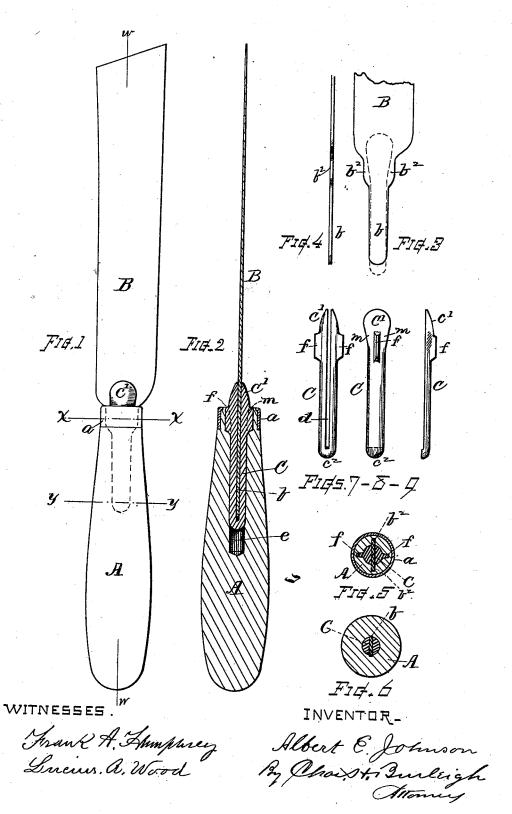
A. E. JOHNSON. KNIFE.

No. 342,697.

Patented May 25, 1886.



UNITED STATES PATENT OFFICE.

ALBERT E. JOHNSON, OF SOUTHBRIDGE, MASSACHUSETTS.

KNIFE.

SPECIFICATION forming part of Letters Patent No. 342,697, dated May 25, 1886.

Application filed October 24, 1885. Serial No. 180,796. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. JOHNSON, a citizen of the United States, residing at Southbridge, in the county of Worcester and 5 State of Massachusetts, have invented certain new and useful Improvements in Shank-Supporters for Wooden Handled Knives; and I declare the following to be a description of my said invention sufficiently full, clear, and exact to enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My present invention relates to an improvement in the construction of that class of
knives wherein the blade is provided with a
shank or tang that is driven into a wood handle, and which are commonly known as
"shoe-knives," "cigar-knives," &c. In this
class of knives as ordinarily constructed a
round hole is bored in the handle, and the flat
shank or tang of the blade is simply driven
into said hole. Such knives are quite liable
to break off at the junction of the shank and
blade, and the blades are also liable to get
loose and pull out of the handles.

The object of my invention is to provide a cheap, simple, and efficient means of supporting the shank in this class of knife, to prevent 30 breaking, and for fixing the shank in the handle in a firm and rigid manner, while enabling the knife to be constructed at the usual small cost within which this class of knives must be furnished.

In the drawings, Figure 1 is a side view of a shoe-knife embracing my invention. Fig. 2 is a longitudinal section of the same at line w w, Fig. 1. Figs. 3 and 4 show the form of the short or tang of the blade. Fig. 5 is a section

w, Fig. 1. Figs. 3 and 4 show the form of the shank or tang of the blade. Fig. 5 is a section at line x x, Fig. 1. Fig. 6 is a section at line y y, Fig. 1. Figs. 7, 8, and 9 show details of the shank-supporter.

In reference to parts, A denotes the wooden handle, of ordinary form, with a ferrule, a, at

45 its upper end.
B indicates the blade, which may be of any of the usual patterns common in this class of knife. Said blade is punched from sheet-steel, with a shank, b, formed as indicated in Figs.

50 3 and 4. Said shank is made with side wings, b² b², at its junction with the blade.

C indicates a shank-supporter, formed of two semi-cylindrical bars of metal, corresponding substantially to the size of the blade-shank b, and having a central slot, d, into which 55 said shank is inserted, the wings b^2 b^2 projecting beyond the respective sides of the supporter. Fins ff are formed on the outer sides of the supporter-bars, as indicated, and above them the end spread out in rounded pads 60 c', that rest against the sides of the blade B above the end of the handle. The sides or halves of the supporter C are preferably joined together at their lower ends, c^2 . Said supporter can be forged or cast in a straight bar, 65 or cast in a V-shaped bar, and then folded together at c^2 , to bring the sides of the slot d parallel; or a round piece can be slitted to form the semi-cylindrical parts; or, if desired, the halves may be forged or otherwise made in 70 separate pieces, as indicated in Fig. 9.

A round hole, e, is bored in the handle A. The shank b and supporter C are driven into said hole together, the shank-supporter filling the hole, and the wings b^2 and fins f cutting 75 into the wood in the form of a cross within the ferrule, (see Fig. 5,) so as to hold the shank firmly, while the pads c' press against the sides of the blade and prevent it from bending at the part where it meets the handle, and thus 80 bringing a strain at the junction of the blade and shank across the corner of the wood, tending to break it off at that place. The neck of the supporter is made slightly conical at m, so as to wedge in the end of the handle, closing 85 the opening, and setting the pads c' firmly against the sides of the blade.

I am aware that knives have heretofore been made the handles of which are provided with adjusting-clamps for holding ex-90 tensible blades, as appears in Patent No. 51,297 and Reissue Patent No. 2,520, and I do not claim constructions of such nature as within the scope of my present application, which relates to the improved rigid construction specified.

What I claim as of my invention, and desire to secure by Letters Patent, is—

1. The shank-supporter C, formed of the semi-cylindrical side pieces, with end pads, c', 100 conical neck m, and back fins, f, and the slot d, as and for the purpose set forth.

2. The combination of the blade B, having the shank b, the handle A, provided with the hole e, the metal shank-supporter having semi-cylindrical side portions fitting the sides of the 5 shank and connecting across the end thereof at C², driven into the handle with the blade-shank, as set forth.

3. The combination of the blade B, having a shank, b, provided with wings b, the wood ic handle A, provided with the round hole e and ferrule a, and the shank-supporter having semi-cylindrical sides with rounded end pads,

c', embracing the sides of the blade, and the back fins, f, said supporter being forced into the hole in the wood handle with the blade- 15 shank, substantially as and for the purpose described.

Witness my hand this 21st day of October, A. D. 1885.

ALBERT E. JOHNSON.

Witnesses:

C. A. PAIGE, L. D. CLEMENCE.