(No Model.)

A. E. JOHNSON.

SHOE KNIFE.

No. 430,186. Patented June 17, 1890.

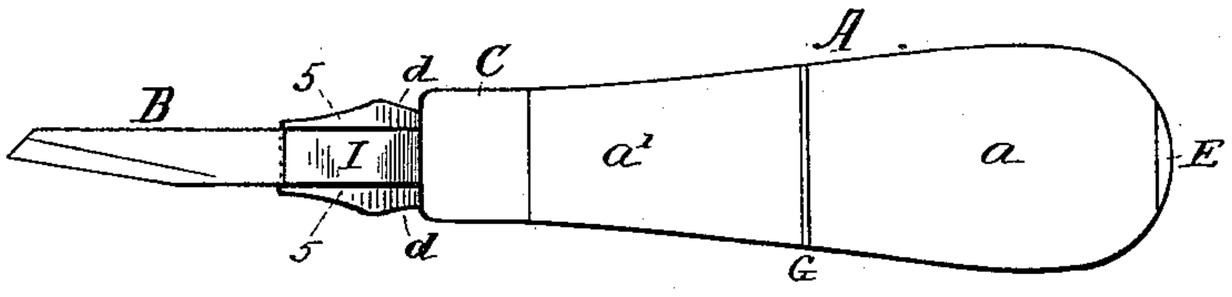


FIG. 1

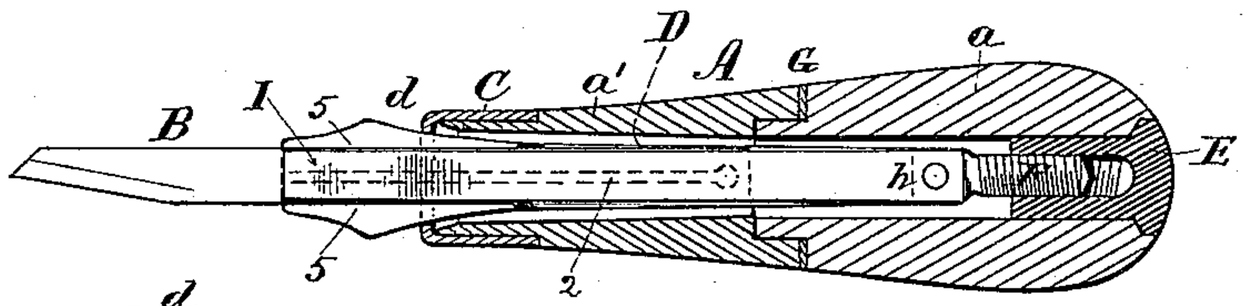


FIG. 2

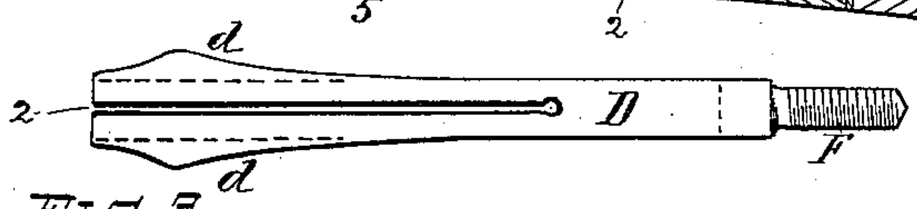


FIG. 3

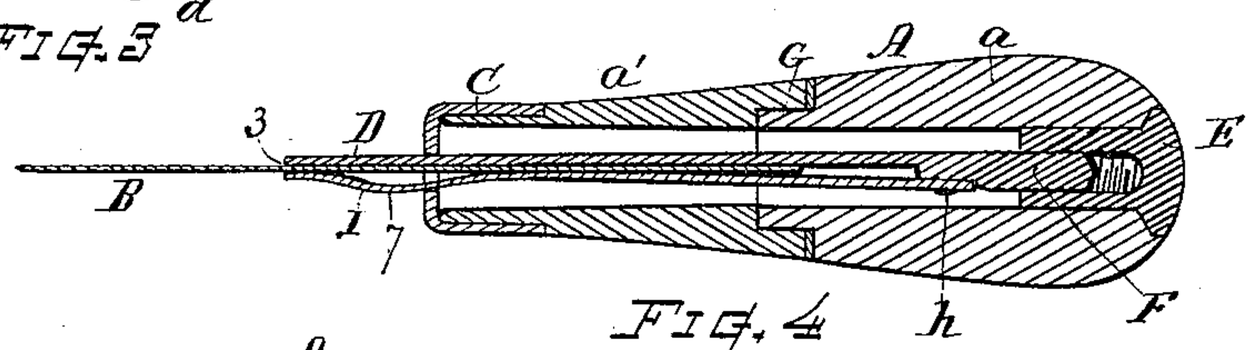


FIG. 4

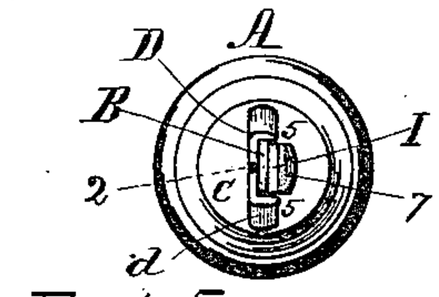


FIG. 5

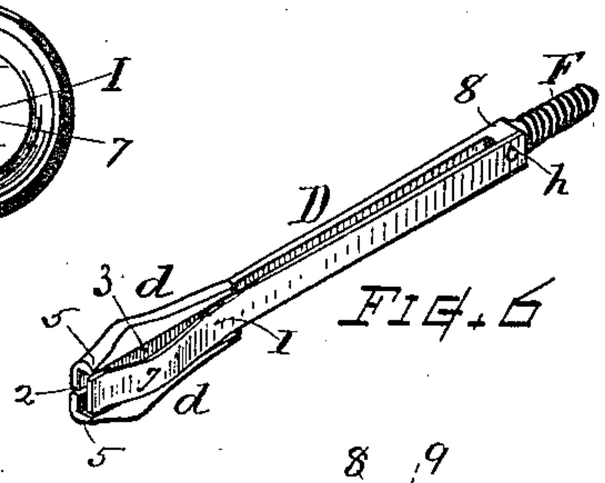


FIG. 6

FIG. 7

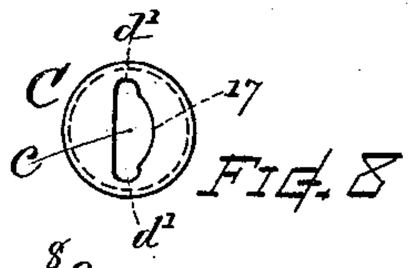
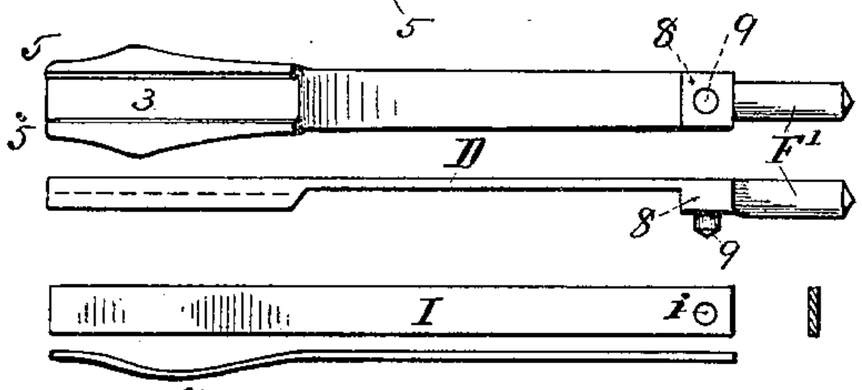


FIG. 8



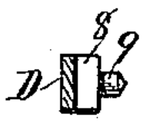


FIG. 9

FIG. 10

Witnesses.

Ella P. Bleyer

Geo. M. Rice

Inventor.

Albert E. Johnson

by Chas. H. Burleigh

Attorney.

UNITED STATES PATENT OFFICE.

ALBERT E. JOHNSON, OF PUTNAM, CONNECTICUT.

SHOE-KNIFE.

SPECIFICATION forming part of Letters Patent No. 430,186, dated June 17, 1890.

Application filed March 12, 1890. Serial No. 343,654. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. JOHNSON, a citizen of the United States, residing at Putnam, in the county of Windham and State of Connecticut, have invented certain new and useful Improvements in Click-Knife-Blade Holders, of which the following, together with the accompanying drawings, is a specification sufficiently full, clear, and exact to enable persons skilled in the art to which this invention appertains to make and use the same.

The object of my present invention is to provide a knife-blade holder which will secure the blade by clamping firmly both its back and front edges and at the same time embracing the blade at the sides, so that said holder is adapted for supporting blades firmly, although the different blades may vary in thickness.

Another object is to provide a click-blade holder having an elastic side jaw or spring that bears upon the side of the blade and presses it laterally against a side seating-surface on the jaws which sustain the edges, thereby preventing looseness and rendering the holder capable of accommodating blades of different thicknesses and widths.

Another object is to simplify the manufacture by providing the main part of the holding-stem, upon which are formed lips or jaws, between which the blade is inserted, with an integral screw-tang and an integral stud or boss, on which the spring or side jaw is attached by riveting, as more fully hereinafter explained.

These objects I attain by a click-knife-blade holder having the peculiar construction and arrangement of parts hereinafter described, the particular subject-matter claimed being definitely specified and as set forth.

In the drawings illustrating my invention, Figure 1 is a side view; Fig. 2, a longitudinal vertical section; Fig. 3, a back view of the blade-holding jaws; Fig. 4, a longitudinal horizontal section; Fig. 5, an end view; Fig. 6, a perspective view of the blade-holding jaws; Fig. 7, a transverse section through the jaws; Fig. 8, an end view of the ferrule. Fig. 9 shows the details of the blank for the lipped jaws and screw-tang as made integral, and Fig. 10 shows the details of the side jaw or spring.

In referring to parts, A denotes the handle; B, the blade; C, the clamping piece or ferrule; D, the jaw-stem having inclines *d*, that wedge within the ferrule or binder C for confining the blade; E, the handle-tip nut, and F the screw-threaded tang on the end of the stem.

In accordance with my invention the stem or part D, which supports the blade B, consists of a bifurcated bar slitted from its outer end, as at 2, to afford spring action, its inner face fitted with a flat seating-surface for the side of the blade and having on its separated ends overhanging ledges or lips 5, that serve as holding-jaws and are adapted to embrace the narrow front and back edges of the blade in the manner indicated, the inclines *d* being formed on the outer edges over the lipped portions. At the other end of the stem is the screw-threaded tang F. Upon the side of the bifurcated stem I provide a spring or side pressure jaw I, the front end of which occupies position between the lips 5 and bears against the side of the blade for pressing it laterally against the seating-surface 3 on the bifurcated stem D, while its rear end is attached to the stem D near the tang F, as at *h*. The spring or side jaw I is made with a bend or outward incline, as at 7, to be acted upon by the binder or ferrule in the same manner and at the same time, or substantially so, as the inclines *d* are acted upon.

The side spring takes up any back lash or looseness laterally and accommodates blades of different thickness, while the spring-jaws with overhanging lips 5 support the blade at its back and front edges. Said lips also give a small degree of friction on the blade when the clamp is loosened, so that the blade is not liable to drop from the handle while adjusting it.

The handle A is preferably made in two parts *a* and *a'*, connected by a socket-joint near the center, as at G, one part *a* being provided with the nut E for setting up the screw-threaded tang F, and the other part *a'*

with the binder or ferrule C for clamping the jaws 5 and 1 upon the blades. The central opening *c* (see Fig. 8) of the ferrule or binder C is shaped, as at *d'* and 17, to match the outer surfaces *d* and 7, so that the jaws or gripping parts will be forced down upon the blade when the stem and spring are drawn into the handle by the rotation of the butt portion *a* thereof and nut E upon the screw-tang, as will be understood by any one conversant with this class of knife.

The stem D is preferably made by first producing a forged blank, which is formed, as illustrated in Fig. 9, with the tang F' integral therewith, a seat-block 8, and an integral stud or boss 9 for receiving the spring or side jaw I, and with ribs for making the overhanging lips 5. This blank is then milled out between the ribs to form the lips 5 and seating-surface 3, slitted as at 2, and the screw-thread cut upon the tang F. The stud and block are milled off in shape to receive the spring-bar I, which latter is fitted with a hole *i*, that is placed over the stud, and this stud is then riveted down to attach the bar I firmly to the main stem D, the exterior being furnished as desired.

The advantage of making the screw integral with the main stem is that it gives a strong structure and at the same time can be manufactured with greater facility and at a comparatively moderate expense.

It will be noticed that the lips 5 extend but a short distance into the handle. The advantage of the short lip is that if the blade is slightly curved, as frequently occurs, it holds the blade without unnecessarily straining or liability of breaking the blade edgewise.

As it is a well-known and common practice in click-knife-blade holders to clamp the blade by the action of inclined surfaces on the jaws drawn into a binder or ferrule by means of a screw-threaded tang and a nut arranged in the handle, it will be understood that I do not claim such feature, broadly, but that my invention pertains to the improved construction of mechanism for the purpose substantially as herein set forth.

I claim as my invention herein, to be secured by Letters Patent—

1. A knife-blade holder having two jaws adapted for embracing the edges of the blade, in combination with a lateral jaw or side pressure spring bearing upon the side of the blade, and a binder or ferrule that simultaneously binds both the said jaws and side-pressure spring upon the blade, substantially as set forth.

2. The combination, with the handle composed of the parts *a a'*, one of which is provided with a screw-threaded nut E, of the jaw stem or bar D, having a bifurcated end with inclines *d d*, formed thereon, a blade-seat 3, and laterally offset lips 5, that project over said blade-seat for holding the edges of the blade, the screw-threaded tang F at the opposite end of said jaw-bar, the side-pressing spring or jaw I, and the ferrule C, having an opening that fits the exterior surfaces of said jaws, all substantially as and for the purposes set forth.

3. A click-knife-blade holder having its main stem or jaw-bar bifurcated at the end and provided with a seat to match the broad side of the knife-blade, laterally projecting lips for holding the edges of the knife-blade, a screw-tang formed integral with the end of said bar, and the integral boss formed upon the side thereof, and the spring or side jaw, which is connected to said jaw-bar by riveting said boss into an opening formed in the end of said spring, substantially as set forth.

4. A knife-blade holder having a bifurcated jaw provided with short laterally overhanging lips 5 at its end adapted to embrace the edges of the blade and terminating at the inner ends of the inclines *d*, as shown, in combination with the side presser jaw, and means for closing said lips and side presser upon the blade, substantially as set forth.

Witness my hand this 8th day of March, A. D. 1890.

ALBERT E. JOHNSON.

Witnesses:
CHAS. H. BURLEIGH,
ELLA P. BLENUS.