

(No Model.)

L. S. EDLEBLUTE.
Sawing Machine.

No. 243,114.

Patented June 21, 1881.

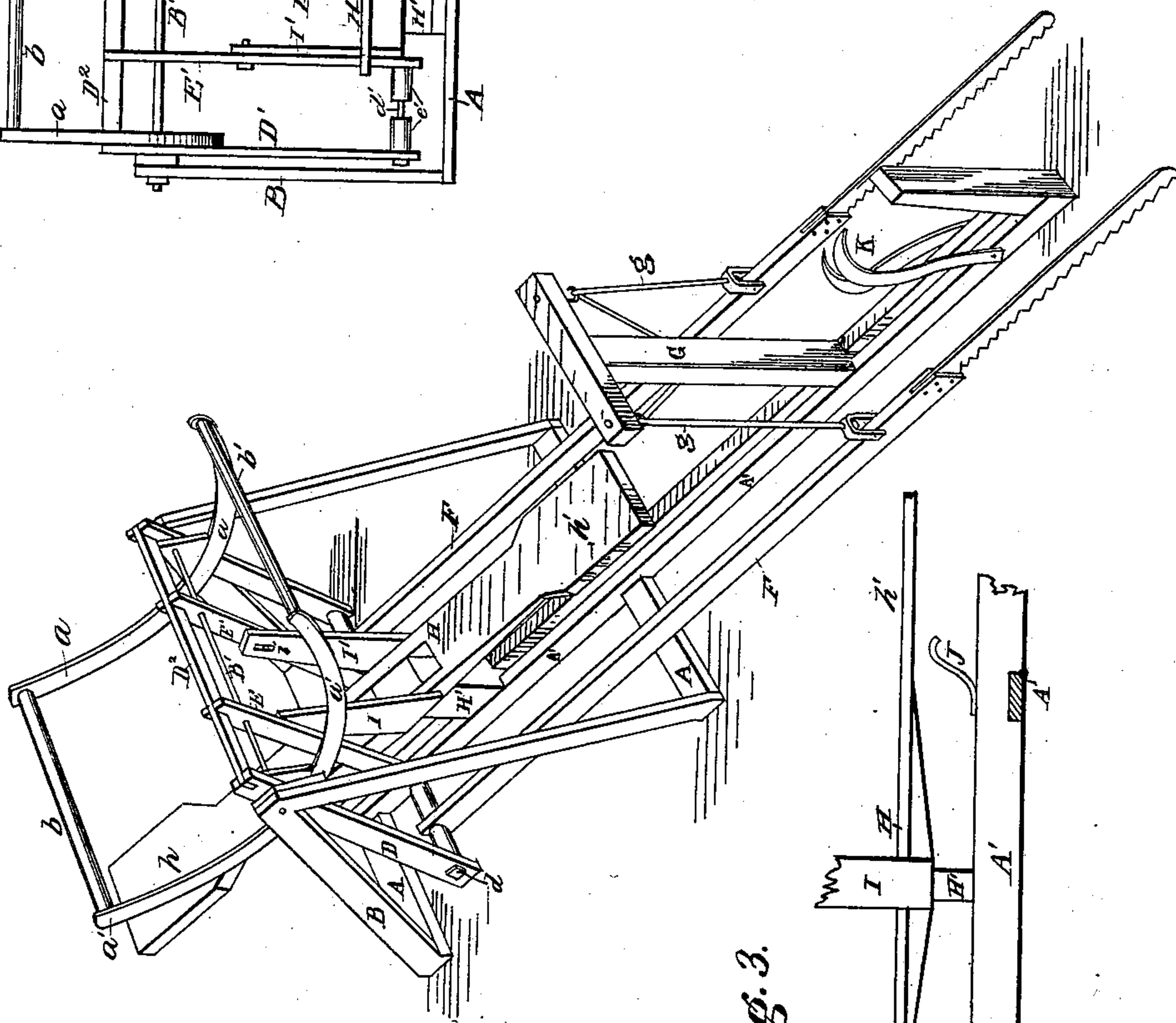
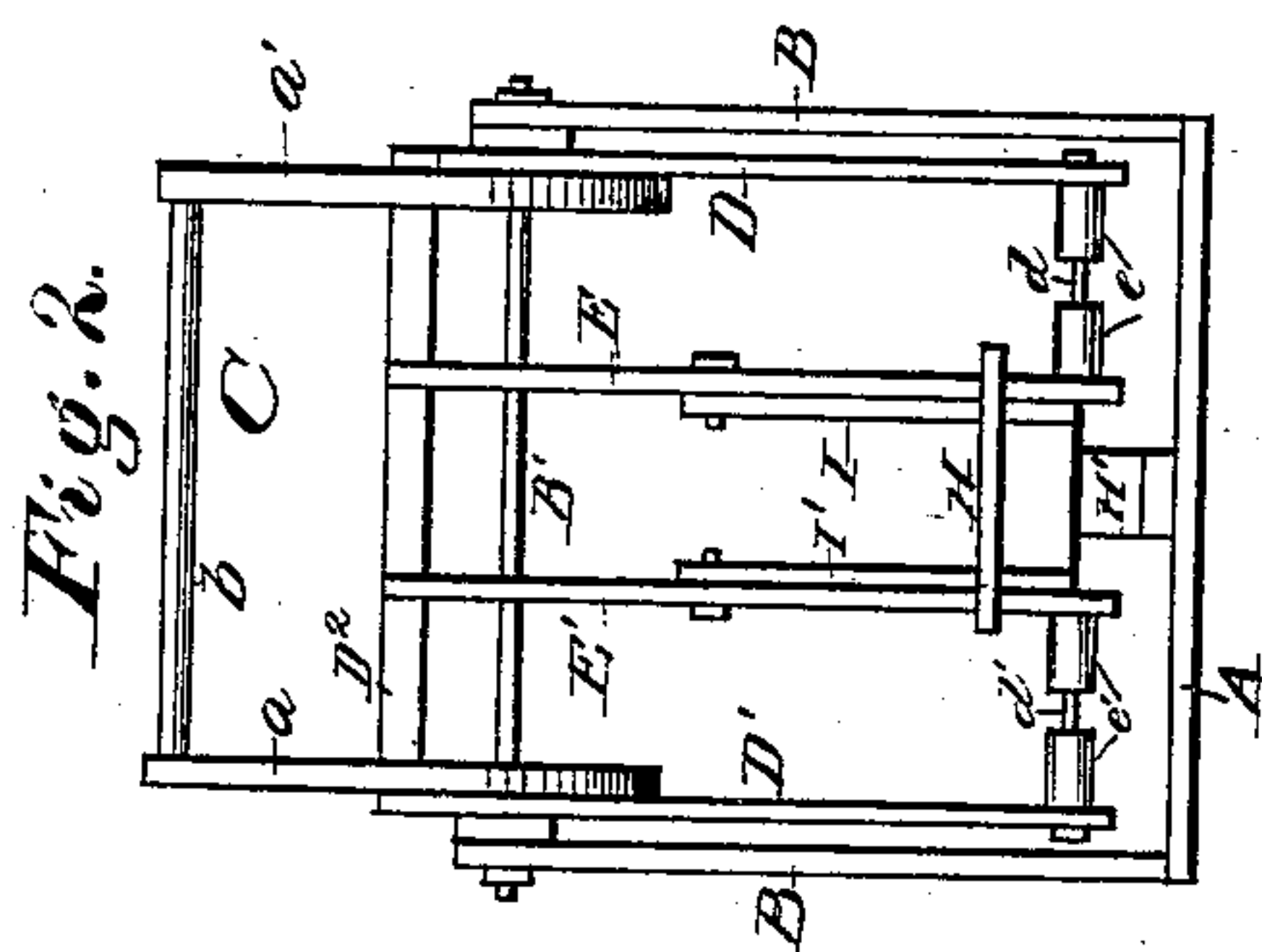
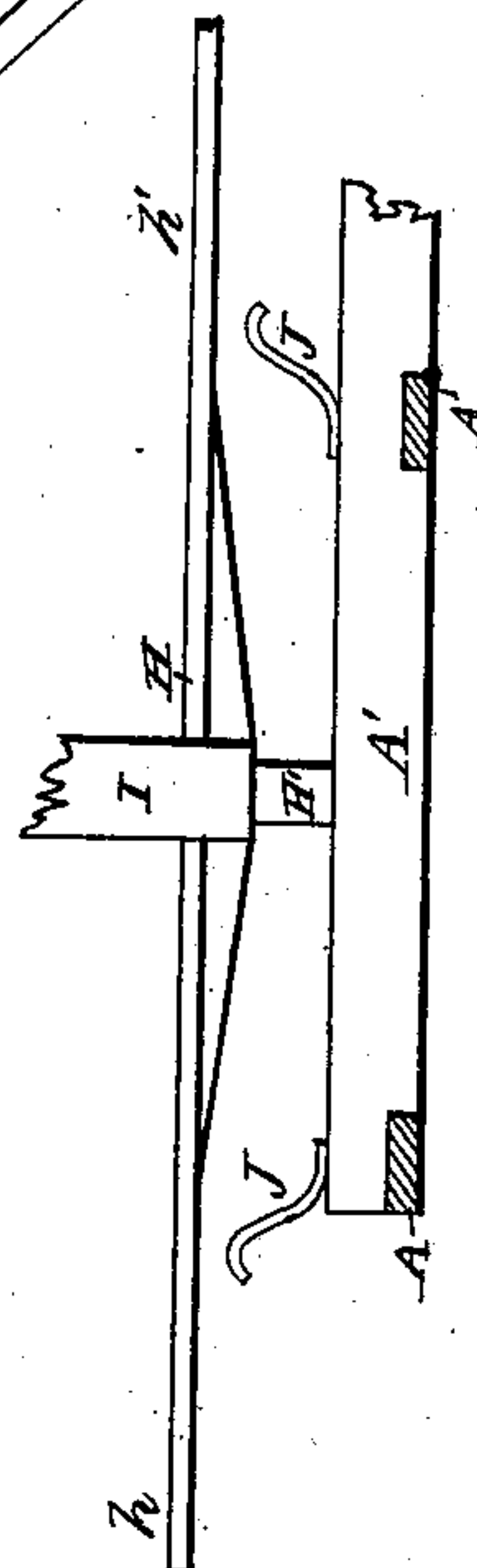


Fig. 3.



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UNITED STATES PATENT OFFICE.

LUCIUS S. EDLEBLUTE, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF TO
RUFUS P. WHITE AND HORACE W. SMITH, BOTH OF SAME PLACE.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 243,114, dated June 21, 1881.

Application filed August 28, 1880. (No model.)

To all whom it may concern:

Be it known that I, LUCIUS S. EDLEBLUTE, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and
5 useful Improvements in Sawing-Machines, of which the following is a specification.

My invention relates to that class of sawing-machines known as "hand-power" machines.

10 One of the principal objects of my invention is to utilize the weight of the operators to assist in propelling the saws through the log or timber.

One feature of my invention consists in the
15 employment of a system of levers whereby the above object is accomplished.

Another feature of my invention consists in such a construction of the various parts that two or more saws may, at the will of the operator, be used in connection with the first-named
20 feature of my invention.

Figure 1 of the drawings is a perspective view of my invention. Fig. 2 is an end view of the same, and Fig. 3 is a detached view of
25 the treadle or platform upon which the operators stand.

The frame of my machine consists of a base composed of the cross-pieces A and the longitudinal piece or pieces A'. To this base-frame
30 the uprights or brackets B are secured. The upper ends of these brackets are connected by a rod, B', passing from one to the other, to which rod is pivoted a double hand-lever or brake, C. This brake consists of the horizontal levers a a', whose ends are connected by
35 the cross hand-rods b b'. To the levers a a' are rigidly connected the downwardly-extending arms D D', the upper ends of which extend a short distance above the levers a a', and are connected by the cross-piece D². To
40 the cross-piece D² are attached the arms E E'. The rod B', which connects the upper ends of the brackets B, passes through the arms D E and D' E'. The lower ends of the arms D
45 and E are connected by a rod, d, and in like manner the lower ends of the arms D' E' are connected by a rod, d'. The above-mentioned arms and levers, with their connecting pieces and rods, form a rigid frame or brake which
50 turns on the cross-rod B' as a pivot.

The saw-pitmen F are attached at one end to the rods d and d', and held in position from lateral movement by the washers or sleeves e e', (see Fig. 2,) and to the free ends of the pitmen the saws are attached. The saws may
55 be lifted from the log or timber by means of cords g, which pass over pulleys or hooks in the support G.

A treadle or lever, H, is pivoted at or near its center to a block, H', which is attached to
60 the base-frame, and at either end of this treadle is a platform, h h'. At or near the center of the treadle the upwardly-extending arms I I' are rigidly connected thereto, and the upper ends of these arms are loosely connected,
65 by means of a slot-and-pin connection, as i, to the downwardly-extending arms E E' of the hand-brake.

Springs J are attached to the base-frame under each end of the treadle H, so that when
70 the end of the treadle is forced down upon the spring a slight upward impulse will be given to the end so forced down as soon as the pressure by which the end was forced down is removed.
75

The log or timber is held in position against the machine by any suitable device, as the dogs K.

The particular forms in which the various parts of my invention are to be constructed
80 are preferably those hereinbefore described. Slight variations may, however, suggest themselves to the manufacturer. For instance, the horizontal levers a a' may be straight instead of semicircular, as shown.
85

It is obvious, from the construction above described, that two or more saws may be employed, at the will of the operator, as a saw-pitman may be placed at each end of the rods
90 d and d', the washers e e' being placed between them, instead of on either side of a single pitman.

The manner in which my invention operates is as follows: The log or timber to be sawed is placed in position at the end of the base-frame
95 under the saws, and held there by any suitable device, and the saws being set at the required distance apart by regulating the washers e e' on the rods d d', two men take their position, one on the platform h and the other on
100

the platform h' , and each grasps one of the hand-rods b b' over his platform, which he elevates and depresses alternately, after the manner of a hand-car brake. As this motion is made the lower ends of the arms D E and D' E' , which arms are connected, in the manner above described, with the levers a a' , are caused to vibrate back and forth, carrying the saw-pitmen, which are connected to the rods d and d' , back and forth, thus propelling the saws through the log. When the man on the platform h lifts up on his hand-rod b he of course bears down on the platform more than the amount of his weight, and the man on the opposite platform, h' , at the same time is bearing down on his hand-rod b' , and thus a certain portion of his weight is transferred from the platform to the hand-rod. It will thus be seen that there is considerable more weight on the platform h than on the platform h' , and the treadle H is thus caused to rock on its pivot-block H' , throwing the upper ends of the arms I I' toward the platform h , and as these arms are connected to the arms E E' they push on said arms, thus assisting the hands in moving the saws back and forth. When the man on the platform h has lifted his hand-rod to its highest point the operation above described is reversed, he pulling down on his hand-rod and the man on the platform h' lifting up on his, and the platform h' will descend, the platform h will ascend, and the upper ends of the arms I I' will vibrate toward the platform h' , thus assisting to move the arms E E' toward platform h' .

From the above description of the construction and operation of my invention, it will be seen that by it the weight of each man is utilized to assist both himself and the man on the opposite platform.

While my invention is best adapted to be operated by two men, it may be very advantageously operated by one man.

My invention will be found very advantageous for sawing hub, spoke, or stave timber, or stove-wood.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination of the treadle H , pivoted to block H' , and provided with the platforms h and h' and the arms I I' , and the arms E E' of the brake C , the arms I I' being connected to the arms E E' by a slot-and-pin connection, *i*, substantially as and for the purposes specified.

2. The combination of the rigid brackets B , arm D , suspended therefrom and supported thereby, and brake C , connected to arms D , cross-bar B' , arm E , suspended therefrom and supported thereby, treadle H , pivoted centrally at H' and provided with arm I , having slot *i* at its upper end, and there pivoted to arm E , and saw-pitman F , suitably connected to the arms E and D , substantially as and for the purposes specified.

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Attest:

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