No. 707,690. Patented Aug. 26, 1902.

C. FOSTER.

LOOM FIXER'S KNIFE.

(Application filed Dec. 6, 1900.)

(No Model.)

Fig. 1.

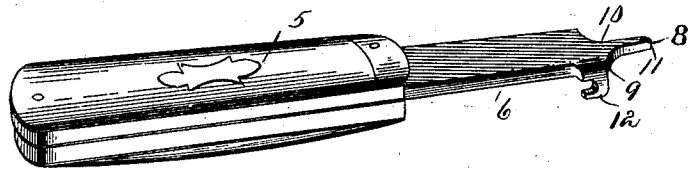


Fig. 2.

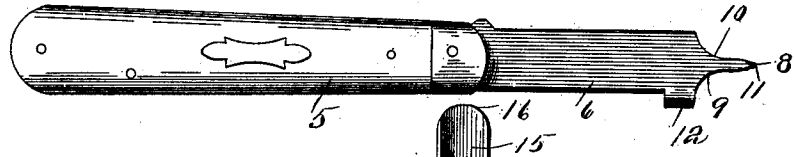


Fig. 3.

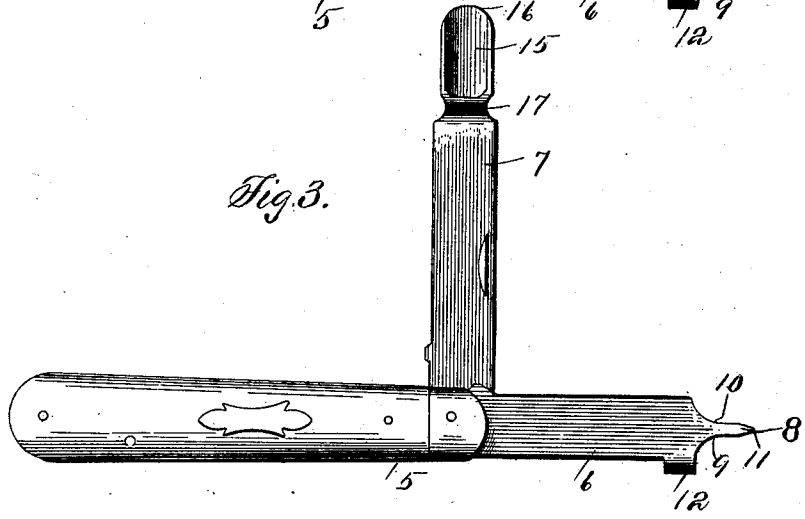
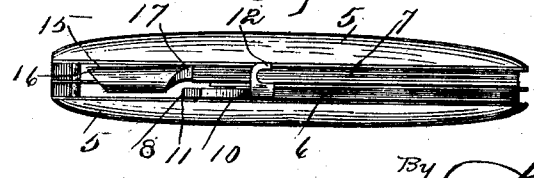


Fig. 4.



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UNITED STATES PATENT OFFICE.

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LOOM-FIXER'S KNIFE.

SPECIFICATION forming part of Letters Patent No. 707,690, dated August 26, 1902.

Application filed December 6, 1900. Serial No. 38,982. (No model.)

To all whom it may concern:

Be it known that I, CHARLES FOSTER, a citizen of the United States, residing at West Warren, in the county of Worcester, State of Massachusetts, have invented certain new and useful Improvements in Loom-Fixers' 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 loom-fixers' tools in general; and it has specific reference to loom-fixers' knives, the object of the invention being to provide a knife that may be used to punch leather and which will have a blade embodying an awl for use on a picker-stick and having a lateral shoulder which may be employed for taking out eyelet-screws.

A further object of the invention is to provide such an arrangement of blades in their handle that when the blades are folded the hooked shoulder of the awl-blade will be in position to be grasped to unfold that blade and which awl-blade when open to its fullest extent will serve as a part of the handle for manipulating the punching-blade, the relative proportion of the blades being such that when it is desired to use the punching-blade open to its fullest extent the punching-blade will not interfere with its functions. With this arrangement perfect freedom of the use of the blades individually is secured the same as if they were mounted at opposite ends of the handle, while by mounting them at the same end of the handle the awl-blade has a double function in that it forms at times a part of the handle for the punching-blade.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a perspective view showing the knife with the punch and hook blade opened to its full extent and in position to form a portion of the handle for the second or boring blade or cleaning-blade. Fig. 2 is a side elevation of the hook and punch blade. Fig. 3 is a view showing the blades at right angles, and Fig. 4 is a view of the knife with the blades closed.

Referring now to the drawings, 5 represents the handle of the tool, at one end of which are pivoted two blades 6 and 7, having the arrangement of the blades of the usual pocket-knife and which blades are adapted for movement to lie within the inclosure of the handle or to project therefrom, the operative position of the blade 6 being in alinement with the handle 5, while the operative position of blade 7 is at right angles to the handle.

The blade 6 comprises a cross-sectionally rectangular body portion, the outer end of which is contracted to form a point or awl-blade 8, comprising a stem portion 9 and a head 10, the sides of the stem being curved inwardly, while the sides of the head are curved outwardly to form the pointed section of an oval. In cross-section this awl-blade is rectangular, so that its forward end presents a straight edge 11. This awl-blade is used on a picker-stick of a loom for the purpose well known to those skilled in the art.

In the rear of the awl-blade there is formed a rearwardly-directed hook 12. This hook is formed integral with the body of the blade and initially is stamped with the blade from a single sheet of metal to lie in the same plane with the blade, the hook being formed by notching the lug at the side of the blade in the stamping operation. The hook is then bent downwardly to lie at right angles to the face of the blade, as shown. The hook 12 is used to take out eyelet-screws. The body portion of the second blade 7 is likewise rectangular in cross-section, its outer end being formed arc-shaped in transverse section to form a gouge 15, which is gradually tapered on the convex side at its end to form the cutting edge 16. The blade is contracted at the base of this gouge to form a neck 17. The gouge 15 is used for punching holes in the leather of a loom. The tool thus presented is useful for a variety of operations about a loom, as will be readily understood by those skilled in the art, and it will be seen that when the blade 7 is to be used the blade 6 may be opened, when the knife may be firmly grasped and given a twisting movement to operate the blade 7. In their folded positions the blade 6 lies with its hook across the blade 7, which, however, does not interfere with the

blade 7, for the reason that said bade 6 is opened when the blade 7 is to be used. On the other hand, the blade 6, which is used independently of the blade 7, may be opened and closed independently. The blade 7 may also be used when in alinement with the handle, it being seen from the drawings that the hook of the blade 6 lies to one side of the said blade, so that blade 7 may coincide with blade 6, and, furthermore, blade 7 is sufficiently longer than blade 6 as to have its gouge portion project beyond blade 6.

What is claimed is—

1. A loom-fixer's knife comprising a handle having a blade mounted therein and provided with a terminal awl-blade and a hook adjacent to the base of the awl-blade at one side of the blade of the knife, said hook lying in a plane beyond the side edge of the knife-blade, and projecting beyond the side face of the knife-blade, said hook being adapted for engagement with eyelet-screws to remove them.

2. A tool comprising a handle having blades pivoted therein upon a common pivot and adapted to open to aline with the handle, one of said blades having a terminal punching-gouge and the other blade having no sharp side edges whereby it may be grasped in connection with the handle to rotate the punching-blade, the punching-blade being longer than the other blade so that it may be employed for punching when both blades are open to the same degree.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

his
CHARLES × FOSTER.
mark

Witnesses:
E. C. SAWYER,
O. M. SMITH.