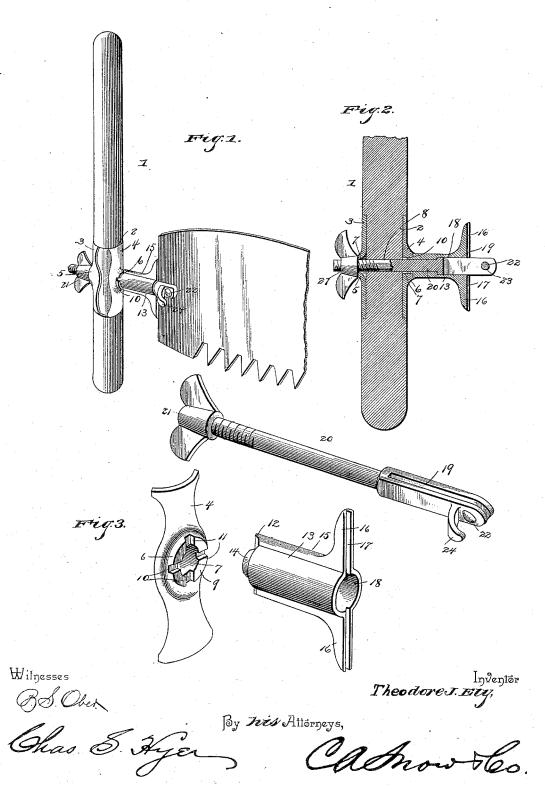
## T. J. ELY. HANDLE FOR CROSSCUT SAWS.

No. 493,823.

Patented Mar. 21, 1893.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C

## UNITED STATES PATENT OFFICE.

THEODORE JULIUS ELY, OF GIRARD, PENNSYLVANIA.

## HANDLE FOR CROSSCUT-SAWS.

SPECIFICATION forming part of Letters Patent No. 493,823, dated March 21, 1893.

Application filed May 31, 1892. Serial No. 435,044. (No model.)

To all whom it may concern:

Be it known that I, THEODORE JULIUS ELY, a citizen of the United States, residing at Girard, in the county of Erie and State of 5 Pennsylvania, have invented a new and useful Handle for Crosscut-Saws, of which the following is a specification.

This invention relates to saws, and has special reference to means for attaching handles 10 to cross-cut saws, as will be more fully here-

inafter described and claimed.

The object of this invention is to provide a cheap, simple and effective means of attaching a handle to a saw of the nature set forth, 15 which can be easily and quickly adjusted either to arrange the handle in line with the saw blade or at a right angle thereto.

In the drawings:—Figure 1 is a perspective view of a portion of a saw blade showing the 20 improvement in connection therewith. Fig. 2 is a central longitudinal section of the improvement. Fig. 3 is a perspective view of the parts of the device detached.

Similar numerals of reference are used to 25 indicate corresponding parts in the several

figures.

Referring to the drawings, the numeral 1 designates the handle which is formed with a circumferential groove 2, and as the said han-3c dle is preferably formed of wood, said groove may be readily turned therein. Two plates 3 and 4 of concavo-convex form are placed against the handle in vertical position and within the groove 2 thereof, and have central enlargements 5 and 6 with openings 7 therein adapted to align with an opening Sextending transversely through the handle in a horizontal plane and centrally of the said groove 2. The enlargement 6 of the plate 4 is formed 40 with a flat rim 9 surrounding the opening 7 therein and having diametrically opposed grooves 10 extending through the same and formed with beveled walls 11. The said grooves are arranged in vertical and hori-45 zontal planes, and are adapted to receive a pair of oppositely situated beveled lugs 12 on the end of a tubular post 13 and which is also provided with an extended sleeve 14 adjacent to said lugs to fit into the hole or open-50 ing 7 of the said plate 4 to hold the said post in position. The lugs are extended over the is claimed as new islength of the post in the form of ribs which I

strengthen the same as at 15, and the opposite end of said post is formed with arms 16 projecting therefrom at right angles and con- 55 structed with a V-shaped groove 17 in the outer face of each adapted to fit over the end of the saw blade. The said groove 17 is adapted to extend across the outer end of the post and the arms in order to provide a snug 60 bearing for the end of the saw blade. The hole extending through the post is enlarged at the outer end as at 18 to receive the en-larged bifurcated end 19 of a clamping rod or bolt 20 which extends through the said post, 65 the openings 7 in the plates 3 and 4, and the opening 8 in the handle 1, and receives a thumb or clamping nut 21 on the outer screw threaded end thereof and which bears against the plate 3. The end of the saw blade is em- 70 braced by the bifurcated end of the rod or bolt 20 and is secured therein by a headed bolt 22 extending through openings 23 in the said enlarged end 18 of the rod or bolt in a loose manner. A thin curved lip 24 projects 75 over the head of the bolt 22 and prevents disengagement of the same from connection with the said enlarged end of the rod or bolt. The said lip is integrally formed with the rod or bolt as fully shown, and is bent over the head 80 of the bolt 22 after the latter is mounted in

To operate the device, the end of the saw blade is placed in the enlarged bifurcated end of the rod or bolt, the bolt 22 having 85 been first withdrawn to permit said insertion, and afterward dropped through the opening in the said saw blade. The nut 21 is then tightened, and all the parts are held snugly together. In reversing the handle, the said 90 nut is loosened, the post 13 is turned to bring the lugs thereof in opposite positions and in engagement with oppositely situated grooves in a horizontal plane, if the adjustment be from a vertical to a horizontal, and the said 95 nut 21 again tightened to bring the parts in proper engagement.

The advantage of the construction herein set forth will be readily apparent to those skilled in the art, and need not be further 100 enlarged upon herein.

Having thus described the invention, what

In a saw-handle-attaching device, the com-

bination of a handle having a circumferential groove therein and an opening extending transversely therethrough, two plates located opposite to each other in said groove and ar-5 ranged in vertical planes, said plates having openings therein aligning with the opening in the handle and surrounded by enlargements one of which is formed with diametrically-opposed notches and a flat rim, a cylin-10 drical post engaging one of said plates and having a pair of aligned arms with grooves therein that extend through the thickness of said post and integrally formed with lugs that extend lengthwise of the post and pro-15 ject slightly beyond the opposite end thereof in the form of beveled lugs that engage the notches of one of the aforesaid plates, the end |

of the post opposite to that on which the arms are formed having a sleeve of reduced diameter to fit in the opening of the notched plate, 20 and a clamping rod or bolt extending through the said post and plates together with the handle and provided with a bifurcated front end embracing and connected to the sawblade and having a clamping-nut on the rear 25 end, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

THEODORE JULIUS ELY.

Witnesses: CHAS. G. WOOLSEY, CALVIN J. HINDS.