

(No Model.)

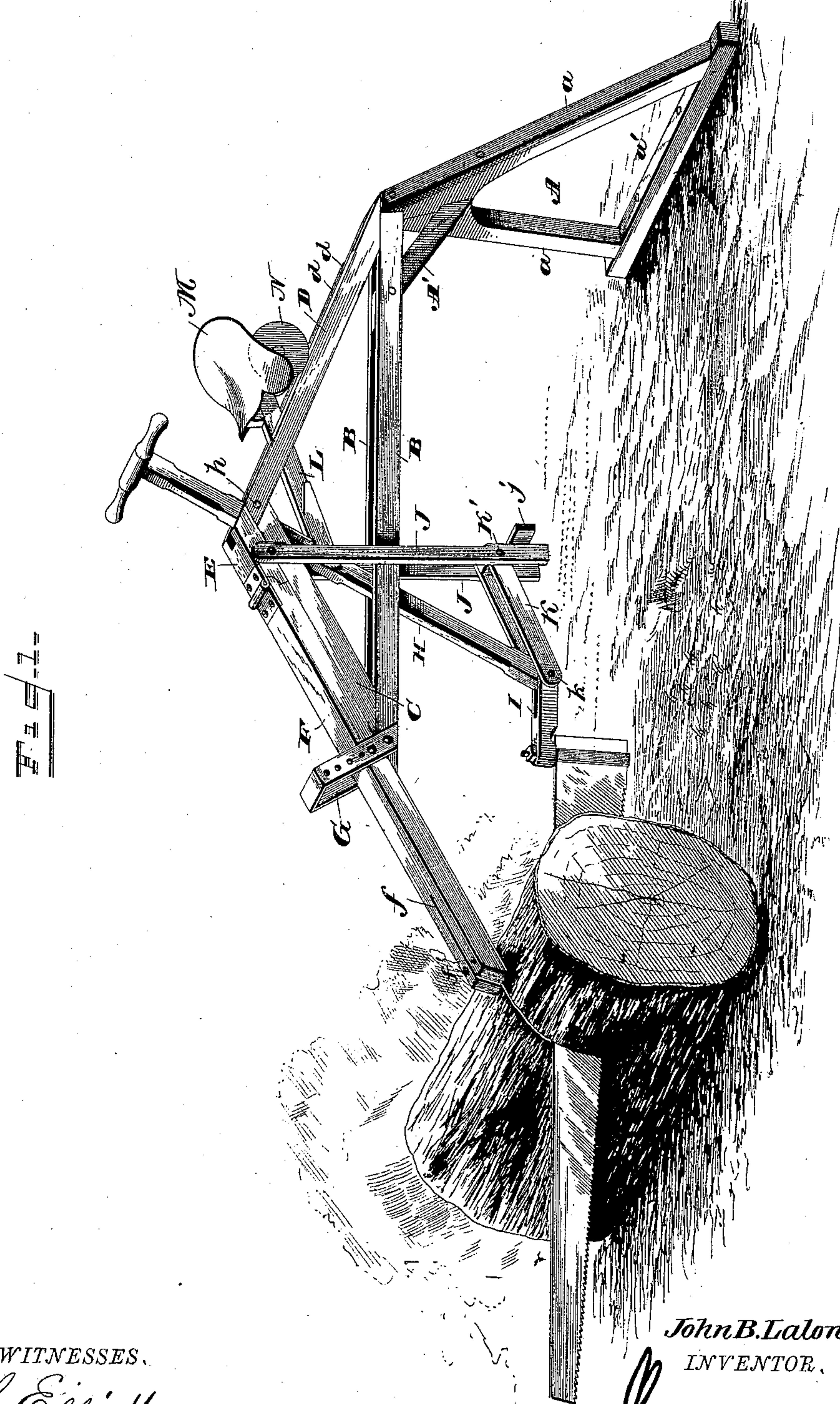
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J. B. LALONDE.

DRAG SAW.

No. 387,522.

Patented Aug. 7, 1888.



WITNESSES.

*G. S. Elliott,*  
*W. Johnson*

*John B. Lalonde.*  
INVENTOR.

*Wm. H. H. H.*  
Attorney.



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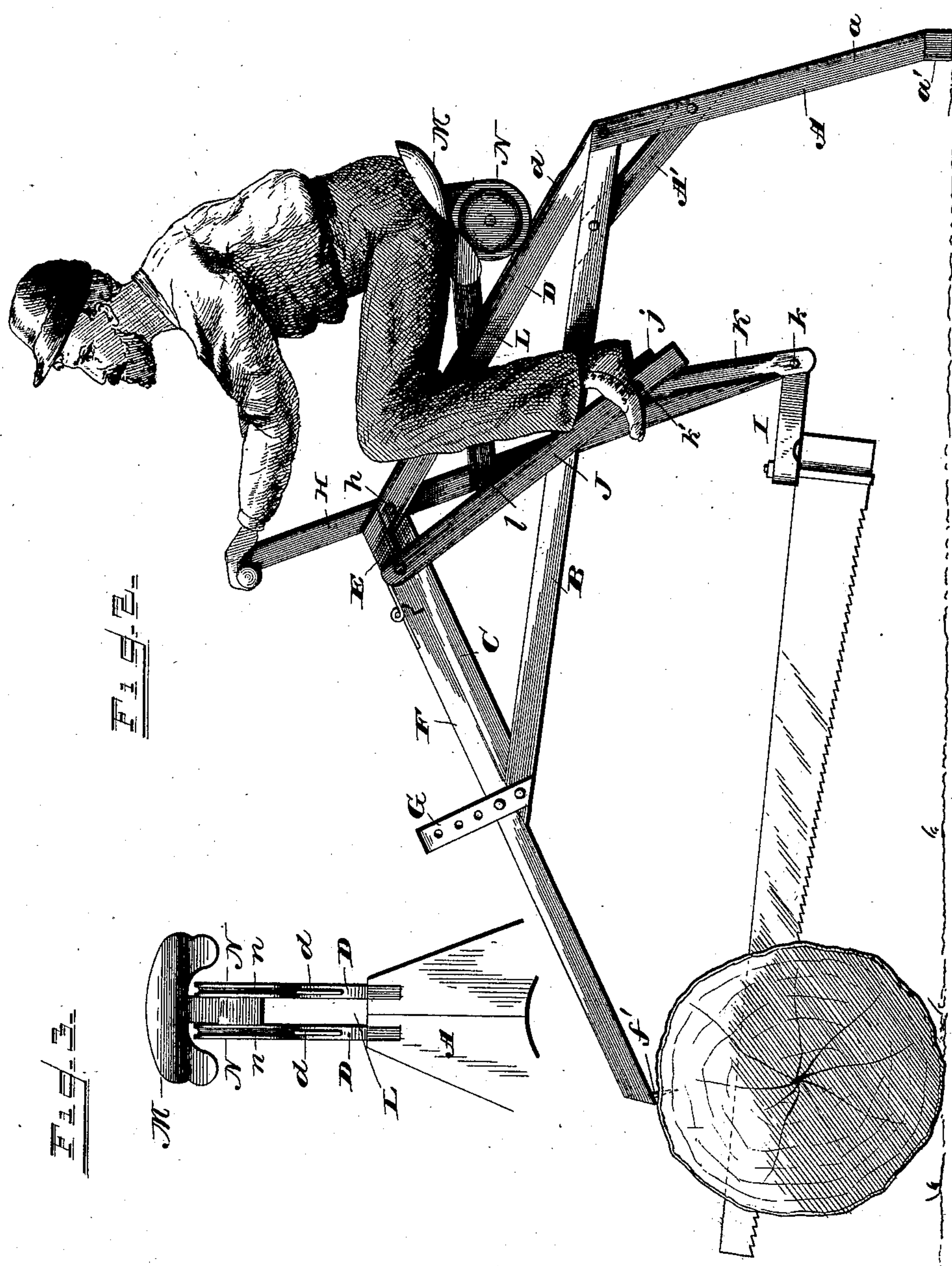
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*[Signature]*  
Attorney.



# UNITED STATES PATENT OFFICE.

JOHN B. LALONDE, OF PORTLAND, OREGON, ASSIGNOR OF ONE-HALF TO  
ESTEVAN G. FRANCIS, OF SAME PLACE.

## DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 387,522, dated August 7, 1888.

Application filed April 12, 1888. Serial No. 270,473. (No model.)

### *To all whom it may concern:*

Be it known that I, JOHN B. LALONDE, a citizen of the United States of America, residing at Portland, in the county of Multnomah and State of Oregon, have invented certain new and useful Improvements in Drag-Saws; 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 or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain new and useful improvements in that class of sawing-machines which are operated by combined hand and foot power; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims, whereby the operator can bring into play the muscles of his arms, legs, and back, so as to operate the saw with greater power and speed.

In the accompanying drawings, which illustrate my invention, Figure 1 is a perspective view of a machine constructed in accordance with my invention. Fig. 2 is a side view, and Fig. 3 is a detail view.

A refers to the rear portion of the frame, which consists of diverging legs *a a*, which are connected to a sill or transverse piece *a'*, which is provided with perforations for spiking or otherwise securing the same to the ground. To the upper portion of this rear frame, A, are secured two parallel strips or bars, B B, between which, near their rear ends, the upper end of an inclined brace, A', extends, the lower end thereof being secured to the rear portion, A, of the frame.

To the front ends of the parallel strips or bars B is rigidly secured an upwardly and rearwardly extending solid beam, C, the upper end of which is bifurcated, and to the same is secured downwardly-extending parallel strips or beams D, which are secured to the upper edges of the bars B above the frame A. These strips or beams D are provided with metallic tracks *d d*, over which the grooved rollers move, as will be hereinafter set forth.

A block, E, the upper end of which is bifur-

cated, is rigidly secured to the upper portion of the beam C, and to the same is hinged a beam, F, the lower end of which is provided with a slot, *f*, and pins *f'*, for securing the lower end of the same to a log. A bail, G, is secured to the front end of the triangular frame, and said bail is provided on its sides with perforations and a pin, which passes through the beam F to permit said beam to be adjusted to suit different sizes of logs without throwing the strips B out of a horizontal position.

Between the rails or bars D there is pivotally secured by a bail, *h*, a lever, H, which is provided at its upper end with a handle-bar. The lower end of this lever is pivotally attached to a metallic block, I, to which the saw is clamped. This lever H operates between the upper ends of the rails D D, between which it is pivoted and between the bars B B.

In front of the lever H, beneath the block E, are pivoted parallel strips J J, which are provided at their lower ends with a cross-piece or foot-rest, *j*; and these parallel strips are connected to the clamping-block I by a link, K, which consists of parallel pieces which are pivoted to the block I and to the parallel strips J J by bolts *k* and *k'*.

L refers to a bar which is pivotally secured by a bolt, *l*, to the lever H, said bar passing through the inclined rails D, and to the rear end of the same is attached a seat, M. Beneath the seat and bar L is a suitable block, on each side of which are journaled wheels N N, which are provided on their peripheries with grooves *n* or with side flanges, which will prevent the same jumping off the tracks *d d*.

To operate the device, the pins *f'* are driven into the log to be sawed, the saw then lying in the slot *f*. The operator can then adjust the angle of the main frame to suit himself by placing the pin in the proper perforation in the swinging bail G. When seated, the operator's feet will rest upon the cross-bar *j*, and the handle-bar is grasped. The weight of the operator upon the seat, which is mounted on inclined rails, will draw the saw rearwardly without any effort on the part of the operator, and by drawing upon the handle-bar and pushing upon the foot-rest the saw will be moved with great power forwardly, and at the same time the seat will move upwardly, thus bring-



ing into play the muscles of the legs, arms, and back, and affording the operator during each reciprocation of the saw a rest, as the weight of his body upon the sliding or rolling seat operates the saw in its rearward movement.

I claim—

1. In a drag-saw, the combination of the two downward rearwardly-inclined bars D, having tracks thereon and an intervening space between the same, a seat having rollers engaging with and moving on the tracks on said bars D, and an arm connected to and projecting forwardly from the under side thereof between said bars, and a hand-lever pivotally mounted in the frame, to which the forward end of the arm from the seat is attached, and having its lower end secured to levers connected to the rear end of the saw and to the frame of the machine, substantially as described.

2. In a drag-saw, the combination of the frame, the two downward rearwardly-inclined bars D, having tracks thereon and an intervening space between the same, a seat having rollers engaging with and moving on the tracks on said bars, and an arm connected to and projecting forwardly from the under side thereof between said bars, a hand-lever pivotally

mounted in the frame, to which the forward end of the arm from the seat is attached, the slotted block secured to the rear of the saw, to which the lower end of the hand-lever is secured, link K, attached to the slotted block at its front end, and the swinging frame having foot-pieces, to which the rear end of the link K is attached, substantially as described.

3. In a drag-saw, the combination of a frame consisting of parallel bars B B and D D, having tracks thereon, beam C, and a rear support, A, the adjustable beam F, supporting the operating mechanism, consisting of a pivoted lever with a handle-bar, swinging bars J J, link K, the block I, connecting the same to the reciprocating saw, and a bar, L, pivoted to the main lever H, the rear end of said bar passing between beams D D, and being provided with a seat and with rollers bearing on the tracks on said beams D D, substantially as and for the purpose set forth.

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

JOHN B. LALONDE.

Witnesses:

JOSEPH HAYES,  
D. W. WAKEFIELD.