(No Model.)

M. E. TRUE. CROSSCUT SAW HANDLE.

Patented Feb. 4, 1890. No. 420,480.  $\overline{B}$ Witnesses Ballon &W. Main

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## UNITED STATES PATENT OFFICE.

MOSES E. TRUE, OF BATAVIA, NEW YORK.

## CROSSCUT-SAW HANDLE.

SPECIFICATION forming part of Letters Patent No. 420,480, dated February 4, 1890.

Application filed May 10, 1889. Serial No. 310,325. (No model.)

To all whom it may concern:

Be it known that I, Moses E. True, a citizen of the United States, residing at Batavia, in the county of Genesee and State of New York, have invented a new and useful Improvement in Crosscut-Saw Handles, of which

the following is a specification.

My invention relates to improvements in handles adapted for use upon crosscut-saw blades, capable of being readily attached to or detached from the blade; and the object of the improvement is to provide a cheaply-made and efficient handle having a screw-clamping device made to coact with a screw-nut secured within the wooden handle in such a manner that the full strength of the timber may be preserved, as well as perfect adjustability attained, which is accomplished by the mechanism illustrated in the accompanying draw-20 ings, in which—

Figure 1 is a perspective view of the handle, partly in cross-section, showing the parts in working position. Fig. 2 is a perspective view of the flanged securing-nut detached 25 and with the nut-retaining pins in position. Fig. 3 is a plan view of the saw-clamping bolt, showing the lateral strengthening-ribs upon each side of the longitudinal slot within which the saw-blade enters. Fig. 4 is an end 30 view of the lower part of the handle, showing the method of inserting the flanged nut within the handle; and Fig. 5 is a detached view of the ferrule, provided with inwardly-extending prongs for securing the same to the 15 handle.

Similar letters refer to similar parts throughout the several views.

The wood handle A is provided at its lower end with a hole a of sufficient depth to retent necessary for its accommodation to the different widths of saw-blades, as will be here-

inafter explained.

C is the ferrule upon the lower end of the handle, (to prevent splitting of the said handle,) having upon its free edge a series of spurs c, which reach within the hole of the washer D sufficiently far to permit of an outward bend, and thereby loosely clinch over to the rib d of the washer, thus allowing the handle to turn upon the washer. This washer

the ears having notches  $d^2$ , within which the back of the saw-blade enters, thus preventing the washer from turning when clamping 55 the handle to the saw.

c' are prongs upon the ferrule C, that stand in a reverse direction from the spurs c, which enter within grooves, (presently explained,) by which the washer is prevented from turning upon the wood handle, and securing the

same to the handle.

E is a screw-nut having across its periphery and upon the line of the axial center flanges e, which flanges are provided with holes e', 65 through which holes pass the securing-pins e2, for fastening the nut to the handle. Within the hole a are grooves a', two in number, extending radially from the axial center of the hole, and are made to reach some little dis- 70 tance longitudinally of the handle center, and are of sufficient dimensions to closely receive the prongs e' of the washer, as well as the flanges of the nut E, which nut is round and made to tightly fit into the hole 75 within which it is driven. This hole extends about one-half the length of the handle, and the nut is located at about half the depth of the hole after the nut is seated. Pin-holes are drilled part way through the handle at the 80 point of intersection with the nut-flange holes, and into these holes are driven the metal pins  $e^2$ , the pins passing through the nut-flange and far enough past the same to enter within the wood beyond, thereby strongly securing 85 the nut to the handle and preventing the removal of the nut as the handle is tightened upon the saw-blade by means of the screwthreaded tang upon the clamp-bolt, the slot of which allows the clamp to be passed over 90 the end of the saw-blade, while the solid free end of the clamp engages with a notch made in the tooth edge of the saw, so that as the threaded tang of the clamp-bolt is screwed into the nut within the handle the clamp car- 95 rying the saw is drawn to the handle and the parts will be firmly united each with the other. To disengage the handle from the saw, a reverse movement is given the handle, thereby allowing the same to be slipped off 100 over the end of the blade.

the rib a of the washer, thus allowing the handle to turn upon the washer. This washer given the clamp-bolt B with a small amount is provided with ears d' upon its periphery, of metal, ribs f are made to extend longi-

tudinally of the slotted portion of the bolt and upon either side thereof, so that quite a material reduction is made in the heft of the bolt without sacrificing in any manner the strength thereof.

Having now described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. The combination, with a clamp-bolt, of the wooden handle having the grooved hole in the lower end thereof, the flanged nut adapted for insertion in the grooved hole, the nut-retaining pins, the ferrule having the prongs c' entering within the handle-groove, and the notched washer swiveled thereto, sub-

stantially as described, and for the purpose set forth.

2. As a new article of manufacture, the ferrule adapted for use upon the lower end of the wood handle, having the washer swiveled 20 thereto and provided with the inwardly-extending prongs c', arranged for insertion within the longitudinal grooves a' of the handle for securing the parts each to the other, substantially as described, and for the purpose 25 set forth.

MOSES E. TRUE.

Witnesses:

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