

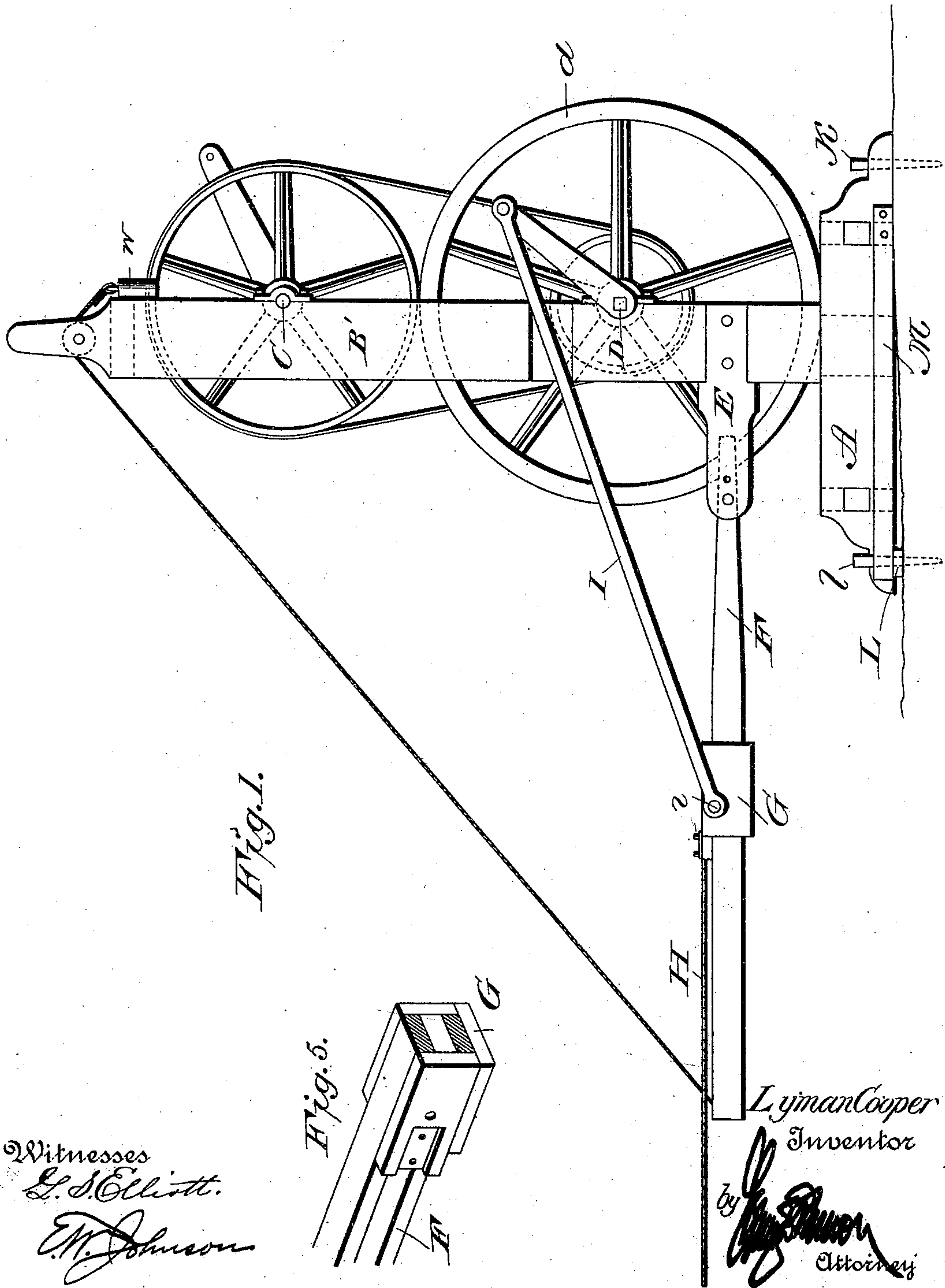
(No Model.)

2 Sheets—Sheet 1.

L. COOPER.
SAWING MACHINE.

No. 501,826.

Patented July 18, 1893.



Witnesses
G. S. Elliott.
E. M. Johnson

Lyman Cooper
Inventor
by [Signature]
Attorney

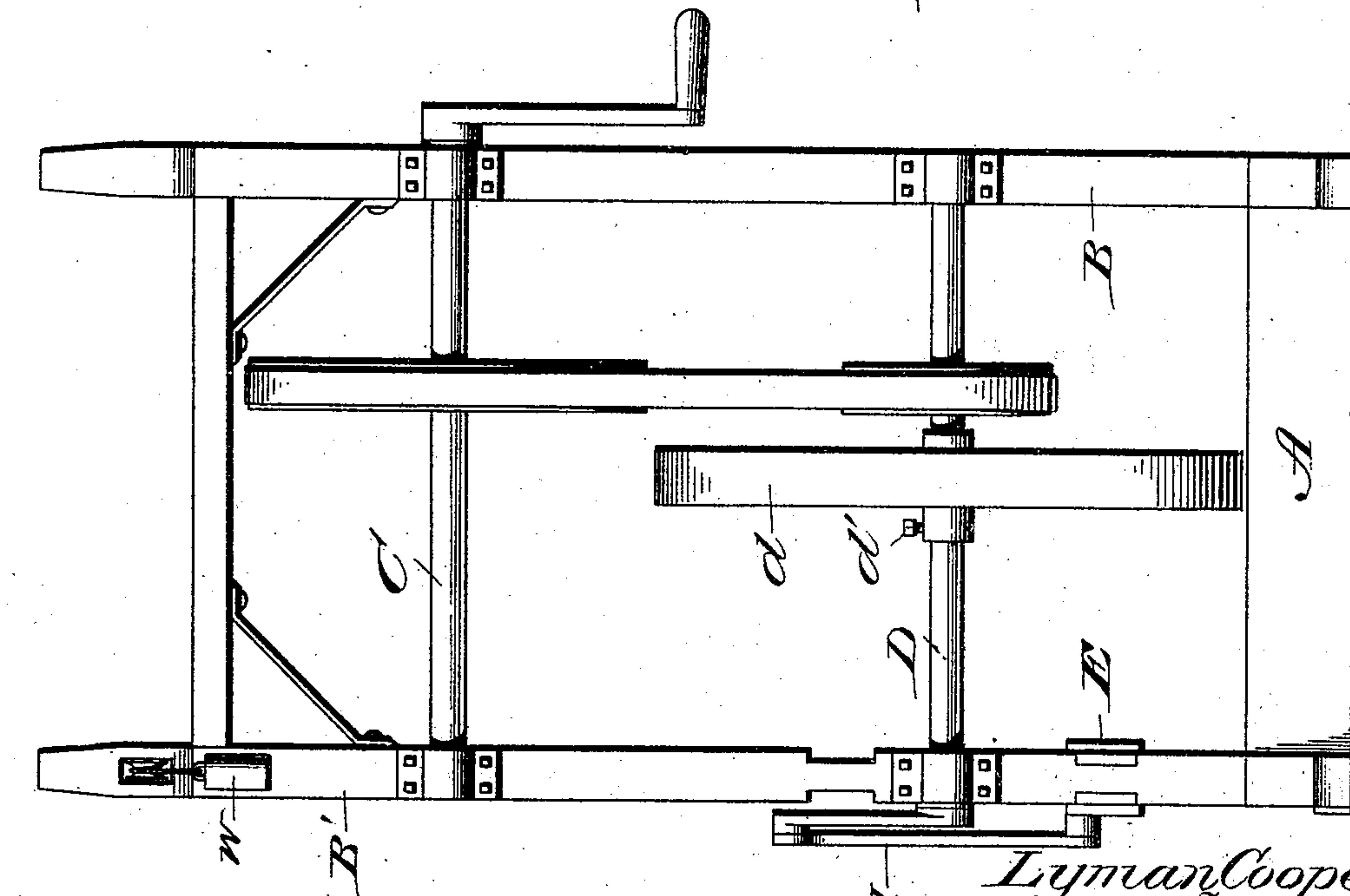
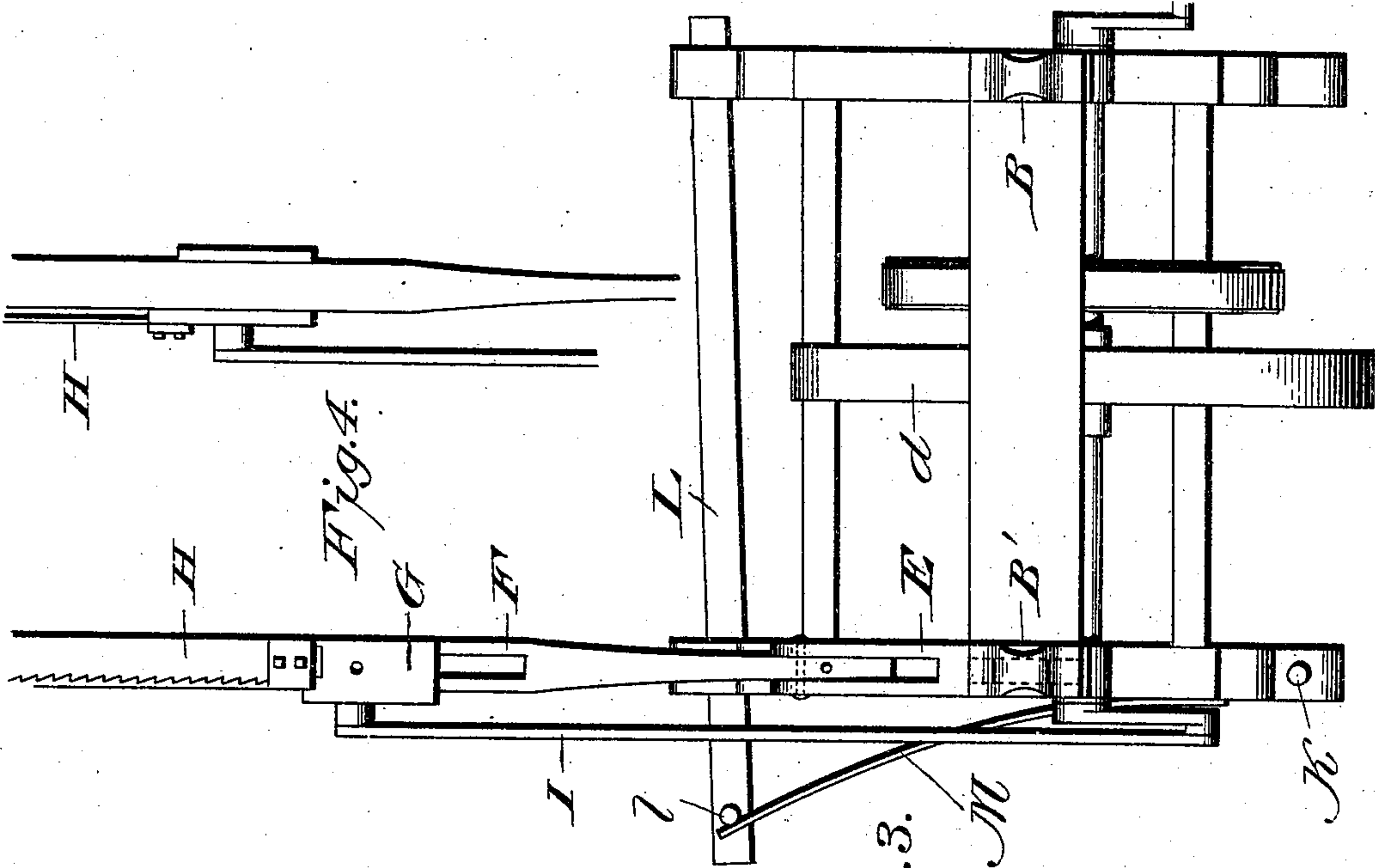
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UNITED STATES PATENT OFFICE.

LYMAN COOPER, OF PATOKA, INDIANA.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 501,826, dated July 18, 1893.

Application filed March 2, 1893. Serial No. 464,364. (No model.)

To all whom it may concern:

Be it known that I, LYMAN COOPER, a citizen of the United States of America, residing at Patoka, in the county of Gibson and State of Indiana, have invented certain new and useful Improvements in Sawing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a sawing machine which is cheap and simple in construction, and in which the parts can be adjusted so that the saw may be operated to cut either vertically or horizontally; and the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a sawing machine constructed in accordance with my invention. Fig. 2 is a rear elevation. Fig. 3 is a plan view. Figs. 4 and 5 are detail views.

A designates a suitable base to which are rigidly secured uprights B and B', connected at their upper ends by a cross-piece as shown. To these uprights are attached bearings in which are journaled shafts C and D, the shaft D having mounted thereon a fly-wheel *d*, which may also be used as a supporting wheel in transporting the device from place to place, and when so used the set-screw *d'* is loosened so that the wheel can turn freely upon the shaft. The shafts C and D are provided with pulleys, as shown, over which passes a driving belt, the shaft C having a suitable crank-handle to provide for turning the same. The upright B' is cut away or recessed on each side above and below the shaft D. Within two of these recesses, so as to embrace the upright, is secured a bracket-arm E, the outer end of which is bifurcated to receive the end of a slotted bar F, upon which the slide G which carries the saw is mounted. This bar is pivotally secured to the bracket, and to the outer end of the same is attached

a flexible connection which extends over a pulley journaled near the upper end of the upright B', the free end of the flexible connection or cord carrying a weight *w*.

H designates the saw, which is attached to the slide G in any suitable manner. The slide is provided with an aperture on the same side as the saw, to provide for the attachment of the pitman-rod I, and on one side at right angles with the saw with another aperture to receive the pin *i* of the pitman when the position of the saw is changed from a vertical to a horizontal position. The other end of the pitman-rod is connected to a crank-arm carried by the shaft D. The pitman-rod may be disconnected from the slide G, and the bar F carrying said slide can be given a quarter turn in the bracket-arm E, so that the angle of the saw may be changed. The height of the saw can be changed by adjusting the block E upon the upright B'.

The bar F is provided with a longitudinal slot, and the slide G is preferably made up of four pieces rigidly connected to each other, one of which lies in the slot while the others embrace the side of the bar.

When the device is used for felling trees one corner of the same is pivoted to the ground by a pin K, and the forward portion of the base may be placed upon a plank or board L, which is held in place by the weight of the machine and a pin *l*. One of the side pieces of the base is provided with a flat spring M, the free end of which is placed against the pin *l* and the machine swung upon the pivot, so that when the saw is in engagement with the tree the tendency of the spring will be to constantly move the saw against the tree and aid in sawing.

I am aware that prior to my invention it has been proposed to provide a hand-sawing machine with a supporting frame and mechanism for reciprocating a saw, and I do not claim such as my invention; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. In a sawing machine, the combination, of a frame having uprights which support the shafts of driving mechanism, a bracket-arm attached to one of the uprights, and a bar pivoted to the bracket-arm and carrying a slide

to which the saw is secured, the holes in the bar for the pivot-pin being pierced at right angles with each other, so that the saw can operate vertically or horizontally, substantially as set forth.

5 2. In a sawing machine, the combination, with the frame, pivoted at one end, of a spring attached to said frame and engaging a stop

located adjacent thereto, substantially as shown, and for the purpose set forth. 10

In testimony whereof I affix my signature in presence of two witnesses.

LYMAN COOPER.

Witnesses:

M. F. STEWART,
OLL HUDELSON.