

1,372,579.

Patented Mar. 22, 1921.

Fig. 1.

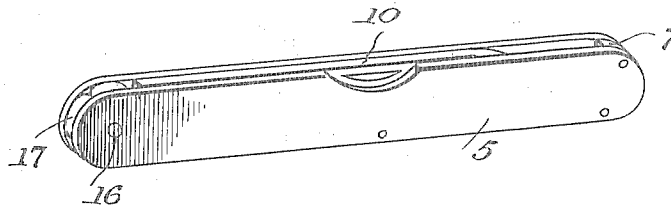


Fig. 2.

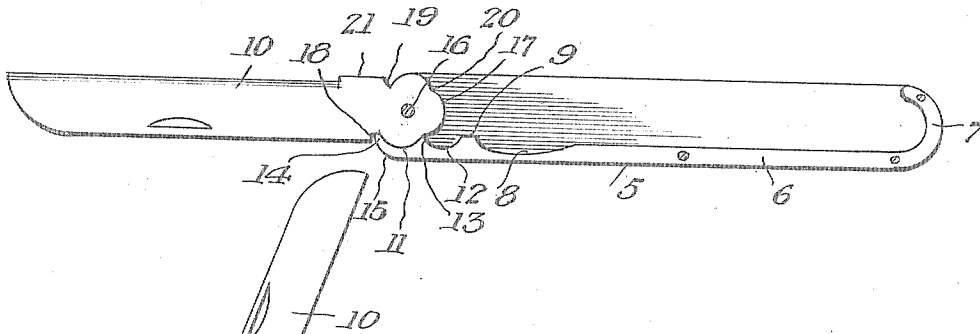


Fig. 3.

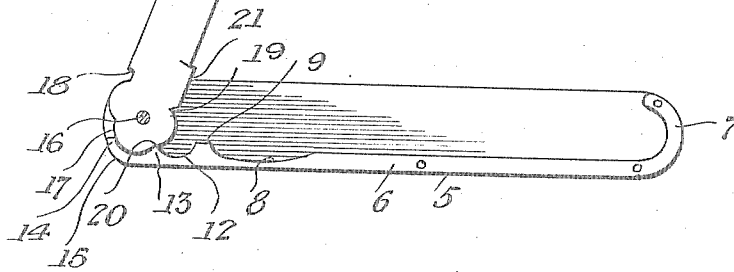
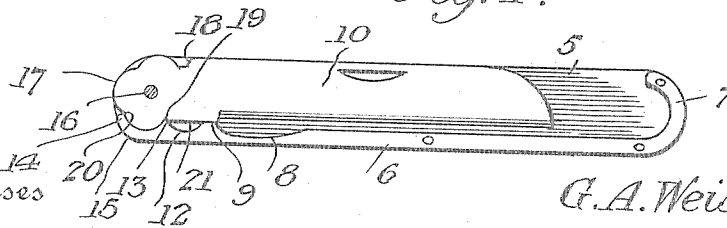


Fig. 4.



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KNIFE.

1,372,579.

Specification of Letters Patent. Patented Mar. 22, 1921.

Application filed August 14, 1918. Serial No. 249,858.

To all whom it may concern:

Be it known that I, GUSTAV A. WEISHAUP, a citizen of the United States, residing at Williamsport, in the county of Lycoming and State of Pennsylvania, have invented new and useful Improvements in Knives, of which the following is a specification.

This invention relates to improvements in the construction of pen knives.

In the ordinary construction of pen knives the ends of the handle project beyond the ends of the blades, when the latter are in their closed position, and the partition between the blades is of a length corresponding to the length of the handle. The partition, and as a matter of fact the ends of the handle, by frictional contact therewith bind the blades in the opening and shutting thereof and under other conditions, wear so that the same becomes sharpened and soon cut their way through the user's pocket, as well as offering other objectionable features. Also in the ordinary construction of pen knives the contact engagement between the blades and the springs is such that the blade closed quickly is liable to inflict injury to the user of the knife.

It is the object of the present invention to overcome the above mentioned objections and to produce a pen knife wherein the blade co-operates with the spring in another manner so as to leave no gaps or space between the ends of the handle and the blade of the knife, when the blades are in their closed position, and wherein the said springs and blades further coact to permit of the blade being closed in perfect safety.

Other objects and advantages will appear as the nature of the invention is better understood reference being had to the accompanying drawings in which there is illustrated a simple and satisfactory embodiment of the improvement and in which:—

Figure 1 is a perspective view of a pen knife constructed in accordance with this invention;

Fig. 2 is a longitudinal sectional view taken in a line with the side of one of the springs and showing the blade in its open position;

Fig. 3 is a similar sectional view showing the blade partly closed;

Fig. 4 is a similar view showing the blade entirely closed.

While it is to be understood that a pen

knife constructed in accordance with my invention may be provided with any desired number of blades, I have deemed it necessary, for the purpose of illustration, to only show, in the accompanying drawings, a knife provided with a single blade and a single spring which coöperates with the blade.

The knife is broadly indicated by the numeral 10 and comprises a handle made up of similarly shaped strips of any suitable material divided from each other, at what may be termed the inner edges thereof by a spring 6 constructed in accordance with this invention. The spring 6 at the outer end of the knife is rounded upon itself, or otherwise hook shaped, as indicated by the numeral 7; one of the ends of the handle may be secured to this rounded portion if desired. In any event the rounded portion is designed to fill the gap between the plates comprising the handle of the knife at the outer end of the knife.

The spring 6, adjacent what I will term the inner end of the knife is preferably concaved as at 8 and is provided with an outstanding lug 9. This lug provides a stop for the manner of shutting the inner end of the blade 10. The spring 6, upon its inner face, outward of the stop 9 is further concaved as at 11 and 12, a substantially V-shaped catch lug 13 being provided between the walls 11 and 12, and a second catch lug 14 being provided at the outer end of the wall 11. The outer edge of this lug is formed by rounding what I will refer to as the inner end of the spring 6 the said rounded portion being indicated by the numeral 15 and forming the rounded ends of the blades comprising the side of the knife.

The blade 10 is pivotally secured as at 16 between the handle plates and as its peripheral edge at its said pivot is round it is received in the concaved portion 11 of the spring 6 when in either its open or closed position. The rounded end 17 of the blade terminates, upon the outer edge of the blade in a depression providing a straight shoulder 18, and this shoulder is designed to be engaged by the catch lug 14 when the blade is open. The round portion 17, at the sharpened edge of the blade is provided with two spaced depressions 19 and 20 respectively, the depression 20 being designed to receive a stop lug 13 when the blade is partly closed and to receive the stop lug 15 if the blade is

wholly closed. In this last mentioned position the depression 19 receives the lug 13. The blade 10 at the cutting edge thereof, inward of the depression or notch 19 is formed with a straight portion 21 which is adapted to engage with the stop lug 9 of the spring when the blade is wholly closed.

It is believed from the foregoing description, when taken in connection with the drawings that the construction and advantages of the invention will be apparent without further detail and description.

Having described the invention, what is claimed is:—

15 A knife including a handle comprising side plates, a spring therebetween in alinement with one of the edges of the plates spacing said plates, said spring having the rounded end which is connected to the plates and 20 which also has its body portion approximately at its center secured to said plates, said spring having a widened portion at the free end thereof provided with a plurality of spaced round concavities which enter from

the inner edge thereof and which have 25 straight portions therebetween providing stops, a knife blade pivoted between the handle plates near the free end of the spring and having its outer surface at the pivoted end thereof formed with rounded projections 30 and rounded concavities between the projections and inclined shoulders communicating with the outer depressions, said rounded extensions designed to be received successively in the upper concave portion of the spring 35 when the knife blade is swung to either open or closed position, and when in opened position, the free end of the spring designed to contact one of the inclined surfaces of the knife blade, and when in closed position the 40 inner edge of the knife blade adjacent to the second inclined shoulder designed to rest on the inner straight portion at the widened end of the spring for holding the cutting edge of the knife blade out of contact with 45 the body of the spring.

In testimony whereof I affix my signature.
GUSTAV A. WEISHAUP.