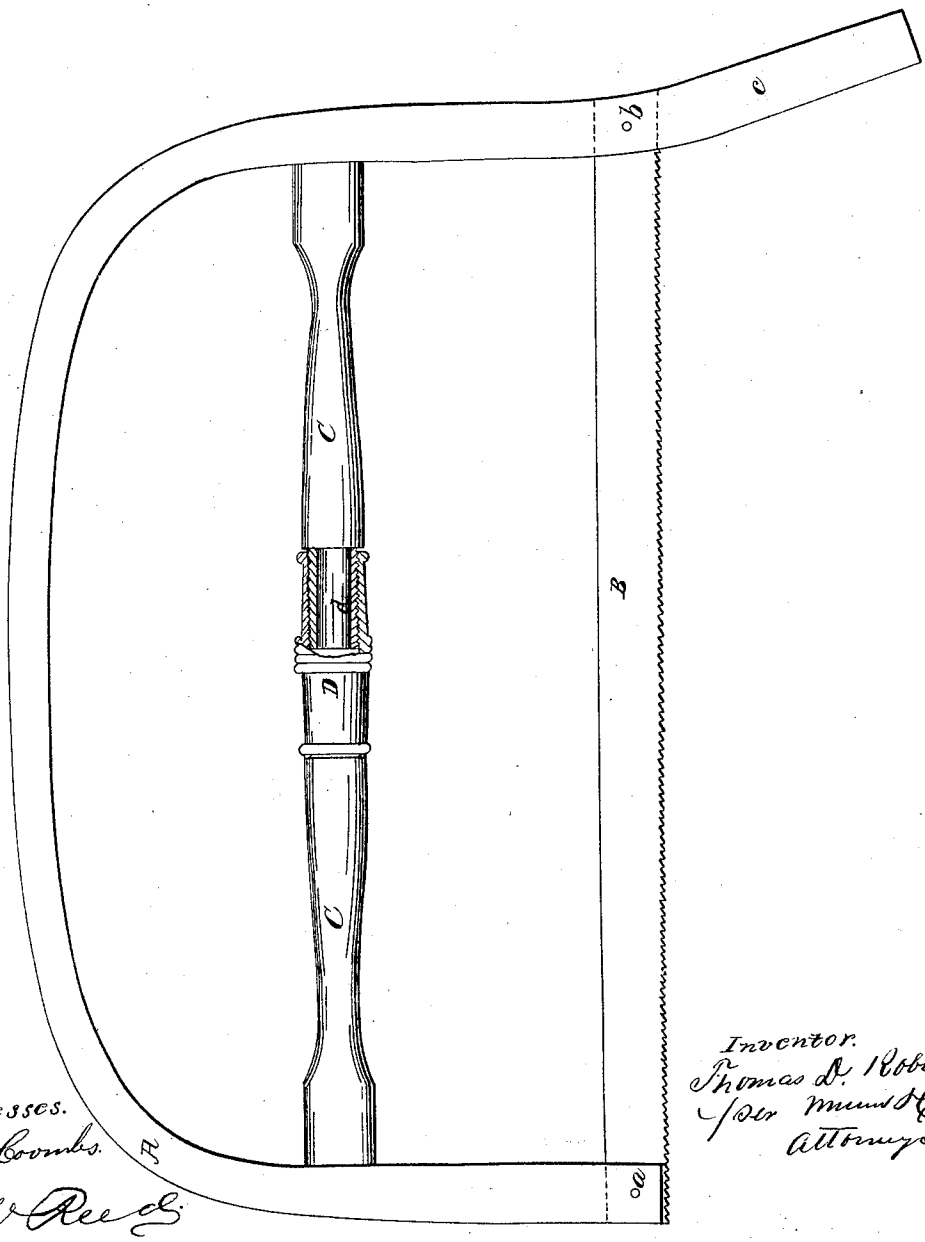
T. D. Roberts,

Hand Saw.

No. 38,338. Patented Apr. 28, 1863.



Witnesses.
H. W. Coombs.
G. W. Reed

Inventor.
Thomas D. Roberts
per Munn & Co
Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS D. ROBERTS, OF UTICA, NEW YORK.

IMPROVEMENT IN HAND-SAWS.

Specification forming part of Letters Patent No. **38,338**, dated April 28, 1863.

To all whom it may concern:

Be it known that I, THOMAS D. ROBERTS, of Utica, in the county of Oneida and State of New York, have invented a new and useful Improvement in Hand-Saws, such as are fitted in a wooden frame and strained taut by operating or adjusting the ends of the frame; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, making a part of this specification, said drawing being a side view of my invention.

This invention relates to an improved mode of constructing the saw-frame, and also in an improved means for straining the saw, whereby the latter may always be kept with the greatest facility in a proper taut state for use, and the saw also readily relaxed and taken from the frame when it is necessary to file or set it.

This invention consists, first, in constructing the frame of a single piece of wood bent or curved in such a manner as to form the two end pieces of the frame to which the saw is attached.

The invention consists, second, in the employment or use of a nut and screw, and a brace, arranged substantially as hereinafter shown and described, for the purpose of straining the saw.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the frame of the saw, which frame is constructed of a single piece of suitable hard elastic wood bent in bow form, as clearly shown in the drawing. B is the saw, which may be constructed in the usual way, and have its ends fitted in the frame A, one end of the saw being fastened in the extreme end of one part of the frame, as shown at *a*, and the other end of the saw fastened in the opposite part of the frame some distance above its end, as shown at *b*, so as to leave a portion, *c*, for a handle below *b*.

C C represent two pieces or bars of wood of straight form, the outer ends of which have tenons formed on them to fit loosely in the frame A, one at each end of the same. On the inner ends of these bars C C there are fitted metal screws *d*, one being a right and the other a left hand screw. On these two screws a nut, D, is fitted, said nut being provided with a right and a left female screw to fit on the screws *d* of the bars C C. From this description it will be seen that by turning the nut D the bars C C may be simultaneously forced outward or drawn inward, said result being attained by the nut D and screws *d d*. When the bars C C are forced outward the saw B will be strained taut, as the two ends of the frame A will be forced apart or distended, and by drawing inward or toward each other the two bars C C, the saw will be relaxed, as the ends of the frame will be allowed to spring back to their original position. By having two screws, *d d*, a right and a left hand one, attached one to each bar C, the operation of the straining devices will be quicker than if one screw only were employed; but one screw *d* might be used with advantage, the nut D being allowed to turn loosely on the bar C, which is not provided with a screw.

By this arrangment a very simple and economical hand-saw of the class specified is obtained, one that will admit of the saw being strained and relaxed with facility. In consequence of having the frame constructed of a single piece of wood it cannot be racked or twisted out of proper shape, as is the case with the ordinary saw-frames of this class. The device at the same time may be manufactured at a moderate cost, and it has no parts liable to become deranged by use or get out of repair.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A saw-frame, B, constructed of a single piece of wood bent in the form substantially as herein shown and described.

2. The nut D and screws *d d*, applied to the bars C C, and the latter arranged with the saw-frame, either constructed as shown or in any proper manner, for the purpose of straining the saw, as set forth, and this saw-straining device I claim whether one screw *d* is used or both of them, as herein set forth.

3. The combination of the saw-frame B, constructed of a single piece of wood, as shown, with the nut D, bars C C, and screw or screws *d d*, as herein specified.

THOMAS D. ROBERTS.

Witnesses:

GEO. T. ROSE,

W. E. GOODRICH.