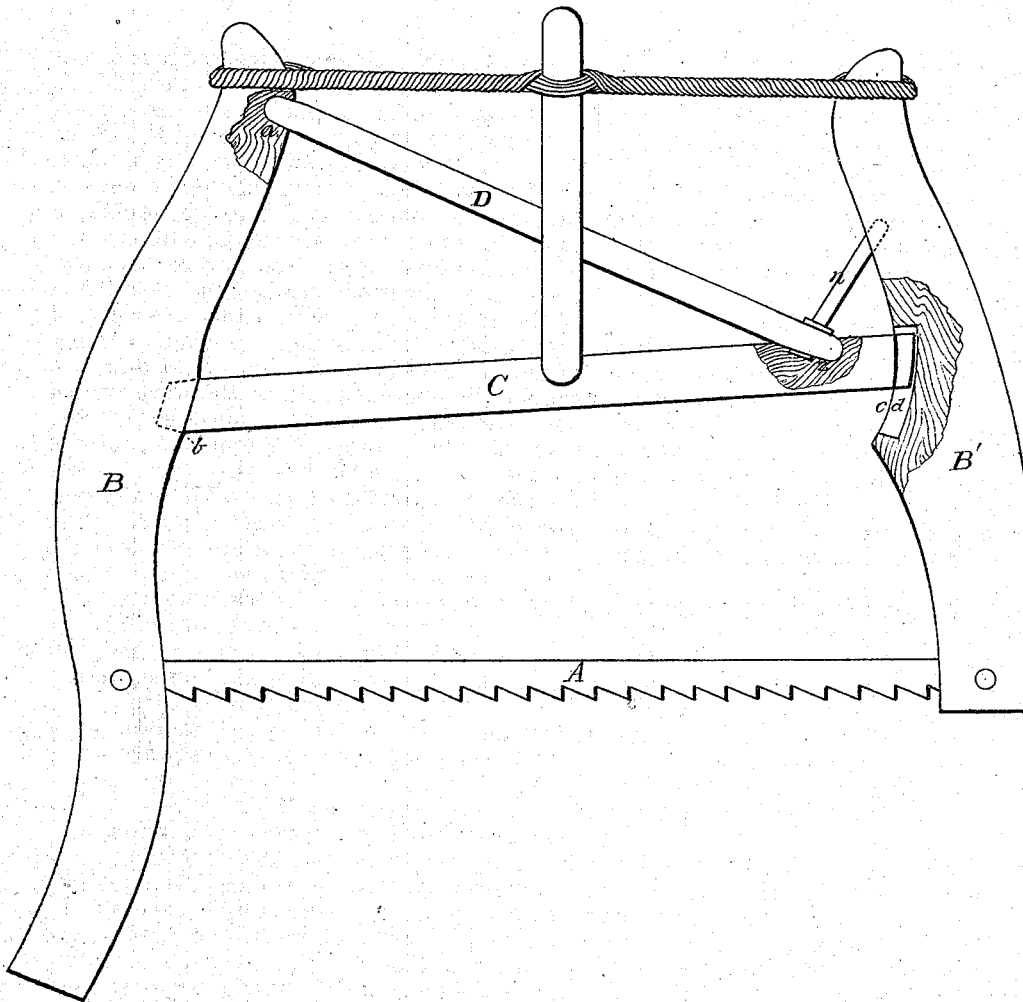


W. HANKIN.

Improvement in Saw-Frames.

No. 129,731.

Patented July 23, 1872.



WITNESSES.

E. A. Bates

Geo. Elpham.

INVENTOR

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Atty

UNITED STATES PATENT OFFICE.

WILLIAM HANKIN, OF HAWLEY, PENNSYLVANIA.

IMPROVEMENT IN SAW-FRAMES.

Specification forming part of Letters Patent No. 129,731, dated July 23, 1872.

To all whom it may concern:

Be it known that I, WILLIAM HANKIN, of Hawley, in the county of Wayne and State of Pennsylvania, have invented a new and valuable Improvement in Saw-Frames; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a side view of my invention, partly sectional.

This invention has relation to the construction of buck-saw frames; and it consists in providing such a frame with an oblique adjustable cross-bar and oblique brace running from the front end of said cross-bar to the upper part of the long side bar, where the pressure of the left hand comes in sawing, as herein-after set forth.

In the accompanying drawing, the letter A designates the saw-blade. B indicates the long side bar or handle of the frame, mortised near its upper end at *a*, and toward the saw-blade at *b*, to receive, respectively, the ends of the brace and cross-bar. B' represents the short side bar, having, at about its middle portion, a curved shoulder, *c*, which is provided with a long mortise, *d*, to receive the tenoned front end of the cross-bar. The lower end of the mortise *c* is about even with the lower end of the opposite mortise in the handle; but its upper end extends some distance above the upper end of the said opposite mortise. C designates the cross-bar, having one of its ends inserted in the mortise in the handle and the other inserted in the long mortise of the short side bar. When pressure is applied to the upper ends of the side bars the tendency of the front end of the cross-bar, which is provided with convex shoulders on each side of the tenon, is to ride up on the concave shoulder *c* of the short side bars, thus throwing the cross-bar into an oblique position, with its front end further from the blade than its rear end.

D represents the oblique brace, the rear end of which is seated in the upper mortise of the handle, and the forward end of which is stepped in a seat, *z*, in the upper surface of the cross-bar, near its forward end. The torsion upon the twisted cords, drawing the upper ends of the side bars together, will, through the oblique brace D, tend to force the movable front tenon of the cross-bar downward toward the saw-blade, thus pressing outward the rear tenon of the cross-bar, and with it the lower end of the handle, thus straining the blade. In my frame the cross-bar and brace are arranged to sustain the oblique strain of the work, which has a tendency to draw the lower end of the short side bar toward the upper end of the handle. At the same time the oblique brace is arranged to run from the cross-bar to that portion of the long side bar which is grasped by the left hand, so that any extra pressure brought upon this portion of the frame, which, in the ordinary constructions, is least able to sustain it, will only have a tendency to force the movable tenon further down in the long slot and thus strengthen still further the bracing action.

Sometimes an auxiliary brace, *n*, is placed between the end of the brace D and the short side bar to keep this end of the brace D securely in place.

What I claim as new is—

In a buck-saw frame, the combination, with the side bar B' having the concave slotted shoulder *c*, of the oblique cross-bar C having its forward end adjustable in concave slotted shoulder, and oblique brace D stepped on the cross-bar C and running obliquely to the upper part of the handle B, substantially as specified.

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

WILLIAM HANKIN.

Witnesses:

WILLIAM H. HANKIN, Jr.,
Z. H. SMITH.