

HENRY S. MILLER.
Improvement in Saw-Frames.

No. 115,499.

Patented May 30, 1871.

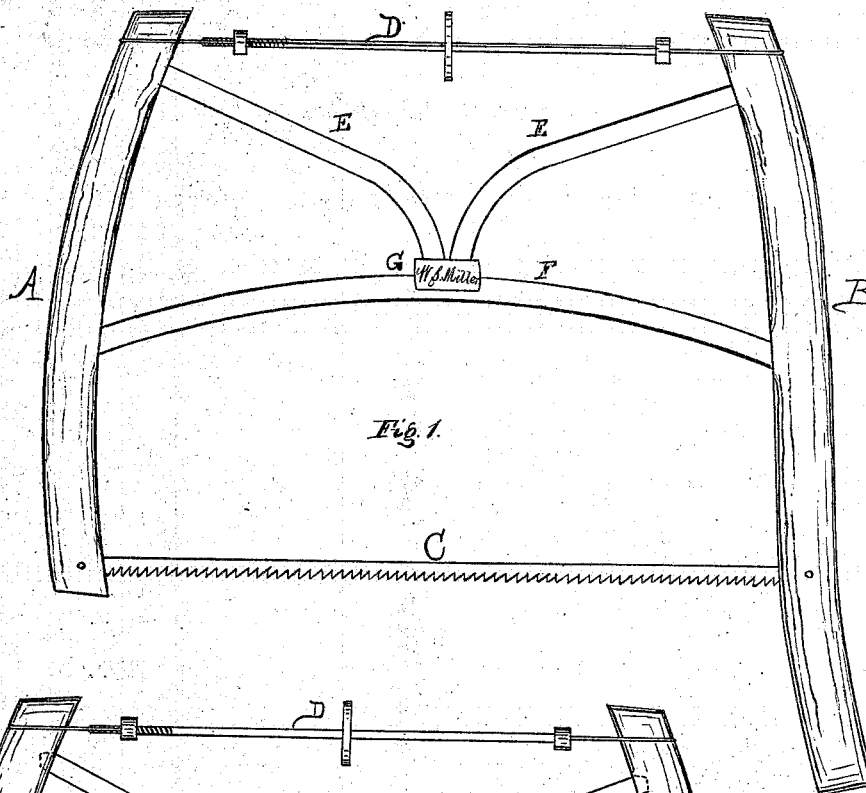


Fig. 1.

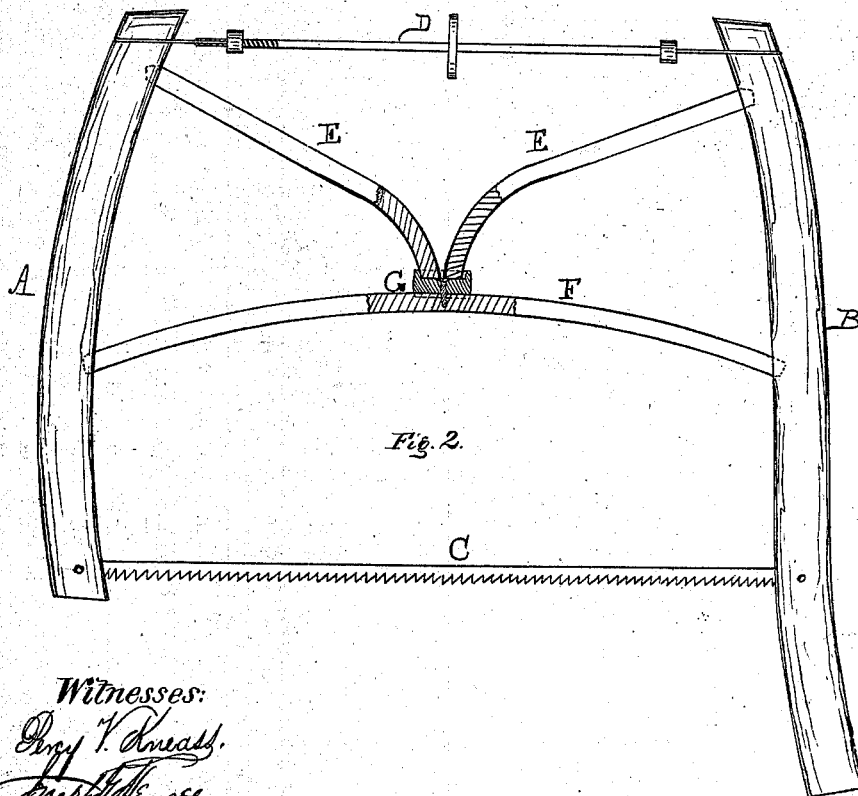


Fig. 2.

Witnesses:
D. V. Kneass.
[Signature]

Inventor:
Henry S. Miller
by [Signature]
Atty.

UNITED STATES PATENT OFFICE.

HENRY S. MILLER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO SAMUEL H. DAVIS, JR., OF SAME PLACE.

IMPROVEMENT IN SAW-FRAMES.

Specification forming part of Letters Patent No. 115,499, dated May 30, 1871.

To all whom it may concern:

Be it known that I, HENRY S. MILLER, of the city and county of Philadelphia and State of Pennsylvania, have made new and useful Improvements in Saw-Frames; and I do hereby declare the following to be a clear and exact description of the nature thereof sufficient to enable others skilled in the art to which my invention appertains to fully understand and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a side view of the device illustrating my invention. Fig. 2 is a similar view, partly in section.

Similar letters of reference indicate corresponding parts in the two figures.

It is desirable in saw-frames that the saw be firmly strained; but it is not desirable that such strain should be of the nature called "dead," or, in other words, without elasticity.

My invention consists in so forming the stretchers of the frame that, while the saw is uniformly strained, there is sufficient elasticity to the parts in order to lessen shocks to the frame and ease the tightening yoke or screw.

In the drawing, A and B represent the side pieces of the frame of a buck or other saw. C is the saw-blade, and D the tightening-yoke; all of which may be of ordinary form and construction. E represents the upper stretchers, and F the lower stretcher, which latter, in the present case, consists of an arch secured to the side pieces of the frame, and having its crown facing upward. The stretchers E E consist of two pieces of curved form, their upper ends being secured to the side pieces of the frame. The lower ends rest on a box-plate, G, which is secured to the corresponding

stretcher, and operates directly downward against the lower arch.

When the yoke D is tightened the tops of the stretchers E are brought together, and this forces down the crown of the arch, thereby straining the saw. In this operation the curved portion of the upper stretcher will yield in the longitudinal direction of the saw, and thus the thrust against the lower stretcher is not dead, but of an elastic nature.

All knots and other obstacles to the saw-blade will cause shocks to the saw-frame. This weakens the parts, works them loose, imparts shocks to the sawyer, and strains the threads of the screw of the tightening-yoke. All these objections are obviated or diminished by the curved arms or stretchers E. While said stretchers press directly downward on the lower stretcher they yield longitudinally, so that the frame is firm and durable, yet sufficiently elastic to overcome the objections to a frame where the parts are dead thrust against each other.

I am aware that stretchers have been applied to saw-frames; and I am also aware that the upper stretchers have been formed of right-lined or straight pieces. I therefore make no claim thereto; but

I do claim—

The saw-frame herein shown and described, provided with the braces E of curved form pressing directly downward on the stretcher F, and yielding in the longitudinal direction of the frame, as and for the purpose specified.

The above signed by me this 26th day of April, 1871.

Witnesses: HENRY S. MILLER.

JOHN A. WIEDERSHEIM,
FRANK GILBERT.