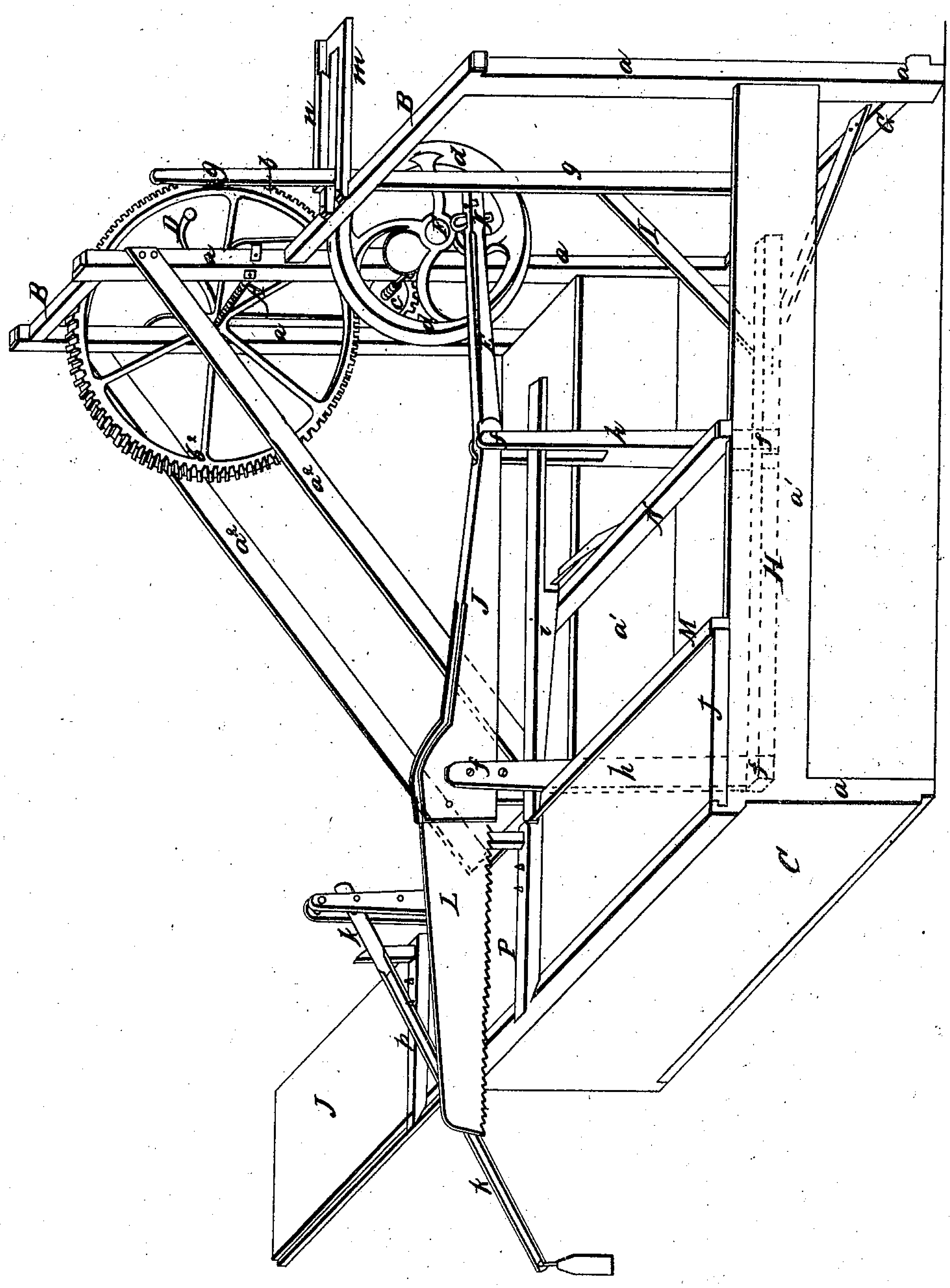
J. Weldy,

Drag Saw.

No. 34,541. Patented Feb. 25, 1862.



UNITED STATES PATENT OFFICE.

JOHN WELDY, OF DAYTON, OHIO.

IMPROVED MACHINE FOR SAWING WOOD.

Specification forming part of Letters Patent No. **34,541**, dated February 25, 1862.

To all whom it may concern.

Be it known that I, JOHN WELDY, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Machines for Sawing Wood; and I do hereby declare that the same are described and represented in the following specification and drawing.

To enable others skilled in the art to make and use my improvements, I will proceed to describe their construction and operation, referring to the drawing, which is a perspective view of a sawing-machine with my improvements.

The nature of my invention and improvements consists in a combination and arrangement of devices for feeding and guiding the saw, hereinafter described.

In the accompanying drawing, *a a* are posts connected by the girders *a' a'*, bars B B, and board C, forming a strong frame, which may be made in the form shown or in such other form as will answer the purpose. The braces a^2 a^2 are fastened to two of the posts and two of the girders to stiffen and brace the frame.

D is a crank fastened to the shaft A, which carries the gear *b*, that drives the pinion *c* and shaft F, which carries the fly-wheel *d*. (Shown in the drawing.)

G is a rock-shaft with journals turning in the posts *a a*, which rock-shaft is provided with a perpendicular arm *g* and a horizontal arm H. These arms are connected by the brace I, as shown in the drawing. The links *h h* vibrate on the arm H, which they connect to the saw shank or beam J with working-joints *f f f f*, and the link E connects the beam J to the crank-pin K in the fly-wheel *d*, which traverses the beam J and saw L when the machine is operated.

By the above description it will be apparent that when the lever *g* is moved back in the frame *m* and locked by the latch *n* it raises the arm H, with the saw-beam and saw, and holds them up while the workman places the wood to be sawed on the bars *p p* of the carriage *j j*, which bars are provided with spurs to hold the wood, which is pressed upon them by the weighted lever *k*, connected to the carriage *j*, as shown in the drawing. The carriage *j j* is arranged to traverse on the girders *a' a'* between the bar M and board C, as shown in the drawing. After the workman has secured the wood on the carriage under the saw he draws back the latch *n* and releases the arm or lever *g* and lets the saw down on the wood and turns the crank D to traverse the saw which saws the wood, and when he has cut off one length he raises the saw by the lever *g* and moves the carriage *j* a proper distance for another length and lets the saw down again to saw off another cut.

If the weight of the saw-links and arm H do not feed the saw fast enough, a weight may be added, and if they feed it too fast a weight may be arranged to counterbalance the weight of the saw and links.

The bar *i* is fastened to the bars M and N to guide and steady the links *h h*, which traverse each side of it, as shown in the drawing.

The saw may be supported by the bent bar O, to hold it straight with the beam.

I contemplate that a pulley or gear may be fastened to the shaft A, to operate the machine by water, steam, or other power.

I believe I have described and represented my improvements in machines for sawing wood so as to enable any person skilled in the art to make and use them. I will now state what I desire to secure by Letters Patent.

I claim—

1. The combination and arrangement of the rock-shaft G, arm H, links *h h*, and saw-beam J, constructed to operate substantially as described, for the purpose set forth.

2. In combination with the links which support the saw-beam, the guide-bar *i*, substantially as described, for the purpose set forth.

JOHN WELDY.

Witnesses:

GEORGE NEEL,

SAMUEL GEPHART.