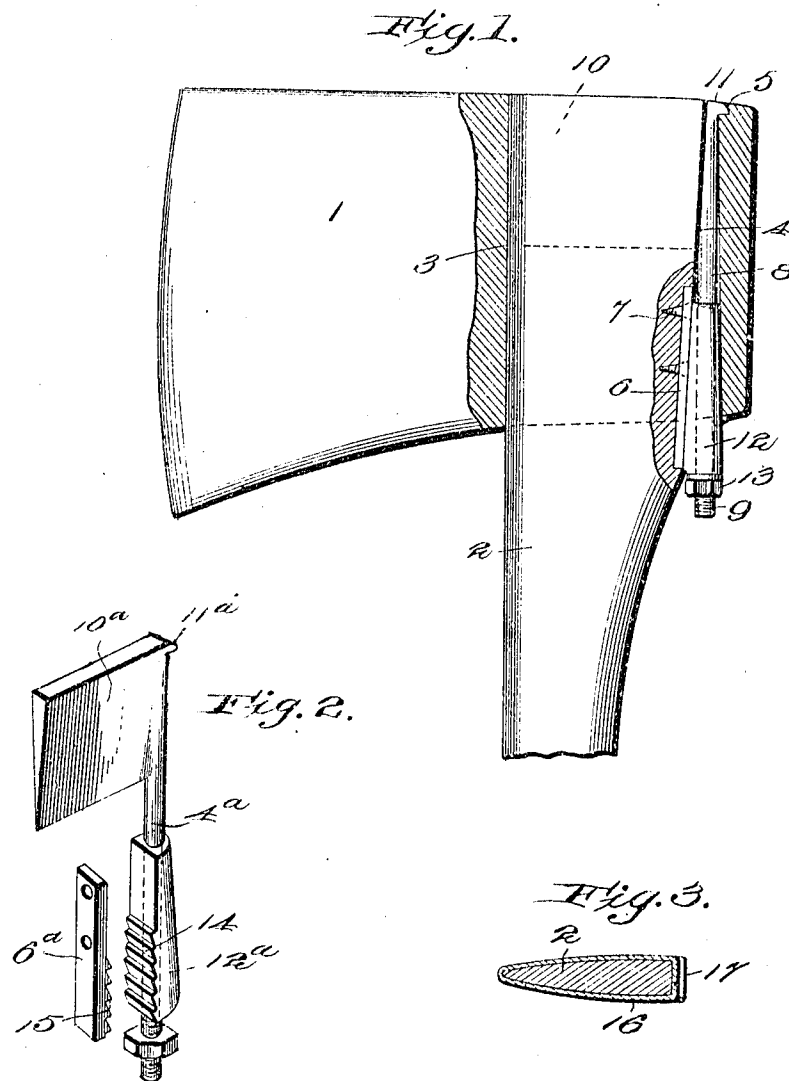


W. L. COVERT.
 SECURING MEANS FOR HANDLES OF TOOLS.
 APPLICATION FILED MAY 10, 1909.

954,259.

Patented Apr. 5, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM L. COVERT, OF BOISE, IDAHO, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO JOSEPH VALENTINE HAWK, OF BOISE, IDAHO.

SECURING MEANS FOR HANDLES OF TOOLS.

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Specification of Letters Patent.

Patented Apr. 5, 1910.

Application filed May 10, 1909. Serial No. 494,955.

To all whom it may concern:

Be it known that I, WILLIAM L. COVERT, a citizen of the United States, residing at Boise, in the county of Ada and State of Idaho, have invented certain new and useful Improvements in Securing Means for Handles of Tools; 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 improvements in securing means for handles of tools, and the same is especially designed for use in connection with axes, hatchets, hammers, picks, and similar tools that are wielded, and in which there is a liability of the tool becoming detached from its handle.

The object of the present invention is to provide a fastening means, which will securely hold the tool on its handle, and which will allow for the ready detachment of the tool from the handle, if desired.

While the invention is not restricted to the exact details as shown, still for the purpose of disclosure reference is had to the accompanying drawings illustrating a practical embodiment of the same, in which drawings like letters designate the same parts in the several views, and in which—

Figure 1 is a side elevation partly in section showing the application of my improved attachment. Fig. 2 is a perspective view of a slightly modified form of attaching means, and Fig. 3 is a transverse section showing a still slightly different form of tooth plate carried by the handle, and adapted to be engaged by the wedge-shaped member of Fig. 2.

For illustration, 1 designates the tool, and 2 the handle thereof, which latter is slightly less in depth than the length of the opening 3 in the tool, and which handle also is beveled on its rear edge, as at 4.

5 designates a notch or shoulder, formed at the rear top edge of the tool adjacent the opening 3.

The handle may or may not be provided with a wear or friction plate at its rear edge cooperating with the wedge-shaped member, hereinafter referred to, but in the drawings the rear edge of the handle at the lower part of its beveled face is provided with a wear or friction plate 6, which is

countersunk in the handle, and may be secured by fastening means 7.

8 designates a spindle, screw-threaded at one end, as at 9, and provided at its other end with a laterally-projecting wedge member 10.

11 is a lip or projection formed at the top rear edge of the spindle 8, and adapted to seat in the notch or shoulder 5.

12 is a hollow wedge member bored to slide on the spindle 8, and at the opposite side from the inclined face this bored wedge member may be rounded off to fit the rear face of the opening in the tool.

13 is a nut on the screw-threaded end of the spindle, adapted to abut against the lower end of the bored wedge-shaped member.

In Fig. 2, the construction of my improvements is substantially the same, 10^a designating the upper wedge formed on the spindle 4^a, but the bored wedge member 12^a is provided with upwardly-directed serrations 14, adapted to engage with oppositely-disposed serration 15, formed on the rear face of the plate 6^a, corresponding to the plate 6. Similarly, the slight modification shown in Fig. 3 simply consists in providing a band 16, adapted to surround the handle 2, just adjacent the lower edge of the tool, and provided with the teeth 17, adapted to be engaged by the serrations or teeth on the bored wedge member.

From the foregoing, it will be obvious that slight modifications may be made without departing from my invention, and indeed the bored wedge member may or may not be provided with serrations, and may or may not be associated with a plate provided with serrations, as the invention will operate successfully with the inclined face of a bored wedge member directly engaging the rear face of the wooden handle, without the interposition of any friction plate.

In operation, it will be seen from Fig. 1 that the upper wedge member 10 is inserted within the longitudinal slit usually formed in handles of this character, with the projection 11 resting on the shoulder 5, so that with the handle forced up substantially flush with the top of the tool, by turning the nut the bored wedge member 12 will be forced within the slot of the tool between its rear edge and the rear edge of the handle,

thereby securely binding the tool to the handle, the projection 11 engaging the shoulder 5 and preventing the wedge 10 from being drawn downwardly as the nut 13 is tightened up. It will be observed that the upper end of the spindle forms a substantial wedge between the handle and the tool at the upper end, the bored wedge operating in the lower portion of the opening only and separated from the top of the opening by a considerable distance, increasing the effectiveness of its operation with varying sized handles, as contradistinguished from those fastening means wherein a wedge extends flush with the upper end of the opening where it is engaged by a headed member, and cannot, therefore, be moved higher up the opening to further wedge the handle if it was small sized and therefore partly still loose.

In the construction shown in Fig. 2, the bored wedge member 12^a is first placed in engagement with the plate 6^a, and in this interlocked position the handle and the bored wedge are passed upwardly through the slot in the tool. The spindle 4^a is then passed downwardly through the bored wedge member 12^a, the wedge 10^a being inserted in the slit in the top of the tool handle. When the nut is turned, it will be obvious that the wedge 10^a and the projection 11^a will be drawn downwardly with the spindle 4^a, until the tongue or projection 11^a engages the shoulder 5, when upon continued movement of the nut, the handle 2 will be forced upwardly through the opening in the tool, owing to the wedge member 12^a being locked to the handle by the serrated plate 6^a, and as the handle is forced upwardly through the tool, the wedge 10^a spreads the upper portion of the handle to securely lock it against the inner side walls of same while the wedge 12^a securely locks the forward and the rear edges of the handle to the forward and rear walls of the opening in the tool.

It will be readily observed from the fore-

going that the improved attachment will not only secure a tool very firmly to its handle, but will also permit of its ready detachment therefrom when desired.

Having thus described the invention, what I claim is:—

1. The combination of a tool having an elongated opening and provided with a notch at the upper end of said opening, a handle disposed within said opening and having a slit at its upper end, a spindle provided at its upper end with a tongue, adapted to seat in said notch, and provided with a wedge member disposed within said slit, said spindle being screw threaded at its lower end and adapted to pass through said opening between one face thereof and one edge of the inserted handle, a bored wedge member operating on said spindle between said tool and tool handle, and a nut operating on said threaded end and engaging said hollow wedge member, substantially as described.

2. The combination with a tool having an elongated opening for its handle, a handle therefor, slit at its upper end and provided with a beveled surface at one of its edges, a spindle disposed in said opening between said beveled edge and tool, said spindle being screw threaded at one end and provided at its other end with a wedge member disposed within the slit in said tool handle, means limiting the downward movement of said spindle through the opening in said tool, a hollow wedge member mounted on said spindle and disposed between said tool and the beveled edge of said handle, and a nut on the screw threaded end of said spindle engaging the lower end of said hollow wedge member, substantially as described.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM L. COVERT.

Witnesses:

J. VALENTINE HAWK,
WM. C. DUNBAR.