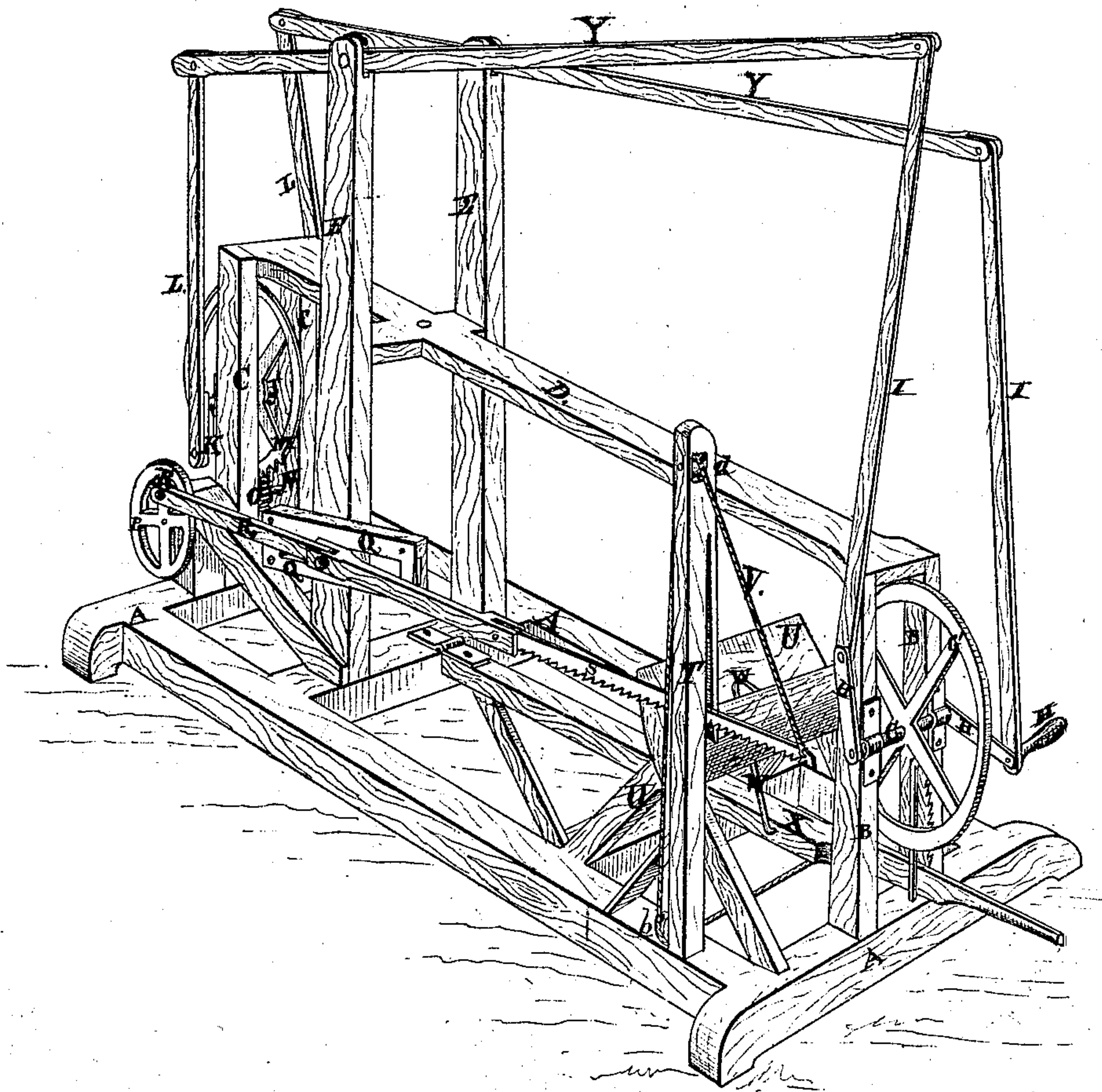


J. Kauffman,
Sawing Machine.
No. 103892. *Patented June 7. 1870.*



ATTEST
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United States Patent Office.

JACOB KAUFFMAN, OF GILBOA, OHIO.

Letters Patent No. 103,892, dated June 7, 1870.

IMPROVEMENT IN SAWING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, JACOB KAUFFMAN, of Gilboa, in the county of Putnam and State of Ohio, have invented a new and useful Improvement in Hand-power Sawing-Machines; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification.

The nature of this invention relates to an improvement in the construction of machines for sawing wood by manual power, and consists in the peculiar arrangement of a pair of walking-beams, and their connecting-rods, for transmitting the power applied to a quarter-cranked driving-shaft, through suitable gearing, to a drag-saw; also, in the general arrangement of its various parts, as more fully hereinafter set forth.

In the drawing, which shows my device in perspective—

A represents a frame-work, forming the bed of the machine, at either end of which is inserted a pair of standards, B C, connected at the top by a beam, D.

At two-thirds the distance from the front to the rear standards are erected the gallows-frame standards E, in which are pivoted the walking-beams Y.

G is the driving-shaft, provided with a balance-wheel, G', and journaled in the standards B.

H are cranks, placed at right angles with each other, at either end of the shaft, and communicate motion to the walking-beams Y, through the connecting-rods I, one of the cranks being provided with a crank-handle, H', through which the shaft is rotated.

J is a shaft, journaled in the standards C, and is provided at either end with the quarter-cranks K, which are connected to the short arms of the walking-beams by the rods L, whereby a continuous rotary motion is communicated to the shaft J, on which is keyed a spur-wheel, M, which, in turn, rotates, with increased velocity, a counter-shaft, N, below, through its pinion, O.

P is a crank-wheel at the end of the counter-shaft, which communicates a reciprocatory movement to a cross-head moving in the guides Q, through a pitman, R.

To the cross-head is attached a drag-saw, S, moving in guides in a standard, T, near the saw-horse U.

When not sawing, the saw is suspended by a cord, V, passing around shieves, *a b*, at the top and bottom of the standard T, passing to the opposite side of the bed-piece, and terminating in a ring to slip over a pin therein, so as to hold up the saw when not in use.

W is a clamp, bent at the top to hook over the stick to be sawn, and passes down through the saw-horse, engaging with a treadle, X, pivoted to the bed-piece, and which engages with a ratchet on the face of one of the standards B, whereby the stick of wood in the saw-horse is firmly held in place while being sawn.

It will be noticed that the leverage in the cranks and beams increases from the saw toward the driving-shaft, while the speed increases in the opposite direction, so that the usually laborious and slow process of sawing wood by hand, with this device is rendered easy and expeditious.

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

The construction of the standards B C E, driving-shaft G, balance-wheel G', quarter-cranks H and handle H', walking-beams Y, connecting-rods I L, shaft J, quarter-cranks K, spur-wheel M, counter-shaft N, pinion O, crank-wheel P, pitman R, guides Q, saw S, standard T, cord V, shieves *a b*, saw-horse U, clamp W, and treadle X, all arranged on a bed-frame, A, and operating substantially as herein described, for the purpose specified.

JACOB KAUFFMAN.

Witnesses:

FREDERICK EBERTS,
SAM. J. SPRAY.