

W. Clemson,

Saw Handle.

No. 106,123.

Patented Aug. 9. 1870.

Fig. 1.

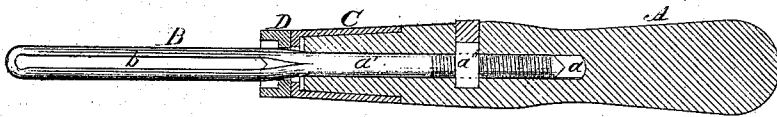


Fig. 2.

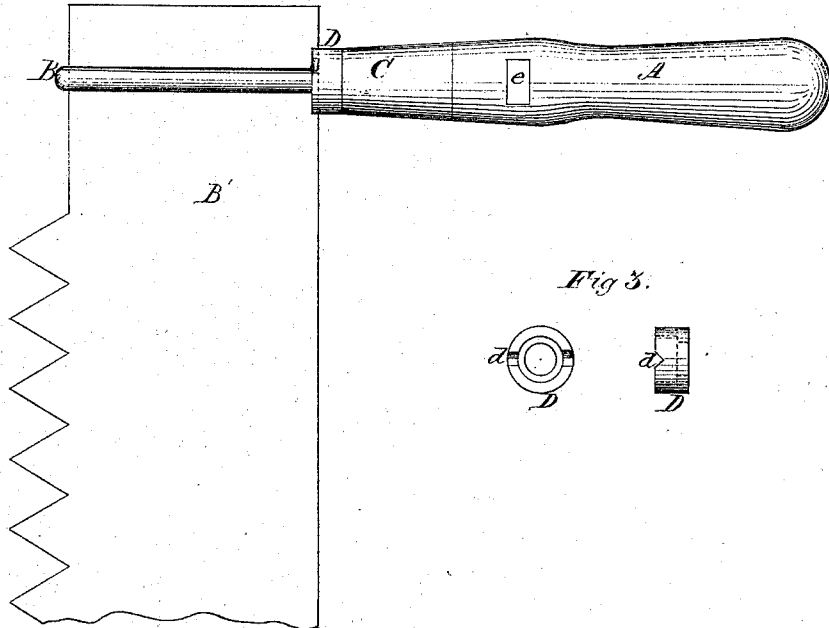
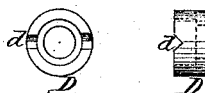


Fig. 3.



Witnesses:

John F. Fennell  
Albert Strader

Inventor:

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By N. Crawford, his atty

# United States Patent Office.

WILLIAM CLEMSON, OF MIDDLETOWN, NEW YORK.

Letters Patent No. 106,123, dated August 9, 1870.

## IMPROVEMENT IN SAW-HANDLE.

The Schedule referred to in these Letters Patent and making part of the same

### To whom it may concern:

Be it known that I, WILLIAM CLEMSON, of Middletown, in the county of Orange, in the State of New York, have invented a new and improved Mode of Attaching Handles to Cross-cut Saws, of which the following is a specification.

My invention is designed to improve and simplify the one patented to me June 22, 1869; and

It consists of a handle and its attendant devices, whereby the handle is firmly attached to the saw.

To enable those skilled in the art to make and use my invention, I will describe its construction and operation.

In the drawing—

Figure 1 is a longitudinal sectional view of the handle, and the devices by which the handle is attached to the saw;

Figure 2 represents a section of a saw with the handle attached; and

Figure 3 is a side and top view of the notched nut or block.

A represents an ordinary wooden handle, having on its lower end a ferrule, C, and also a hole, *a*, running longitudinally to about two-thirds, more or less, of its length, to admit the shank *a'* of screw-bolt B, and having a mortise in its side, to admit a nut, *a''*, that receives the screw part of the shank *a'*.

B is a screw-bolt, having a slot, *b*, that receives the end of the saw.

B' represents a small portion of a cross-cut saw.

C is an ordinary ferrule put on the end of the handle A, to secure it from splitting.

D is a notched clamp-nut or block, having a hole in its center through which screw-bolt B freely passes.

This nut is interposed between the ferrule C on handle A and the saw in slot *b* of the screw-bolt B, and is free to turn or slide thereon.

On the face, or that part of the nut next the saw, are cut notches, *d*, opposite each other, on radial lines, which fit closely upon the back the saw, of whatever shape or taper there may be to the saw.

*e* is a wooden plug, which is fitted in the mortise in the side of handle A, and, when dipped in glue and driven in upon nut *a''*, becomes fast to the handle A, and, when shaved down to be smooth with the

handle, it is not perceptible to the touch, and serves to keep nut *a''* firm and steady in position.

By turning handle A from left to right the screw-bolt B is drawn further into the handle, and the length of slot *b* in screw-bolt B is caused to be shortened, thereby accommodating itself to the width of the saw-blade, whatever that may be, while the process of turning the handle A in the opposite direction, or from right to left, causes the saw to be released, and the handle A can be removed from the saw-blade.

When the shank of the screw-bolt is passed through the clamp-nut or block D, and screwed into nut *a''*, and the clamp-nut D turned so that the notches on its face will be coincident with the edge of the back of the saw which is inserted in the slot *b* of the screw-bolt B, and the notches in the clamp-nut D embrace the back of the saw, as seen in fig. 2, and the handle A then turned from left to right and down upon the shank *a'* of screw-bolt B, the clamp-nut D is forced upon the saw, and the handle is firmly and securely fixed to the saw, and cannot be removed therefrom until the handle is turned in the opposite direction, or from right to left, when it is released and can easily be taken from the saw.

The construction and arrangement of devices, as I have described, makes an attachment that is cheap, easily operated, and that can be depended upon for security as well as durability, and not likely to get out of order, and will admit of considerable variation in the width of saw-blades.

I am aware that slotted screw-shanks, inserted in handles, have been used for attaching handles to saws; such slotted shanks or hooks I do not claim; nor do I claim the nut inserted in the handle, or the ferrule on the same; but

Having described my invention,

What I claim, and desire to secure by Letters Patent, as an improvement on my former patent, is—

The combination of the handle A, slotted screw-bolt B, ferrule C, notched clamp-nut D, and nut *a''*, when constructed and arranged in the manner and for the purpose described.

Witnesses:

WM. CLEMSON.

ELISHA P. WHEELER,  
G. R. KIMBALL.