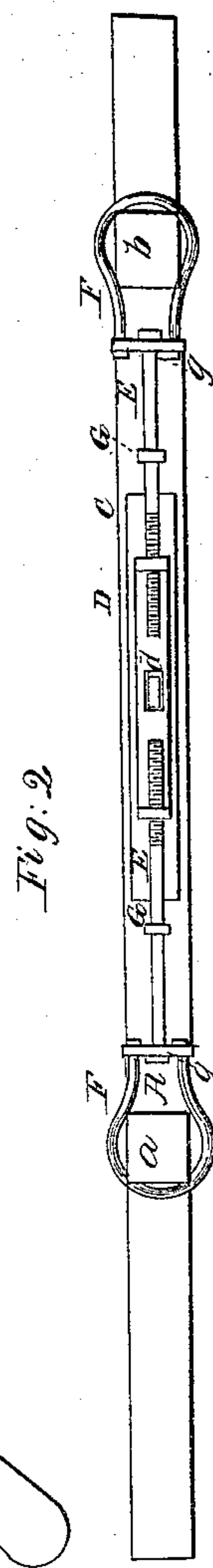
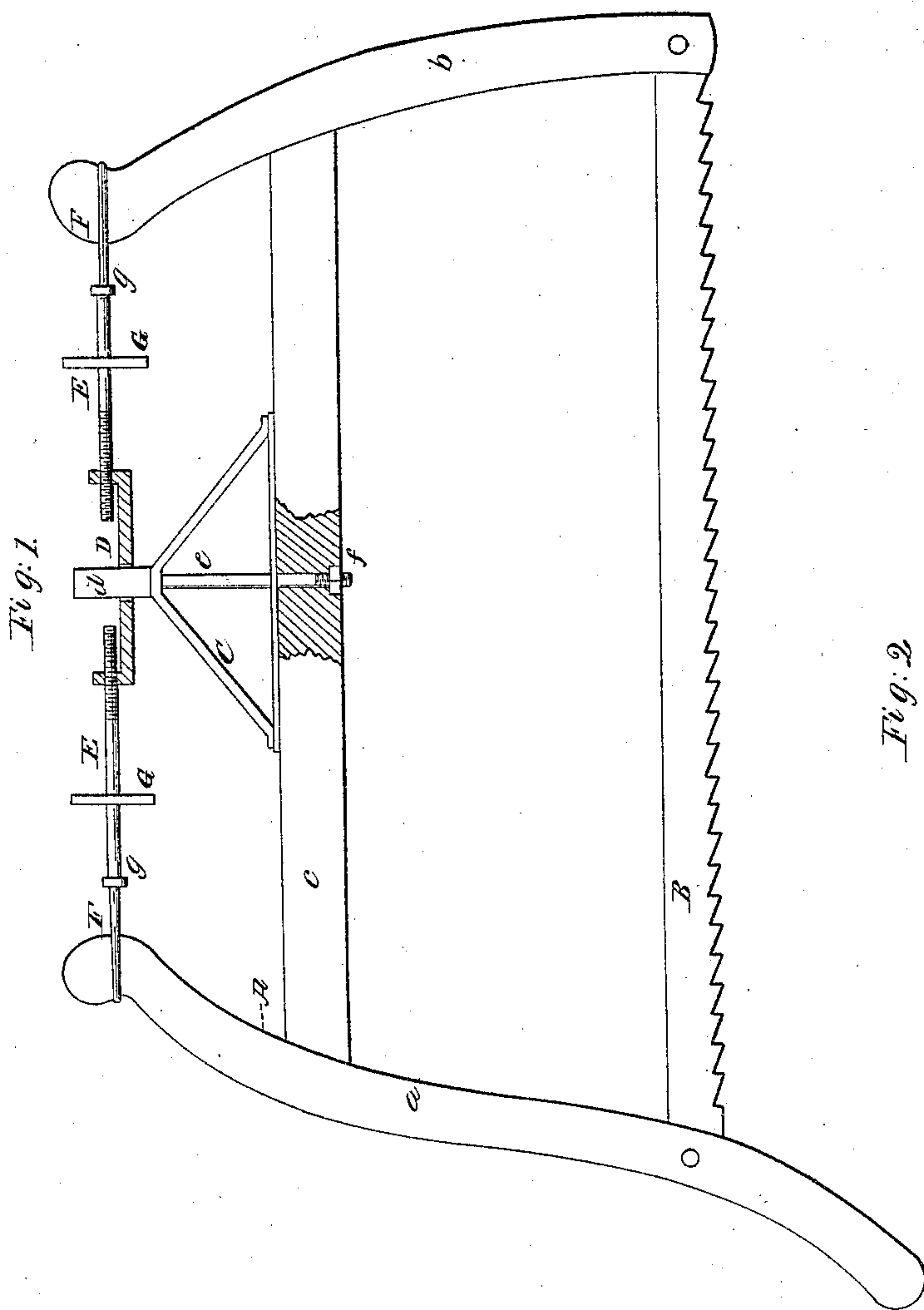


*W. H. Lirington,*

*Hand Sarr.*

*N<sup>o</sup> 30,073.*

*Patented Sep. 18, 1860.*



*Witnesses:*  
*Wm. H. Lirington*  
*John Scott.*

*Inventor:*  
*Wm. H. Lirington.*

# UNITED STATES PATENT OFFICE.

WM. H. LIVINGSTON, OF NEW YORK, N. Y.

## WOOD-SAW FRAME.

Specification of Letters Patent No. 30,073, dated September 18, 1860.

*To all whom it may concern:*

Be it known that I, W. H. LIVINGSTON, of the city, county, and State of New York, have invented a new and useful improvement in handsaws, (No. 2,) such as are strained in frames and used for sawing fire wood and commonly termed buck-saws, and also those which are used by artisans for sawing scrollwork; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, a plan or top view of the same.

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

The object of this invention is to strengthen the cross-piece of the saw-frame, prevent said cross-piece from bending laterally or in a direction at right angles thereto, and also to prevent the "winding" and "racking" of the saw frame.

The invention also has for its object the straining of the saw in its frame by an equal movement of both end pieces so as to preserve the symmetry of the frame and the proper balance thereof.

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

A, represents the saw frame of a buck saw which is constructed in the usual way *a, b*, being the end pieces, *c*, the cross piece and B, the saw. To the upper surface of the cross piece *c*, there is attached a triangular metal frame C, which has a flat metal upright *d*, at its upper end and a rod *e*, attached which passes through the frame C, and cross-piece *c*, the rod *e*, having a nut *f* on its lower end.

On the flat metal upright *d*, there is placed a bar D, the ends of which are bent upward and tapped to allow the ends of the screw rods E, E, to pass through. The outer ends of the rods E, E, are connected by swivel joints *g*, to loops F, which are fitted on the upper ends of the end pieces *a, b*. Each rod E, is provided with a thumb piece G, by which it is turned.

The metal frame C, serves to strengthen the cross-piece *c*, preventing any lateral or vertical bending of the cross piece while the flat metal upright *d*, serves as a guide for the bar D, which rises and falls on the upright as the screw rods E, are turned. When the saw B, is strained, the rods E, are screwed inward, and the bar D, descends and this bar also serves to stiffen the frame preventing it from winding as the bar cannot turn on the upright *d*, and the effect of the bar D, in this respect is precisely the same as if it were a fixed article to which the rods E, were connected.

By this arrangement both end-pieces *a, b*, it will be seen are moved to strain the saw and the symmetry of the frame may therefore be always preserved and the frame kept in a properly balanced state.

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

The combination of the screw rods E, E, loops F, F, or their equivalents, bar D, and frame C, applied to the saw frame A, as and for the purpose herein set forth.

WM. H. LIVINGSTON.

Witnesses:

M. M. LIVINGSTON,  
JNO. H. SCOTT.