(No Model.)

J. OHLEN.

SAW HANDLE.

No. 262,821. Patented Aug. 15, 1882.

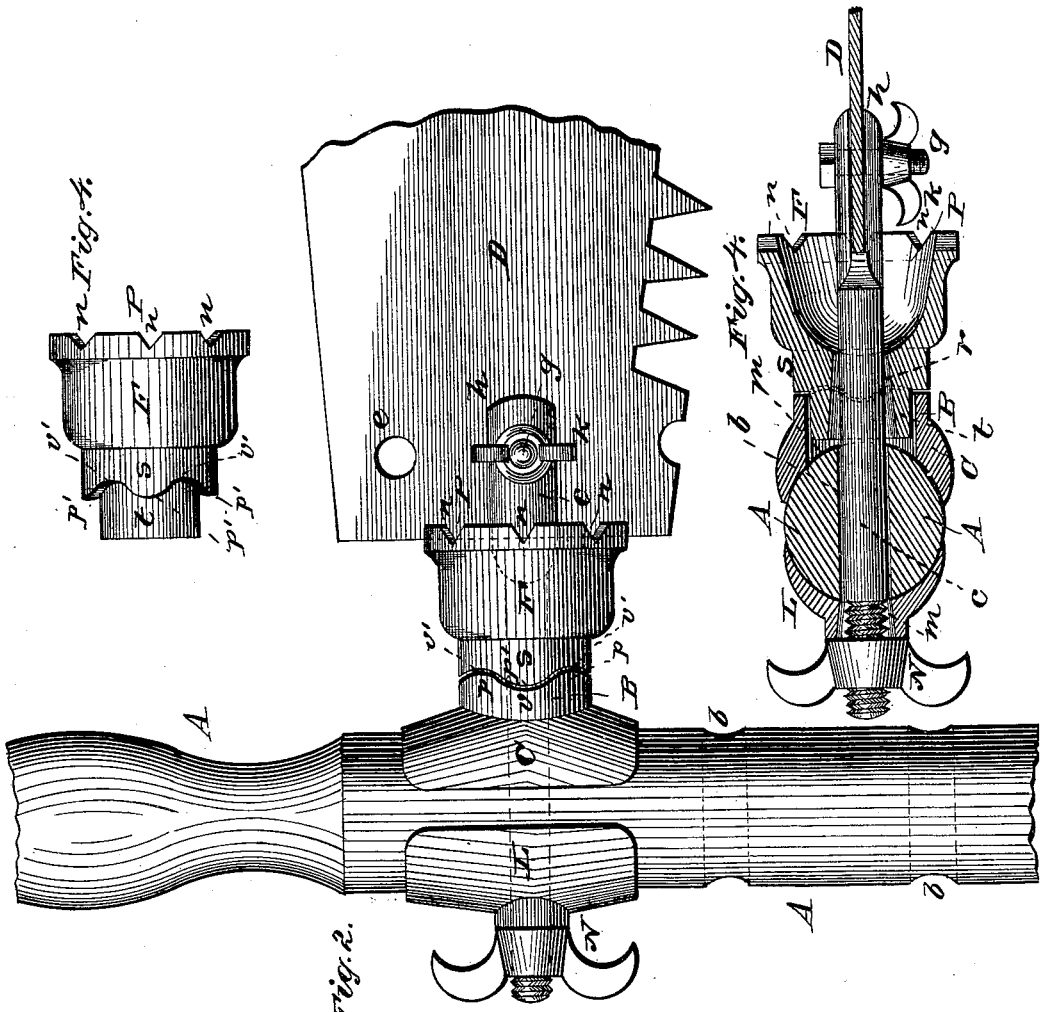

Fig. 2.

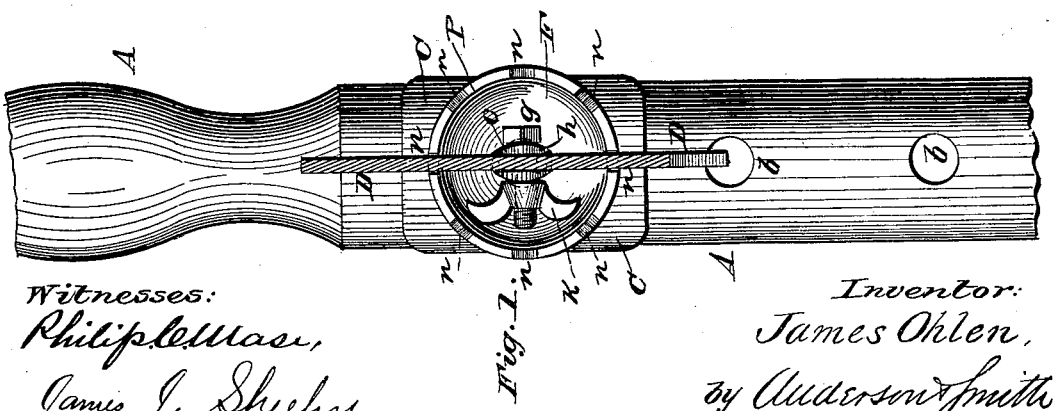

Fig. 1.

Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES OHLEN, OF COLUMBUS, OHIO.

SAW-HANDLE.

SPECIFICATION forming part of Letters Patent No. 262,821, dated August 15, 1882.

Application filed June 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES OHLEN, a citizen of the United States, and a resident of Columbus, in in the county of Franklin and State of Ohio, have invented a new and valuable Improvement in Saw-Handles; and I do hereby declare that the following is a full, clear, and exact descrption of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a face view of my saw-handle, and Fig 2 is a side view of the same. Fig. 3 is a section, Fig. 4 a detail.

This invention has relation to handle-attachments for crosscut-saws; and it consists in the construction and novel arrangement of the cup-shaped ferrule having diametrically-opposed notches in its outer rim, a central opening and a circular bearing extending around the inner end of the same, and around said bearing an annular shoulder consisting of a series of rounded teeth or projections and intermediate depressions, and in combination therewith a threaded saw-tang, saw-blade, perforated handle, thumb-nut, outer clamp, and inner clamp having a circular inside bearing and a toothed or wave-like edge, all as hereinafter set forth.

The object of this invention is to provide a handle attachment which can be readily applied to the blade, and which is easily adjusted to hold the blade at the desired angular, vertical, or horizontal position.

In the accompanying drawings, the letter A designates the saw-handle, which is usually provided with a series of perforations, *b*, through one of which the tang *c* of the saw-blade D is designed to pass. The saw is also usually provided with two or more perforations, *e*, arranged one over the other, and designed to receive the short bolt *g*, which passes through the forked head *h* of the tang *c*, and, with the thumb-nut *k*, serves to secure it to the blade.

L represents the outer clamp-plate and C the inner clamp-plate. These are placed on each side of the handle, opposite each other, and have their middle openings, *m*, arranged to register with one of the perforations *b* of the handle, so that the tang can be inserted and the thumb-nut N applied to its threaded end. The inner clamp-plate, C, is formed with a raised bearing, B, the bearing edge of which consists of alternate rounded projections *p* and depressions *v*. This raised bearing is circular in form and extends around the middle opening, *m*, of the clamp-plate.

F indicates the ferrule, which is cup-shaped, having a flaring outward portion, P, the rim of which is provided with notches *n*, diametrically opposite to each other. A central opening, *r*, is made through the base or inner end of the ferrule for the passage of the tang, and a cylindrical bearing, *t*, is formed around the inner end of this opening, which is designed to fit neatly within the raised bearing B of the clamp C, the circular inner wall of which permits the ferrule to be easily turned in making an adjustment. Around the ferrule F is an annular shoulder, *s*, arranged at the outer end of the cylindrical bearing *t*, and formed with alternate rounded projections *p'* and depressions *v'*, similar in form to those of the bearing B of the inner clamp-plate, and designed to engage the same when the ferrule is in position between the clamp-plate C and the saw-blade. The depressions and projections of the clamp C are designed to be so arranged with reference to those of the ferrule and the latter with reference to the saw-notches of the outer rim of said ferrule that perfect horizontal and vertical adjustments can be easily made. The saw-notches in the ferrule for the inclined position of the blade can be arranged to suit the requirement of the operator; but for ordinary use notches arranged to give the blade an angular position of forty-five degrees will be found sufficient. The threaded tang and thumb-nut serve to hold the end of the saw-blade in engagement with the rim of the ferrule, the clamp-plates against the saw-handle, and the ferrule against the inner clamp-plate. In adjusting the saw-blade to a new position the thumb-nut on the tang is loosened sufficiently to allow the projections *p'* of the ferrule to clear the projections *p* of the clamp-plate, when the ferrule can be easily turned on its bearing *t*; or, the thumb-nut N being loos-

ened, the saw-blade can be detached from the notches in the rim of the ferrule with which it is engaged, and adjusted in other notches thereof, according to requirement. In this operation the ferrule is prevented from becoming displaced by the bearing *t*.

Instead of using the rounded form of projections on the ferrule and clamp-plate, angular teeth may be employed; but the rounded projections and depressions are preferred, being stronger and less liable to injury.

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

1. In a handle attachment for crosscut-saws, the cup-shaped ferrule F, having diametrically-opposed notches *n* in its outer rim, a central opening, *r*, a circular bearing, *t*, extending around the inner end of the same, and an annular shoulder, *s*, consisting of alternate projections and depressions, substantially as specified.

2. In a handle attachment for crosscut-saws, the combination, with the perforated handle and blade, of the threaded tang *c*, thumb-nut N, outer clamp-plate, L, and inner clamp-plate, C, having a toothed bearing, B, of the notched ferrule F, having the inner circular bearing, *t*, and toothed shoulder *s*, substantially as specified.

3. The handle attachment for crosscut-saws, consisting of the threaded tang *c*, outer clamp-plate, L, thumb-nut N, inner clamp-plate, C, having the toothed bearing B, and the ferrule F, having the rim-notches *n* and the inner toothed bearing, *s*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JAMES OHLEN.

Witnesses:
M. D. PHILLIPS,
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