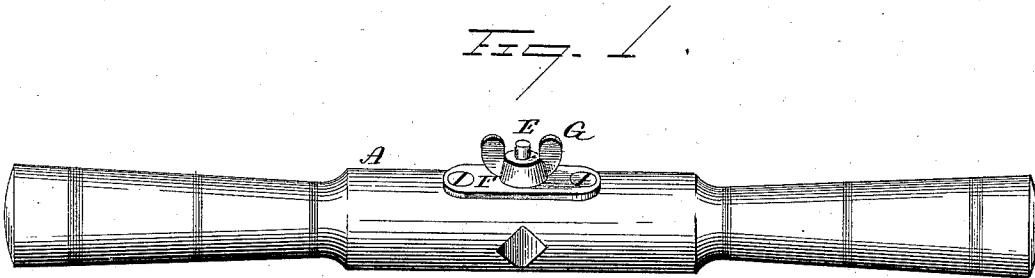
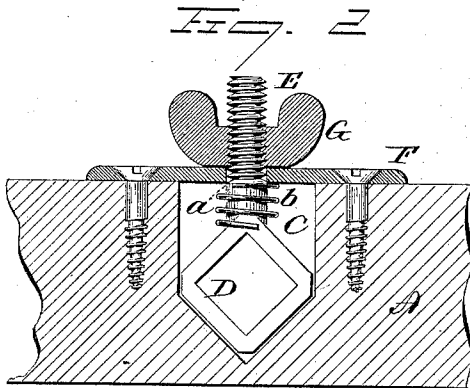
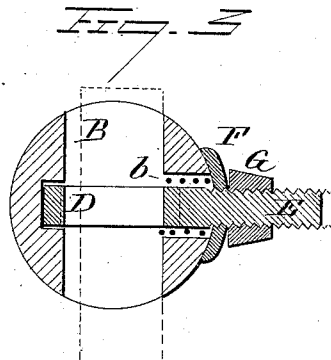
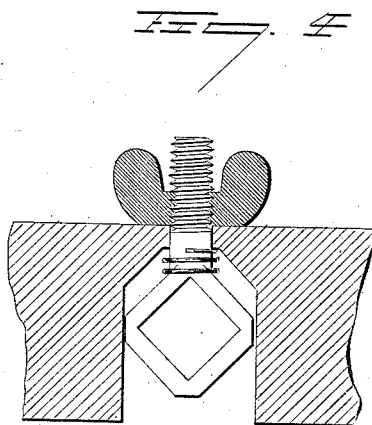


(No Model.)

W. A. IVES.
AUGER HANDLE.

No. 313,739.

Patented Mar. 10, 1885.



Witnesses.
J. A. Chumway
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UNITED STATES PATENT OFFICE.

WILLIAM A. IVES, OF NEW HAVEN, CONNECTICUT.

AUGER-HANDLE.

SPECIFICATION forming part of Letters Patent No. 313,739, dated March 10, 1885.

Application filed October 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, WM. A. IVES, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Auger-Handles; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the handle complete; Fig. 2, a horizontal section of the handle, showing a top view of the yoke and section of the plate and nut enlarged; Fig. 3, a transverse central section enlarged; Fig. 4, a modification.

This invention relates to an improvement in that class of handles for boring-instruments which consist of a bar to be attached to the shank of the boring-instrument, commonly called "auger-handles," and particularly to that class in which the handle is provided with a clamping device by which the handle may be detachably secured to the shank of the auger, the object of the invention being a simple and cheap construction adapted to be sold in the market as an article of manufacture, and which may be applied by the purchaser to a common wood auger-handle such as already constitutes an article of commerce, and thereby avoid the more expensive handles of necessarily special construction to adapt them to a clamping device; and it consists in a yoke arranged to slide in a recess made transversely through the handle and across the opening for the shank of the auger, the said yoke constructed with a shank which extends transversely outside the auger-handle, combined with a nut fitted to the shank, and also in the combination of such a yoke and nut with a common wood auger-handle, and as more fully hereinafter described.

A represents the auger-handle, which is made from a single piece of wood in the usual manner of making such handles, and at the center, diametrically through the handle, is the usual opening, B, for the shank of the auger. On the handle, transversely across the opening B and in a diametrical plane, a re-

cess, C, is formed. Into this recess a yoke, D, is arranged. This yoke is a flat plate having an opening through it corresponding substantially to the opening B in the handle and of like angular shape. The yoke is constructed with a shank, E, which extends outward through the recess in the handle.

F is a plate applied to the surface of the handle and so as to cover the recess C. Through this plate is an opening, *a*, through which the shank E passes. The shank E is screw-threaded, and upon the shank a thumb-nut, G, is applied to take its seat upon the plate F, as shown, and so that by turning the nut in one direction the yoke will be drawn across the opening B and toward the plate, or in the opposite direction will be permitted to recede from the plate. The shank of the auger is introduced, as indicated in broken lines, Fig. 3, passing upward through the opening B and through the opening in the yoke D, and when in its proper position the nut is turned to draw the yoke upon the shank, as seen in Fig. 3, clamping the shank against one side of the opening in the handle, as seen in Fig. 3, and so as to firmly hold the handle in connection with the auger.

If desired to remove the auger, release the screw to permit the yoke to recede therefrom. To force the yoke to recede, as well as to hold the yoke in the handle in the proper position to receive the shank of the auger, I apply the spring *b* between the yoke and plate, one end of the spring bearing upon the plate and the other in the opposite direction against the yoke, and so that as the yoke is drawn toward the plate the spring will be compressed. Then the reaction of the spring will force the yoke to recede. This construction is very simple, cheap, and effective. The plate F requires no fitting other than may be done in casting. The plate is pierced for the purpose of applying screws to secure it to the handle, as shown.

While I prefer to apply the plate upon the handle to serve both as a cover for the recess and a bearing for the nut, the recess may be made upon one side of the handle, a hole through the opposite side, and so that the yoke may be introduced into the recess, the shank first passing through the opening on the

opposite side and the nut applied to the shank outside of the handle, and as seen in Fig. 4. In this case the plate is dispensed with, the spring taking its bearing upon the surface surrounding the opening through which the shank of the yoke passes. This construction makes a clamping device which may be sold in the market independent of the handle, and which any person may readily apply to a handle without other preparation or fitting of the handle than simply forming the recess C in one side of the handle transversely across the shank-opening.

I am aware of Patent No. 174,013, and claim nothing therein shown or described, that patent showing a socket constructed to receive at each end one portion of a wood handle, and which is the expensive class of handles to which I have heretofore referred; but such handles, in addition to their expense, possess a serious difficulty, owing to the fact that while the socket is metal the handles are wood, and however tightly they may be introduced they will unavoidably shrink, so as to become loose in the socket. My invention overcomes this difficulty and retains the handle in one single continuous piece of wood.

I claim—

1. The combination of the yoke D, constructed with an angular opening through it, and with a screw-threaded shank, E, the thumb-nut G, applied to said shank, and the spring b, these parts combined being adapted to be introduced into a recess in one side of a wood auger-handle transversely across the opening for the shank, substantially as described.

2. The combination of the yoke D, constructed with an angular opening through it, and with a screw-threaded shank, E, the plate F, having an opening therethrough for the shank, and the thumb-nut G, applied to said shank upon the plate, the said socket and plate being adapted, the socket to be introduced into a mortise in one side of a solid wood auger-handle, and the plate to the surface of the handle as a bearing for the nut, substantially as described.

3. The combination of the yoke D, constructed with an angular opening through it, with a screw-threaded shank, E, a plate, F, constructed with an opening through which the shank of the yoke passes, a thumb-nut, G, fitted to the screw-threaded shank, and a spring, b, between said plate and yoke, substantially as described.

4. The combination of the solid wood handle A, having an opening, B, through it to receive the shank of the auger, and also constructed with a recess, C, from one side transversely across said opening B, the yoke having an angular opening through it, constructed with a screw-threaded shank, E, and arranged in said recess, the shank extending outside the handle, and the nut G upon the said shank, substantially as and for the purpose described.

5. The combination of the solid wood handle A, having an opening, B, through it to receive the shank of the auger, and also constructed with a recess, C, from one side transversely across said opening B, the yoke D, having an angular opening through it arranged in said recess, and constructed with a screw-threaded shank, E, extending through said recess, a plate, F, arranged to cover said recess, and with an opening through it for the said shank, and the nut G upon said shank, substantially as and for the purpose described.

6. The combination of the handle A, constructed with an opening, B, to receive the shank of the auger, and with a recess, C, opening from one side of the handle transversely across said opening for the shank, the yoke D, arranged in said recess and constructed with an angular opening, and with a screw-threaded shank, E, extending outward through said recess, a plate, F, having an opening through it through which said shank passes, a nut, G, upon said screw-threaded shank outside the plate, and a spring, b, between the plate and the yoke, substantially as described.

WILLIAM A. IVES.

Witnesses:

JOS. C. EARLE,
J. H. SHUMWAY.