(No Model.)

G. MEYER.

POCKET KNIFE.

No. 592,426. Patented Oct. 26, 1897.

FIG. 1.

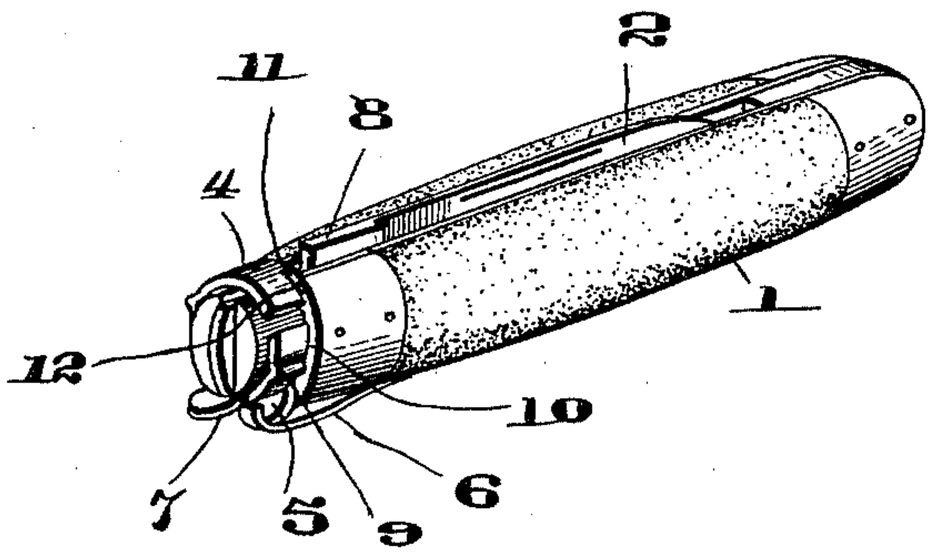


FIG. 2.

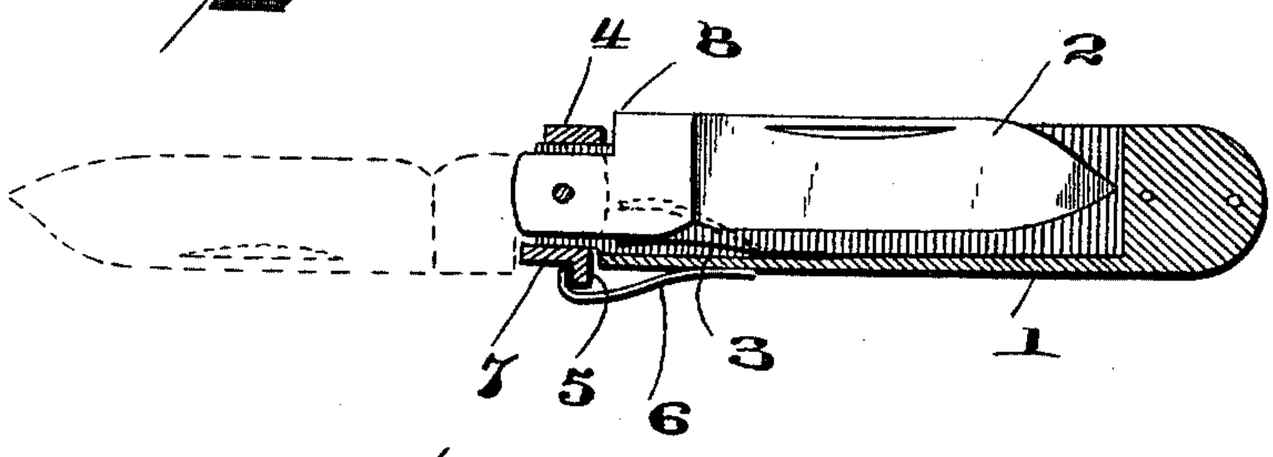


FIG. 3.

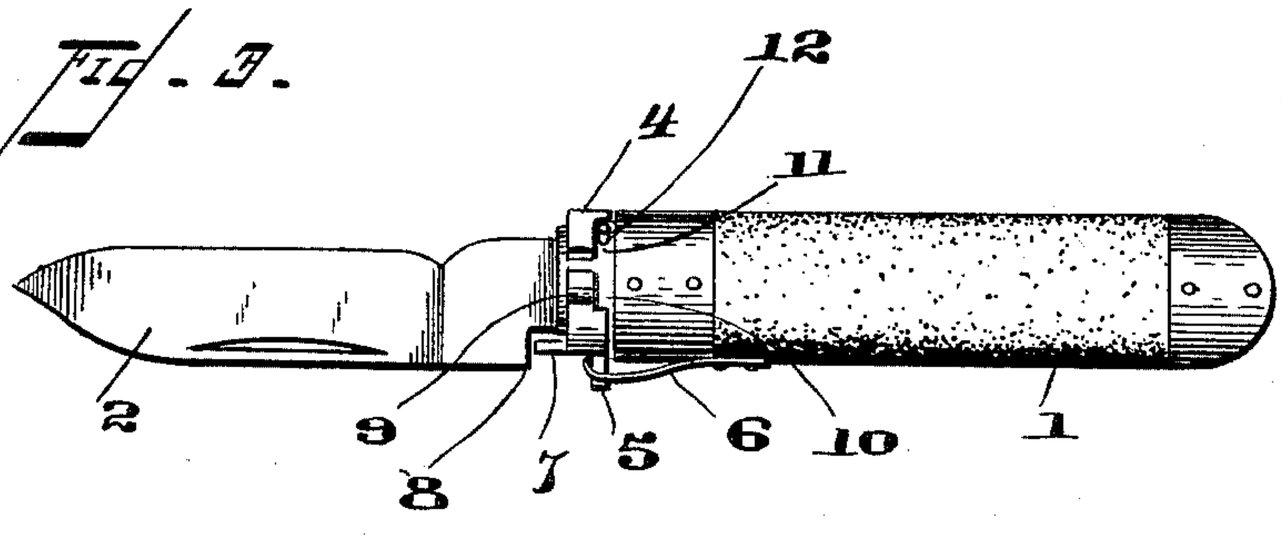
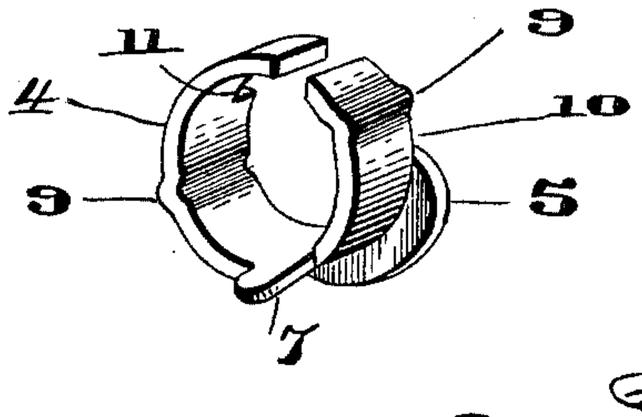


FIG. 4



WITNESSES

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POCKET-KNIFE.

SPECIFICATION forming part of Letters Patent No. 592,426, dated October 26, 1897.

Application filed January 23, 1897. Serial No. 620,333. (No model.)

To all whom it may concern:

Be it known that I, GEORG MEYER, a citizen of the United States, residing at Breckenridge, in the county of Gratiot and State of Michigan, have invented certain new and useful Improvements in Pocket-Knives; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in cutlery, and more particularly relates to pocket-knives.

The object of the invention is to provide in the construction of a knife simple and efficient means for permitting the same to automatically open when suitable means have been so operated that the blade or blades of the knife are free to move.

The invention further aims to provide a knife which shall be so constructed that when the blade or blades thereof are placed in open position the same shall be retained therein, and all liability of the blades closing shall be effectually overcome until the means which are employed for holding the blades open shall have been moved, so as to release the blades.

With these objects in view the invention consists, substantially, in the novel constructions, combinations, and arrangements of parts which will be hereinafter fully illustrated, described, and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a knife constructed in accordance with the present invention. Fig. 2 is a longitudinal sectional view thereof. Fig. 3 is a side elevation illustrating the knife in open position, and Fig. 4 is a detail perspective view of the rotatable bolster.

Similar numerals of reference designate corresponding parts throughout the figures of the drawings.

Referring to the drawings, 1 designates the handle of a knife, which may be of any approved construction, and pivoted in one end of said handle in any suitable manner is a blade 2.

3 designates a spring, one end of which is securely fastened within the handle 1 at the back thereof, and the free end of said spring is adapted to impinge against the tang of the blade 2 when the latter is closed, and by means of the spring 3 it is obvious that when the means employed for retaining the blade closed, which means will be presently described, are released from engagement with the blade the blade 2 will immediately swing open without the necessity of any effort whatever on the part of the user of the knife for opening the said blade.

Mounted upon the end of the handle 1 in which the blade 2 is pivoted is a rotatable bolster 4, and it will be noted that the end of the handle 1 upon which said bolster is mounted is of slightly-less diameter than the remainder of the handle 1 in order that the bolster 4 may readily rotate thereon, and in order that the blade 2 may have a rear swinging movement upon its pivot and in no wise be affected in such movement by the bolster 4 the latter is provided with an open side through which the blade 2 is adapted to swing. The bolster 4 has at its inner end, and extending only partially around the circumference thereof, an outwardly-extending flange 5, which flange is adapted to be engaged by the hooked end of a leaf-spring 6, riveted or otherwise secured to the back of the handle 1, the free end of the leaf-spring 6 being so positioned that the flange 5 on the bolster 4 is adapted to slide therebeneath, and through the medium of the flange 5 it will be observed that the bolster 4 is retained upon the handle 1 both when the blade 2 is opened or closed. The bolster 4 is provided at its end which is opposite to the flange 5 with a lug extension 7, which extension is adapted to be seated upon a shoulder 8, formed in the back of the blade 2, adjacent to the tang thereof, and when the blade 2 is swung open and the bolster 4 rotated so that the lug extension 7 may be seated upon the shoulder 8 it will be noted that further rearward movement of the blade 2 is effectually prevented, while any forward movement of said blade is also overcome by reason of the bolster 4 being in such position that the open side thereof is out of alinement with the tang of the blade.

To facilitate movement of the bolster 4, the latter is provided in its sides at substantially diametrical points with ridges 9, which ridges

afford efficient means for placing the fingers against the same for the purpose of rotating the bolster 4, and in order that the bolster 4 shall be locked against rotation after the blade 2 has been opened said bolster is provided at one side of its open side and adjacent to the flange 5 with a notch 10, in which the hooked end of the leaf-spring 6 is adapted to pass, and it is thus obvious that by reason of the spring 6 being so seated said spring will be directly in the path of the flange 5, and hence the bolster 4 will be prevented moving upon the handle 1 until a sufficient pressure is applied to said bolster as to overcome the tension of the spring 6. The opposite side of the open side of the bolster 4 is also provided with a notch 11, which notch is adapted to receive a limiting-pin 12, arranged at one side of the handle 1, and by means of the pin 12 only a limited movement of the bolster 4 upon the handle 1 is permitted.

When the knife is in closed position, as illustrated in Fig. 1, and it is desired to open the same, it is simply necessary to rotate the bolster 4 to such an extent that the open side thereof will register with the open side of the handle 1, whereby the knife-blade 2 is free to swing upon its pivot, as before described, and immediately upon so positioning the bolster 4 the tension of the spring 3 within the handle 1 will force the blade 2 outwardly to the fullest extent of its movement. The bolster 4 is then rotated in a direction reverse to that employed for opening the knife, and by this reverse movement of the bolster 4 the open side thereof is swung around out of alinement with the open side of the handle 1, the flange 5 of the bolster 4 passing beneath the hook end of the spring 6 and the lug extension 7 on said bolster becoming seated upon the shoulder 8 of the blade 2, the hooked end of the spring 6 also becoming seated in the notch 10 of the bolster 4, and by reason of this latter movement of the spring 6 it is apparent that rotation of the bolster 4 is prevented. With the lug extension 7 seated upon the shoulder 8 of the blade 2 the latter is held in a rigid position, so that the knife may be employed for various purposes, and when it is desired to close the blade 2 it is only necessary to impart to the bolster 4 a sufficient pressure as to overcome the pressure of the spring 6 and thereby unseat the hooked end of the latter from the notch 10, when the bolster 4 may be freely rotated back to the position where the open side thereof will register with the open side of the handle 1. The blade 2 is now free to close, which may be readily accomplished, and a reverse movement is then given to the bolster 4, whereby the open side thereof is swung out of alinement with the blade 2 and the latter held in its closed position.

From the foregoing description it is believed that the advantages of the herein-described knife will be at once apparent to those familiar with the art, and it will be noted that I have provided an improved construction whereby it is unnecessary for the user of the knife to manually open the blade 2, since the spring 3 will automatically operate the blade when the rotatable bolster 4 is suitably moved. Furthermore, it will be seen that liability to injure the finger-nails is also obviated, and the knife may be as readily and quickly opened in darkness as in light.

The knife may be suitably ornamented, if so desired, and I do not wish to restrict myself to any particular form of handle, nor do I wish it to be understood that the herein-described improvements are only applicable to a single-bladed knife, for it is evident that if so desired the construction may be used upon a knife having a plurality of blades, and it will be understood that these, together with other changes in the form, proportion, and minor details of construction, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

While I have described the improvement as adapted for use upon pocket-knives, I also reserve to myself the right to employ the same upon knives of varying description.

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

1. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, and a lug extension carried by the bolster and adapted to be seated upon a shoulder formed upon the blade, whereby the latter is held in a rigid position when open, substantially as described.

2. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, a lug extension carried by the bolster and adapted to be seated upon a shoulder formed on the blade, whereby the latter is held in a rigid position when open, and means for automatically opening the blade when the bolster is suitably operated, substantially as described.

3. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, a lug extension carried by the bolster and adapted to be seated upon a shoulder formed upon the blade, whereby the latter is held in a rigid position when open, and a spring for automatically opening the blade when the bolster is suitably operated, substantially as described.

4. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, a lug extension carried by the bolster and adapted to be seated upon a shoulder formed upon the blade, whereby the latter is held in a rigid position when open, means for automatically opening the blade when said bolster is suitably oper-

ated, and means for retaining the bolster upon the handle to permit the same to be rotated, substantially as described.

5. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, said bolster being provided with an open side whereby the blade is adapted to freely move, a lug extension carried by the bolster and adapted to be seated upon a shoulder formed upon the blade, whereby the latter is held in a rigid position when open, and means arranged within the handle and adapted to force the blade into open position when the rotatable bolster is suitably operated, substantially as described.

6. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, a spring carried by the handle, and a flange carried by the rotatable bolster and adapted to be engaged by the spring carried by the handle, whereby the rotatable bolster is retained upon the handle, but the same permitted to operate, substantially as described.

7. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, a spring carried by the handle and adapted to force the blade into open position when the rotatable bolster is suitably operated, and a spring also carried by the handle and adapted to retain the bolster thereon, but permit the same to be rotated, substantially as described.

8. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon, and adapted to lock the blade in opened or closed position, a spring carried by the handle and adapted to force the blade open when the rotatable bolster is suitably operated, an outwardly-projecting flange carried by the rotatable bolster, and a spring carried by the handle and provided with a hooked end adapted to engage the outwardly-projecting flange of the bolster, whereby the latter is retained upon the handle, but permitted to be rotated thereon, substantially as described.

9. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, a spring carried by the handle and adapted to force the blade open when the bolster is suitably operated, said bolster being provided with an open side, whereby free movement of the blade may be had when said open side is caused to register therewith, an outwardly-projecting flange carried by the rotatable bolster, a spring also carried by the handle and provided with a hooked end engaging said flange, whereby the bolster is retained upon the handle and permitted to rotate thereon, and a lug extension also carried by the bolster and adapted to be seated upon a shoulder formed upon the blade, whereby the latter is held in a rigid position when open, substantially as described.

10. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, means for forcing said blade open when said bolster is suitably operated, an outwardly-projecting flange carried by the bolster, a spring also carried by the handle and provided with a hooked end adapted to engage the flange on the bolster, whereby the latter is retained upon the handle but permitted to rotate thereon, said bolster being further provided with a notch in which the hooked end of said spring is adapted to enter to lock the bolster against rotation, and a lug extension carried by the bolster and adapted to be seated upon a shoulder formed on the blade, whereby the latter is retained in a rigid position, substantially as described.

11. In a knife, the combination with the handle thereof, of a rotatable bolster mounted thereon and adapted to lock the blade in opened or closed position, a spring carried by the handle for forcing said blade open, when said bolster is suitably operated, an outwardly-projecting flange carried by the bolster, a spring also carried by the handle and provided with a hooked end adapted to engage the flange on the bolster, whereby the latter is retained upon the handle but permitted to rotate thereon, said bolster being further provided with a notch in which the hooked end of said spring is adapted to enter to lock the bolster against rotation, and a lug extension carried by the bolster and adapted to be seated upon a shoulder formed on the blade, whereby the latter is retained in a rigid position, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

GEORG MEYER.

Witnesses:
MARY L. TORBERT,
WILLIAM OBERLIN.