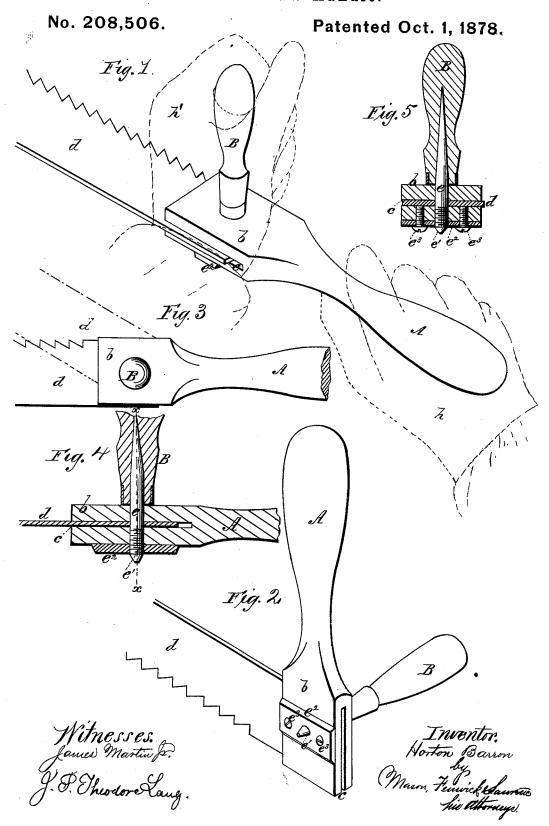
H. BARRON. Cross-Cut Saw-Handle.



## UNITED STATES PATENT OFFICE.

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## IMPROVEMENT IN CROSSCUT-SAW HANDLES.

Specification forming part of Letters Patent No. 208,506, dated October 1, 1878; application filed April 15, 1878.

To all whom it may concern:

Be it known that I, Horton Barron, of Eau Claire, in the county of Eau Claire and State of Wisconsin, have invented a new and Improved Handle for Crosscut-Saws; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification, in which-

Figure 1 is a perspective view of my improved handle, said view showing the position of the same when grasped by the hands of the operator during the act of sawing down a tree. Fig. 2 is a perspective view of my improved handle, showing the main horizontal handle A of Fig. 1 turned up into position at right angles with the saw-blade d when the sawblade is operated for cutting a vertical kerf or for cutting up fallen timber. Fig. 3 is a plan view of my improved handle, as shown in Fig. 1, illustrating by dotted lines certain adjustments of the saw-blade which can be made with reference to the handle when desired. Fig. 4 is a sectional view, showing one end of the saw-blade and the mode of securing each end to a handle. Fig. 5 is a sectional view in the line x x of Fig. 4.

One object of my invention is to provide the means whereby the binding or buckling of a crosscut-saw may be prevented when in use in a horizontal position in cutting down timber, and thus secure ease of operation and freedom from unnecessary fatigue to the op-

Another object is to provide the means whereby an adjustment of the pitch of the saw with reference to the handle may be readily effected to suit the operator, according to the circumstances incident to the use of this class of saws.

Another object is to provide a crosscut-saw with such a handle that the same may be well adapted for use, whether the saw be operated to cut a vertical or a horizontal kerf.

In the drawings, A indicates a main handle, constructed with a widened and flattened portion, b, with a kerf or slot, c, cut therein for the reception of the saw-blade d, as shown in the figures. One end of the saw-blade is inserted in the kerf c, and is firmly clamped therein by means of an upright small handle, I position is inconvenient and, so to speak, un-

B, provided with a screw-pintle, e, which is made to pass through the flattened portion b of the handle A and a perforation in the end of the saw-blade, which is within the kerf or slot c. This pintle e, at its outer end  $e^1$ , is screw-threaded in order that it may be screwed into a metal screw-plate,  $e^2$ , which is secured by screws  $e^3$ , or in any other proper manner, to the under side of the flattened portion b of the handle A. It will thus be seen that when the small handle B is turned to the right the saw-blade may be firmly clamped and held in a fixed position in the slot c, and that by reversing this movement of the handle B the saw-blade may be released, and thereafter reclamped either in the same position or at any desired angle to the handle A, as indicated in dotted lines in Fig. 3.

In the operation of the saw, supposing it to be used for sawing down timber, the movements of the saw can be so governed by the right hand of the operator, as at h, in conjunction with the left hand of the operator, as at h', as to maintain an exact register of the saw-blade with the kerf being cut in a standing tree, and thus prevent the binding or bending of the saw-blade in the kerf during the act of sawing. In other words, for ex-ample, as the saw is forced forward and pulled back by the handle B in the act of sawing a horizontal kerf, the operator can so govern the blade by the handle A as to compel the saw to maintain an exact level position with the kerf.

Under many circumstances it is desirable to operate the saw at an angle varying from that shown in full lines in the figures, and for this reason I provide the means whereby such adjustment can readily be effected to suit the convenience of the operator.

A saw provided with my improved handle can also be used for cutting up timber after it has been cut down, in which case the handle A would be adjusted to the upright position

shown in Fig. 2.

Ordinarily crosscut-saws have but one handle, and this at a right angle with the back edge of the saw-blade, so that when the saw is used to cut down the timber the handle is made to assume a horizontal position, which natural; but by my invention an upright handle is provided for thrusting and pulling the saw-blade, whether the blade be used for cutting either a vertical or a horizontal kerf.

Having described my invention, what I

claim is—

A handle, A, having a kerf or slot, e, to receive the saw-blade, in combination with a clamping-handle, B, and plate  $e^2$ , substantially as and for the purpose described.

Witness my hand, in the matter of my application for a patent for an improved handle for crosscut-saws, this 30th day of March, A. D. 1878.

HORTON BARRON.

Witnesses:

FRANK JONES, F. E. SNODGRASS.