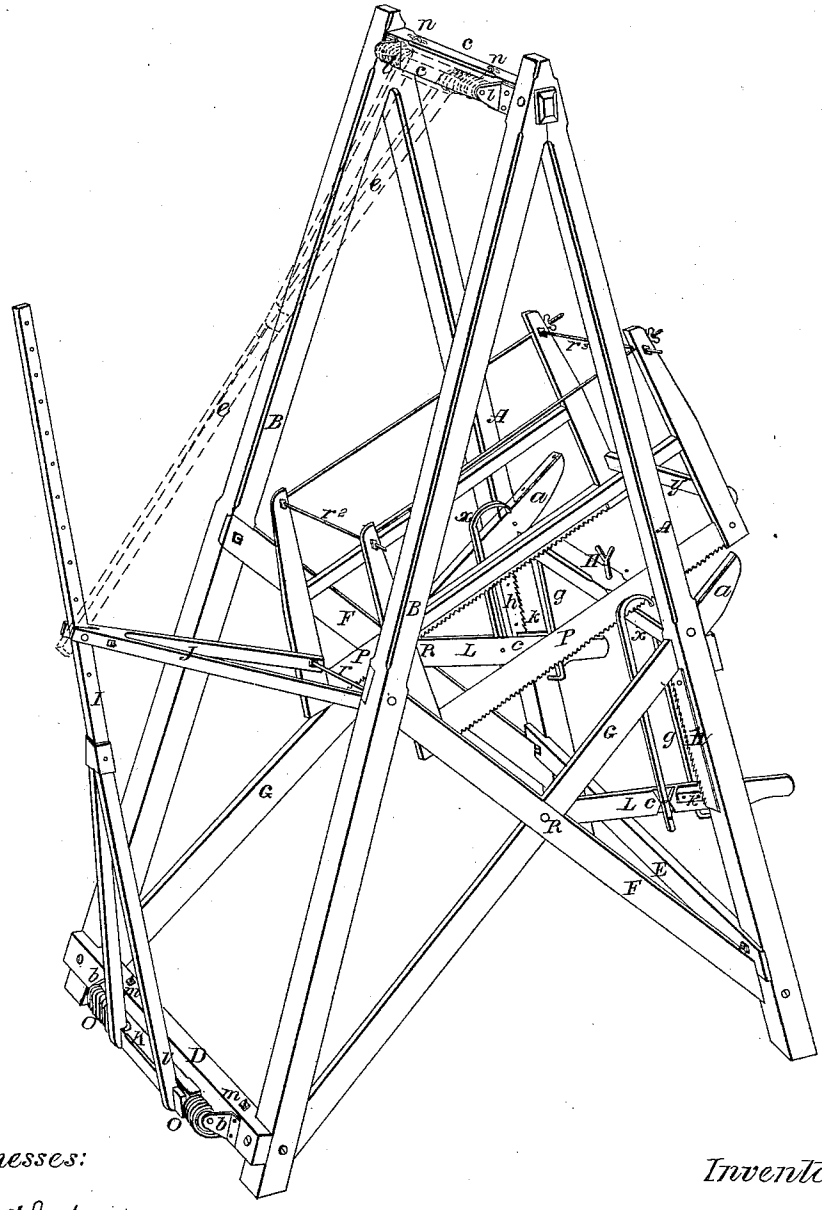
C. M. Day,

Drag Saw.

No. 58,616. Patented Oct. 9, 1866.



Witnesses:

D. McIntyre

C. B. Grant

Inventor:

Charles M. Day.

UNITED STATES PATENT OFFICE.

CHARLES M. DAY, OF ANN ARBOR, MICHIGAN.

HAND WOOD-SAW.

Specification forming part of Letters Patent No. **58,616**, dated October 9, 1866.

To all whom it may concern:

Be it known that I, CHARLES M. DAY, of the city of Ann Arbor, in the county of Washtenaw, State of Michigan, have invented a new and useful Improvement in Hand Wood-Saws, entitled "Day's portable double-action hand wood-saw;" and I do hereby declare that the following is a clear and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a part of this specification, in which said drawing is a perspective view.

The nature of my invention consists in the arrangement of a portable frame with clamp-hooks for holding the wood, to which is attached spiral springs, acting upon movable arms, to add power to one or more hand wood-saws, thereby gaining a quicker motion, and saving time and labor in sawing wood.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I construct my frame A B of wood, which consists of four legs or posts A A B B, each pair of which are united at the top like the apex of an inverted letter **V**. The apex of each pair of legs or posts is connected by framing into them the cross-piece C, and bolted securely.

The legs A B are braced at the side by cross-braces G and F, which are halved together and bolted, the braces G G projecting beyond the legs A A, forming a support for the wood to be sawed at *a a*.

Under supports *a a* is secured a cross-piece, H, which is bolted to legs A A, for center support of wood and as a lateral brace.

E D are cross-pieces, bolted near foot of legs A B, as lateral braces, E also acting as a support for the foot of operator, and D as a support for axle K and arms I and J. On the outside face of cross-piece D are secured iron ears *b b*, in which the axle K has its bearings.

I is a forked arm, whose two ends, *v v*, are bolted to axle K.

J is also a forked arm, connecting arm I with saws P P, secured at one end to saws P P by rod *r*, the other end being secured by pin *s* at any point of arm I, at the pleasure of the operator.

Around each end of axle K is coiled a spiral spring, O O, of brass, iron, or steel, one end of spring being secured by clasping around foot of arm I at *v v*, the other end of spring passing under axle K, and secured to under side of cross-piece D by hooked bolts *m m* clasping them.

Cross-piece C is also provided with ears *l l* and hooked bolts *n n*, the same and for the purpose as on cross-piece D, to which is secured the axle K, should the operator desire to invert arm I, as indicated by dotted lines *e e*.

The saws P P are one or more hand wood-saws of ordinary construction. Where two or more saws are used, they are secured together by three iron rods, r r^2 r^3, and wood handle *y*.

x x are iron clamp-hooks for securing wood to be sawed to frame A B A B, and are connected at lower end to handles L L by pin at *c*.

The ends of handles L L are secured to frame at intersection of cross-braces at R R. On the upper edge of handles L L is secured a small plate, *k k*, which slides against notched plates *h h*, secured to legs A A.

g g are guides to arms L L.

The operation of the machine is as follows: Place wood to be sawed upon supports *a a*, and place clamp-hooks *x x* upon wood, and press down and outward upon handles L L, which catch in toothed plates *h h*, and secure wood to frame. Place saws P P upon wood and draw them toward the operator. By so doing the arm I is drawn toward the frame A B, turning axle K and tightening the spiral springs O O. As the operator reverses the motion of saws from him, the springs O O draw saws P P down, sawing the wood, thereby gaining quicker motion and saving time and labor.

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

The combination of the rock-shaft K, provided with the springs O, with the bifurcated lever I and pitman J, connected to the saws P, when arranged to operate as shown and described.

CHARLES M. DAY.

Witnesses:
D. MCINTYRE,
C. B. GRANT.