

W. CLEMSON.

Improvement in Attaching Handles to Cross-Cut Saws.

No. 129,102.

Patented July 16, 1872.

Fig. 1.

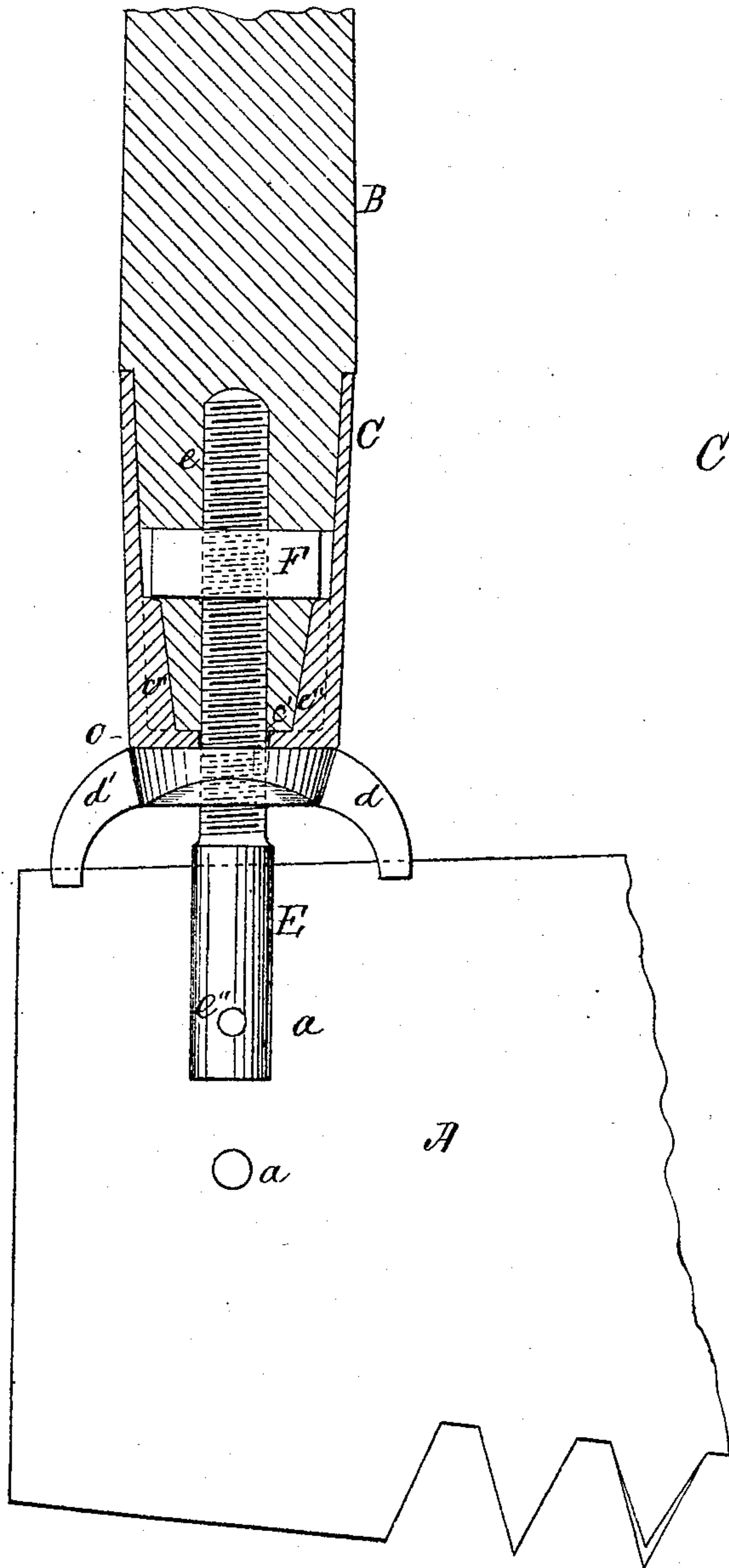


Fig. 2.

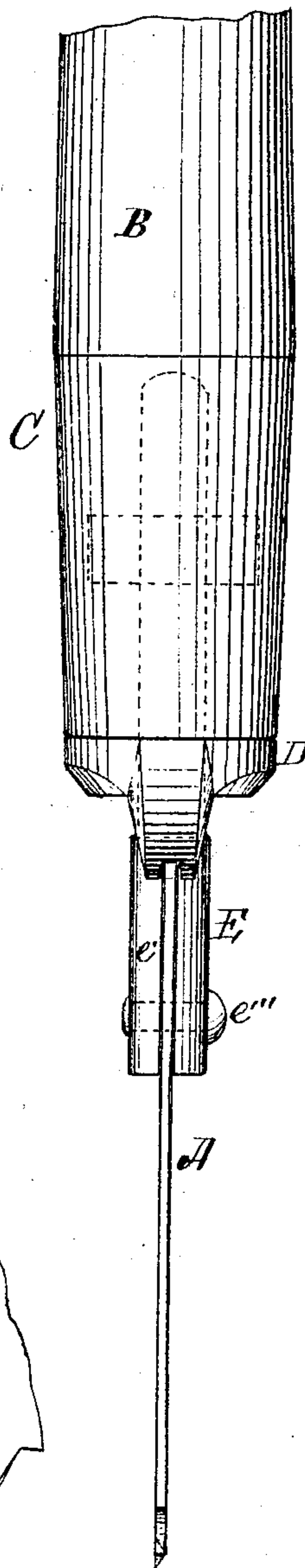
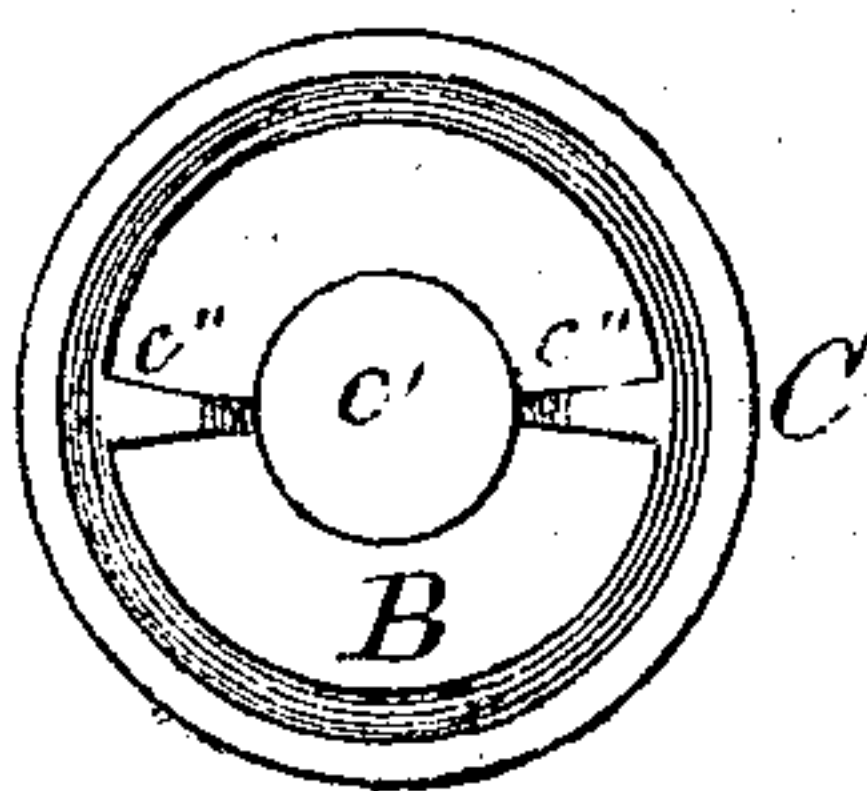


Fig. 3.



Witnesses:

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# UNITED STATES PATENT OFFICE.

WILLIAM CLEMON, OF MIDDLETOWN, NEW YORK.

## IMPROVEMENT IN ATTACHING HANDLES TO CROSS-CUT SAWS.

Specification forming part of Letters Patent No. 129,102, dated July 16, 1872.

I, WILLIAM CLEMON, of Middletown, in the county of Orange, in the State of New York, have invented certain Improvements in the Mode of Attaching Handles to Cross-cut Saws, of which the following is a specification:

The object of this invention is to furnish a safe, convenient, and strong handle—one that is easily and securely attached to a saw, and can be easily and quickly detached therefrom; and it consists in the construction of some of the parts, and their combination with other parts, which forms the improved mode of attaching the handle to the saw.

In the drawing, Figure 1 represents a section of a cross-cut saw-plate, with a section of a handle and the manner of attachment. Fig. 2 is an edge view of the same; and Fig. 3 is a top view of the ferrule and its inwardly-projecting ribs to prevent the handle from turning in the ferrule.

A represents a portion of a saw-blade, to which the handle is attached. *aa* are the ordinary holes made by saw manufacturers to rivet the common thimble to. B is the wooden handle, turned to receive the metal ferrule at its bottom end, a longitudinal hole bored centrally in its lower end, and a transverse hole near its lower end to receive a screw-nut. C is a tapering metal ferrule or thimble on the lower end of the handle, has a metal bottom, *c*, with the hole *c'* in its center and inwardly-projecting ribs *c'' c''* on opposite sides, which fit in corresponding grooves in the opposite sides of the handle B, while the lower end of the handle rests firmly upon the bottom of the ferrule C. D is the bearing-block or nut, having a hole through it vertically to receive the screw-bolt and two arms, *d* and *d'*, extending outward and downward on opposite sides; arm *d'* is a little longer than *d* to compensate for the taper of the back of the saw and cause the handle to stand vertical when in position. Both arms on their bottom extremities are notched or grooved to receive the saw-blade and prevent any turning of the bearing-block

when the handle is being screwed down upon the saw. This block bears firmly upon the bottom *c* of the ferrule C. E is a slotted screw-bolt, having screw *e* on its upper end and slot *e'* on its lower end to receive the saw-blade A, and has a transverse hole, *e''*, through it, near its lower end, in which bolt *e'''* is put, passing through one of the holes *a* in the saw-blade. F is a screw-nut in the handle B, and so placed as to be covered by the ferrule C and bear upon the upper ends of ribs *c'' c''* when it is in place, and be coincident with the hole in the handle to receive the screw-bolt E. By having the nut F rest upon the ribs *c'' c''* it prevents the wood below the nut in the ferrule C from being crushed. By this construction of ferrule the handle cannot turn within it, and at the same time the ferrule is easily removed from the handle and the screw-nut is so placed in the handle as to be covered by the ferrule, and no filling is needed in the mortise to cover the nut, as is necessary where the nut is placed above the ferrule; nor does it need any fastening to keep the ferrule upon the handle, for when the parts are all in place and the handle screwed down it compacts all the parts together, making a strong and durable attachment.

I am aware of the patent No. 104,095, dated June 14, 1870, and disclaim the construction therein shown and described.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The tapering saw-handle ferrule C, having the bottom *c* and inwardly-projecting ribs *c'' c''* and hole *c'*, in combination with the handle B, substantially as shown and described.

2. The combination of the handle B, ferrule C, block D, screw-bolt E, and nut F with the saw-plate A, all constructed to operate substantially as described.

WM. CLEMON.

Witnesses:

CHAS. I. HUMPHREY,  
ELISHA P. WHEELER.