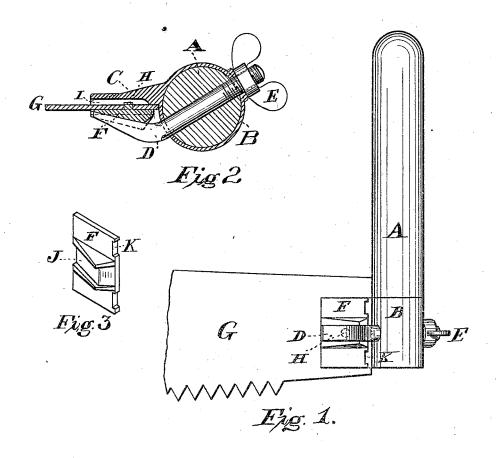
## A. ECKERT.

TOOL-HANDLE.

No. 184,515.

Patented Nov. 21, 1876.



Witnesses; Ferdinand V. Weaver Edwin & Weaver

Inventor; Augustus Eckert

## UNITED STATES PATENT OFFICE.

AUGUSTUS ECKERT, OF TRENTON, OHIO.

## IMPROVEMENT IN TOOL-HANDLES.

Specification forming part of Letters Patent No. 184,515, dated November 21, 1876; application filed August 21, 1876.

To all whom it may concern:

Be it known that I, AUGUSTUS ECKERT, of Trenton, Butler county, Ohio, have invented an Improved Tool-Handle, of which the follow-

ing is a specification:

This handle is intended for saws, meat-choppers, hay knives, and such other tools as it may be found applicable to. The object is to provide a handle which may be conveniently and firmly attached to the tool, and also conveniently detached.

In the accompanying drawing, Figure 1 shows the handle as attached to a crosscutsaw. Fig. 2 is a sectional plan, and Fig. 3 a

perspective view of the shoe F.

The entire device is to be made of metal, with the exception of the hand-piece A, which

is preferably of wood.

A is the hand-piece. On its lower end fits firmly the ferrule B. Outwardly from the ferrule, and forming part of it, projects radially, or nearly so, the ear C. Diametrically through the ferrule B and handle A is a hole, with its axis at an angle to the face of the ear C. Through this hole passes the shank of the finger D. The finger D is so formed that when it is in its place its acting face stands at an angle to the face of the ear C, these faces diverging toward the handle. The shank of the finger is threaded and provided with the tightening-nut E, having its hub bearing against the ferrule B.

When the shank is drawn by means of the nut E, the angular space between the faces of the finger D and the ear C will be lessened. Anything placed between these faces would be drawn edgewise toward the handle, and powerfully elamped between the faces. The blade or tool to which it is desired to attach the handle is placed in this space, one side of it fitting against the face of the ear C. Be-

tween its other side and the face of the finger D is placed the shoe F. Ore side of this shoe lies flat against the side of the blade. A pin, H, projects from its face through a hole in the blade, and dowels the shoe in position. The recess I in the ear C gives clearance to such portion of the dowel pin H as projects through the blade. On the back of the shoe F is formed the incline J, having about the same angle as the face of the finger D, which bears against it. Ledges on each side of the incline guide and hold the finger in position.

A hole in the blade has been mentioned, in connection with a projecting pin on the face of the shoe F. In some cases both hole and pin may be omitted, a small portion of the edge of the blade, bent very slightly up into the notches K, answering the same purpose.

the notches K, answering the same purpose.

By the introduction of the shoe F, the action of the finger D is quickened by reason of the inclination of J. The parts are also more thoroughly doweled and bound together than would be the case were the shoe omitted. It may, however, in some cases be omitted, in which case the finger D should be broadened. It would then be, practically, the finger and shoe in one piece. After the handle is attached there is little or no strain upon the thread of the finger shank. If the nut E be removed entirely it will be found that the parts are still bound somewhat firmly together.

I claim as my invention-

The combination of handle-piece A, eared ferrule B, shoe F, finger D, at an angle to the face of the ear C on ferrule B, and nut E, substantially as and for the purpose specified.

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