P. PAINTER.

Wood-Saws.

No. 148,239. Patented March 3, 1874.

Fig. 1.

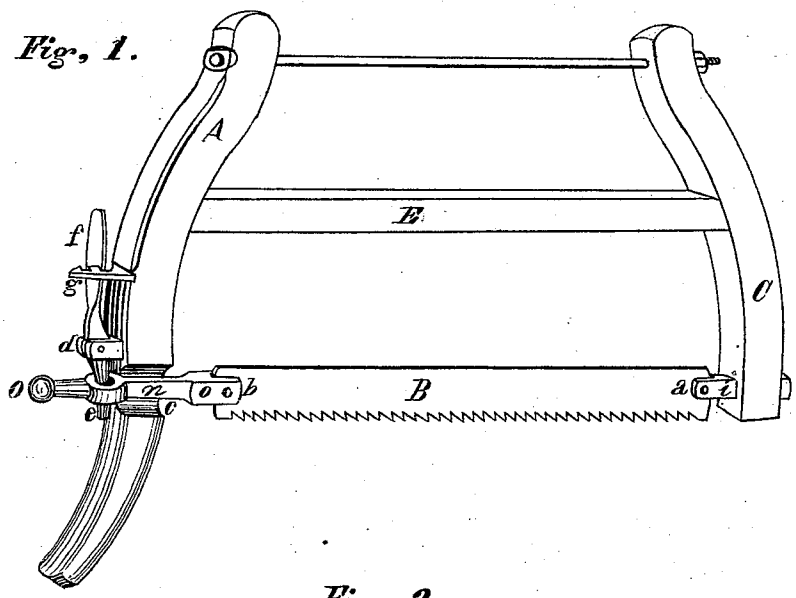
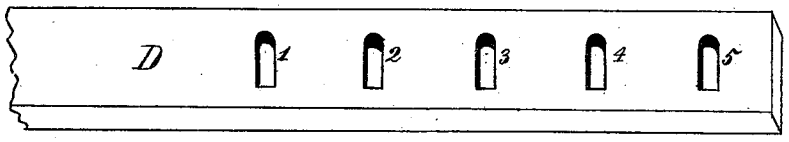


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

PETER PAINTER, OF DERRY STATION, PENNSYLVANIA.

IMPROVEMENT IN WOOD-SAWS.

Specification forming part of Letters Patent No. **148,239**, dated March 3, 1874; application filed February 13, 1874.

To all whom it may concern:

Be it known that I, PETER PAINTER, of Derry Station, Dauphin county, Pennsylvania, have invented a new and useful Improvement in Wood-Saws; and I hereby declare the following to be a full, clear, and exact description of the same, reference being made to the accompanying drawings and the letters of reference marked thereon.

The nature of my invention consists in combining certain simple mechanism with the frame and blade of an ordinary wood-saw, so as to permit the blade to be readily disengaged at one of its ends from the frame or handle, and be instantly replaced and strained to a proper degree of tension when required, substantially as is hereinafter shown, and for the purpose specified.

The object or purpose of my invention is to provide a simple convenient attachment to the ordinary wood-saw, that will permit it to be used as a whip or scroll saw for the rapid and cheap mortising of fence-posts.

In the drawings, Figure 1 represents a perspective view of the improved wood-saw. Fig. 2 shows a post mortised by my method, and with the device above mentioned.

For the benefit of and to enable those skilled in the art to construct the same, I will now proceed to describe my invention.

In Fig. 1, A represents the frame of the wood-saw. As will be noticed, it does not differ materially from the ordinary wood-saw, being made of hard wood and given the shape substantially as shown. The blade B has the end (shown at *a*) fastened to the frame-piece C by means of the slotted piece of metal *i*, to which it is secured by a rivet, as shown, said piece *i* passing through the stock C, and rigidly attached thereto by a nut or other proper method. To the other end of the blade B the slotted piece *o o* is attached by a rivet at *b*. As will be seen upon inspection of drawing, said piece *o o* is lengthened at *n*, so as to extend across the frame from *c* to *e*. An enlargement or boss is formed upon it at *e*. This rounded enlargement is perforated with a proper-sized hole to permit the easy insertion of the rounded lower projecting end of the vibrating lever *f*. Said lever is pivoted in the slotted projecting piece *d*, so as to vibrate freely. At a proper distance above the piece *d*, upon the outer edge of the frame A, the notched dog-plate *g* is firmly fastened. Said notches are for the reception and retention of the lever *f*, when required. The outer end of the rounded piece *o o* projects so as to form a handle, as shown. The frame A is cut away or reduced, as is shown at *c*, to permit the saw-blade B to be properly strained in a line with the center bar E, the portion *n* of the clip *o o* lying in the notch formed in the frame-piece A.

As will be observed upon inspection of Fig. 2, the posts are mortised across the face of the stuff, instead of being formed longitudinally in the same. This method of construction permits the use of my improved saw to cut out the mortises.

Its manner of operation is as follows: The posts are bored with a single row of auger-holes near one edge, but so as to allow enough stuff to stand to secure strength to the post. These holes are spaced for the proper width between the rails, one hole being sufficient for a mortise. The saw is disconnected from the frame at the end *o* by unlatching the lever *f* from the dog-plate *g*. This will permit the lever *f* to be vibrated so as to throw its lower end *e* in, and thus allow the handle *o* to be pushed down off of the end *e*. Said handled end *o* is now inserted in the auger-hole in the post, and a transverse cut made, of sufficient length to form a mortise of suitable length. Another saw-cut is now made from the lower side of the auger-hole, parallel to the first, and of the same length. The saw is now removed and inserted in another hole, and the operation is thus repeated.

It is evident that the saw must be strained to a proper degree of tension after it is inserted in the auger-hole. This is done by passing the handle *o* over the end *e* of the lever *f;* then by pressing said lever in toward the stock A and fastening it in a notch in the dog-plate *g*, as is shown in Fig. 1.

After the sawing operation is done, the wood that remains between the saw-kerfs is removed by a chisel and mallet.

The operation of mortising posts is greatly facilitated and the labor reduced by the use of my improved saw for the purpose.

Having given a full, clear, and exact description of my invention, and described its manner of operation, what I claim as new, and desire to secure by Letters Patent of the United States, is—

The combination of the frame A, blade B, clip *i*, perforated handle-clip *o o*, vibrating lever *f*, provided with its projecting end *e*, and locking dog-plate *g*, substantially as shown, and for the purpose specified.

PETER PAINTER. [L. S.]

Witnesses:

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