs sideways into an operative position in alignment with and acting against a side edge of a root portion of the blade when the blade is opened.

2. A clasp knife according to claim 1, in which the root portion of the spring plate element has a hole through which a pivot pin for the blade extends.

3. A clasp knife according to either one of the preceding claims, in which the handle is of moulded plastics construction with a longitudinal slot for the reception of the blade, and the spring plate element is located in a depression formed in a side wall of the slot in the region of the pivot.

4. A clasp knife constructed, arranged and provided with locking means adapted to operate substantially as hereinbefore described with reference to and as illustrated by the drawings accompanying the Provisional Specification.

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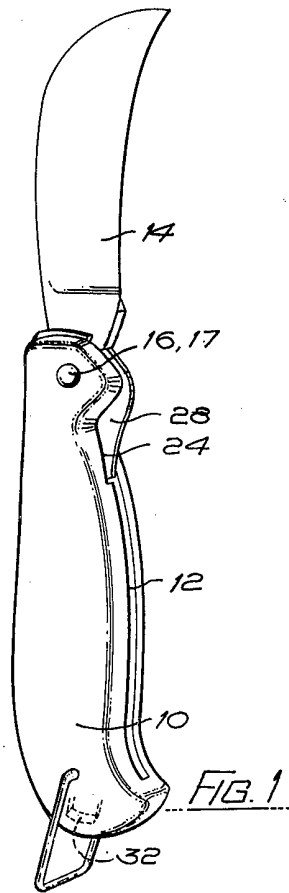


FIG. 1

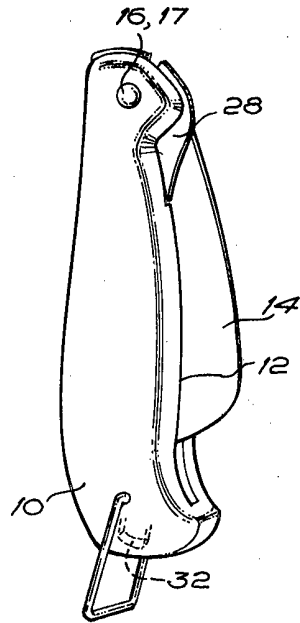


FIG. 2

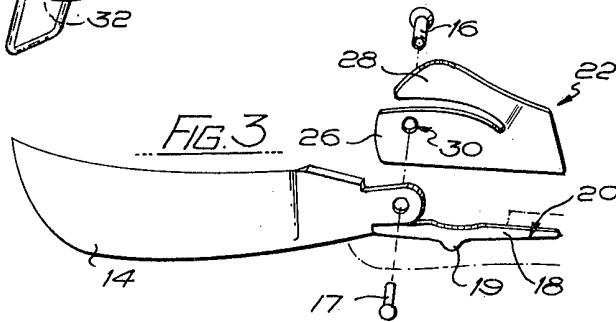


FIG. 3