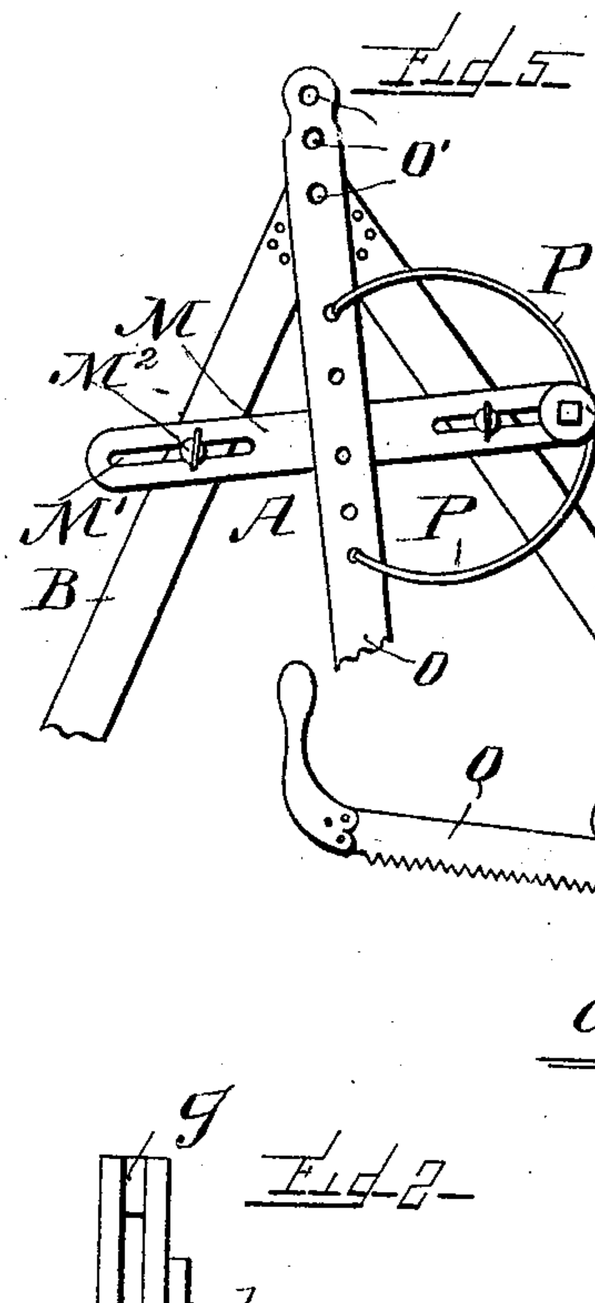
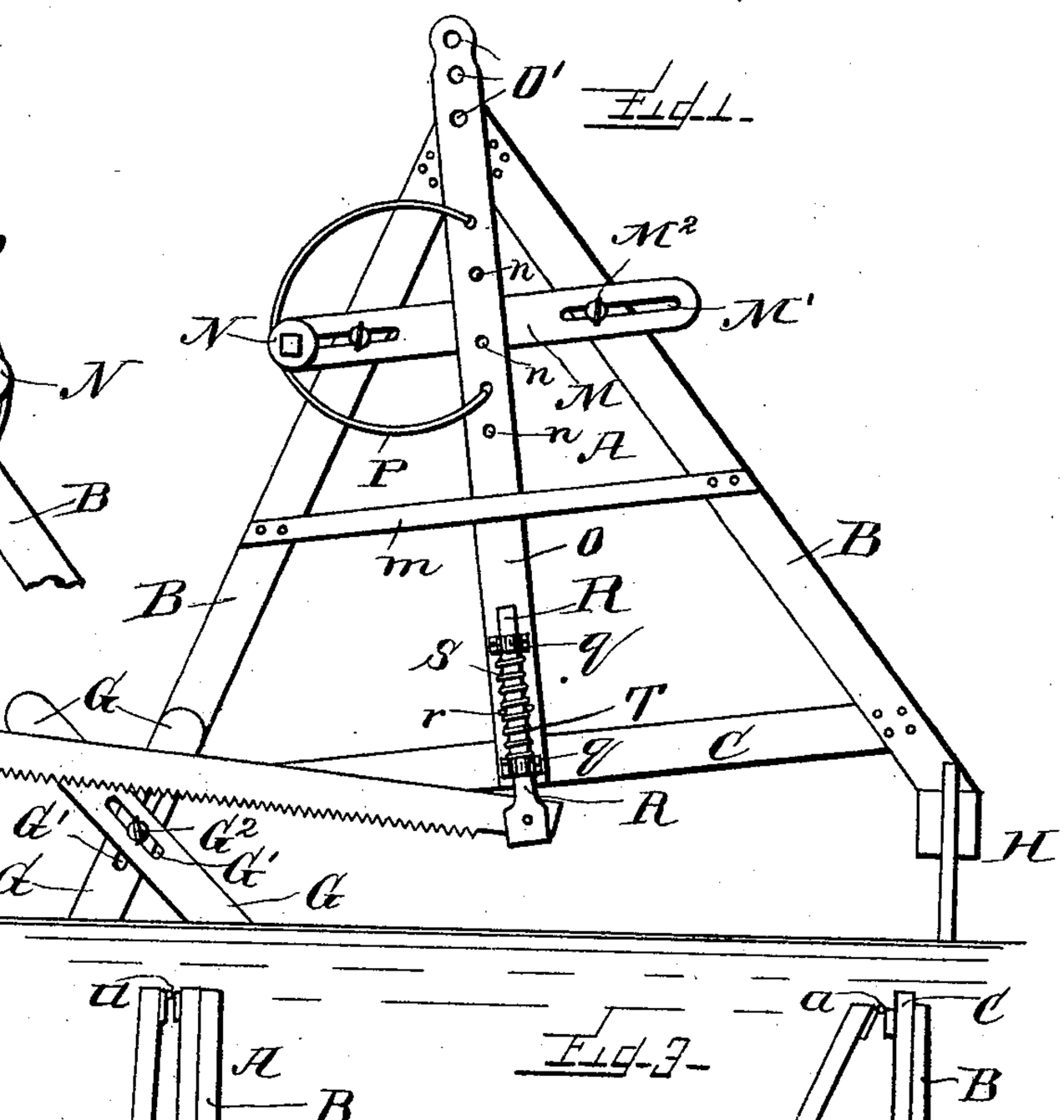
(No Model.)

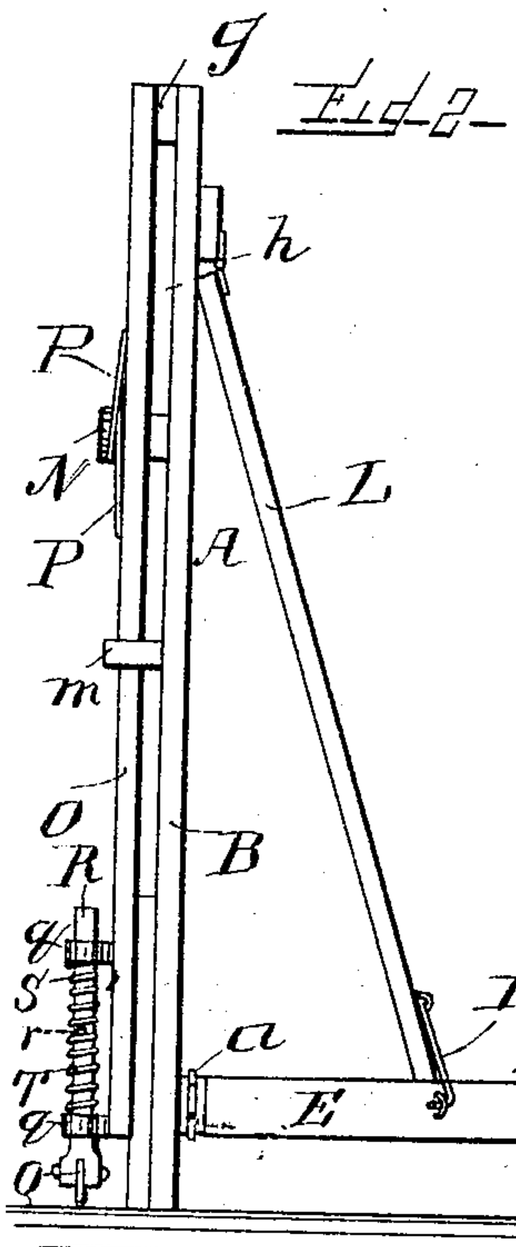
J. B. WETMORE.

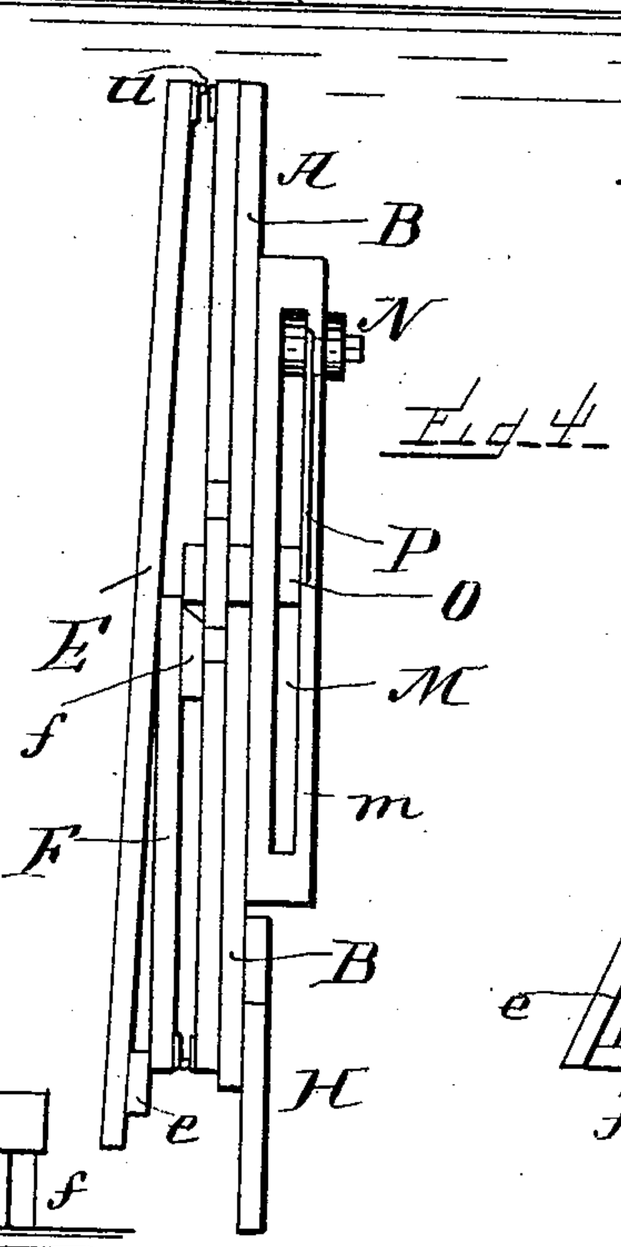
DRAG SAW.

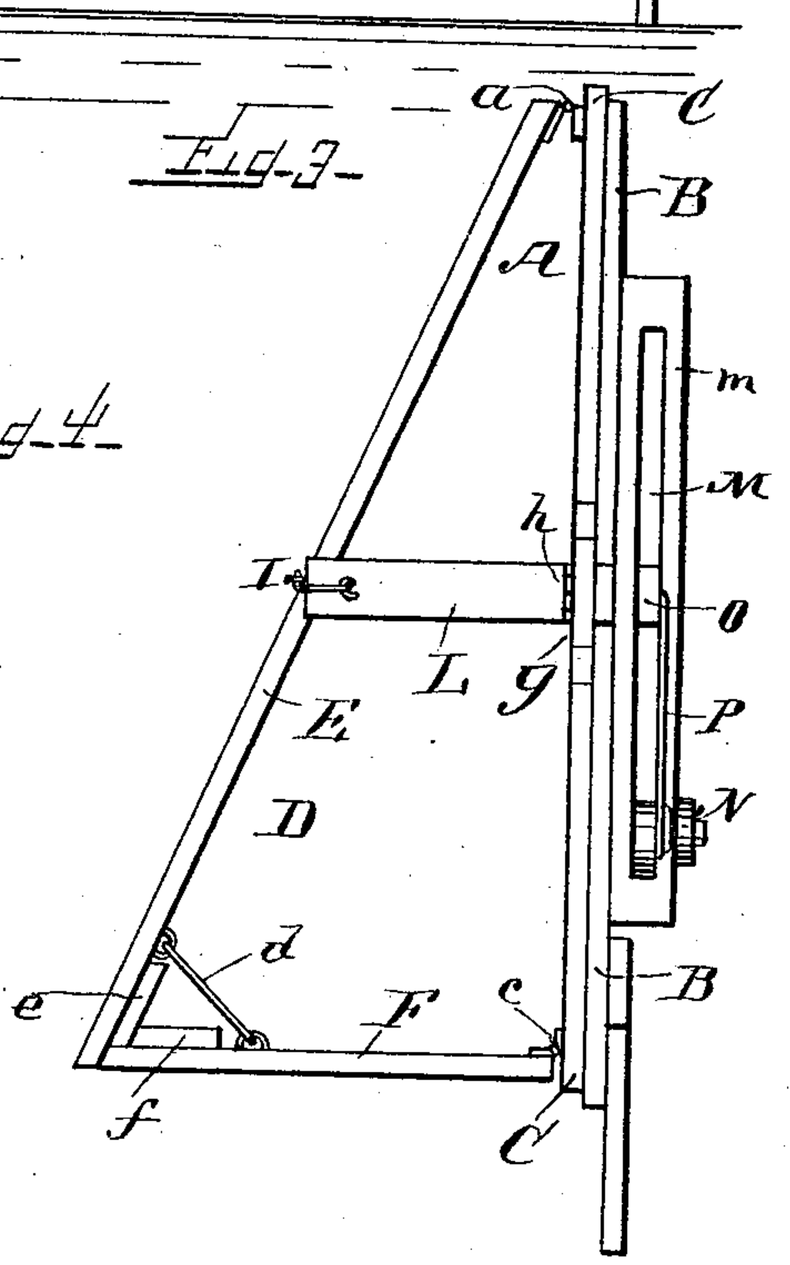
No. 516,418. Patented Mar. 13, 1894.











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DRAG-SAW.

SPECIFICATION forming part of Letters Patent No. 516,418, dated March 13, 1894.

Application filed July 27, 1893. Serial No. 481,641. (No model.)

To all whom it may concern:

Be it known that I, JOB B. WETMORE, a citizen of the United States, residing at Wellsborough, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Drag-Saws, of which the following is a specification.

This invention relates to the class of wood sawing, and particularly to a drag-lever sawing machine, and the object of the invention is to provide a drag sawing machine, constructed so as to be readily folded together for transportation.

A further object of the invention is to provide means for hanging the saw in the frame of the machine, so that the very least power may be required to operate the saw.

A further object of the invention is to provide simple, cheap, yet durable means for the return stroke of the saw; and means for reversing the position of the saw, without removing it from its support.

A still further object of the invention is to provide a wood sawing machine which can be used in the woods, and by removing the ground supporting frame can be attached to a wood house or barn in a very simple inexpensive manner.

The invention consists in the novel construction and arrangement of parts, as will be hereinafter more fully described and set up in the claims.

In the accompanying drawings forming part of this application: Figure 1— is a side view of my improved sawing machine, in position for sawing. Fig. 2— is an elevation looking from the front end of the machine. Fig. 3— is a top plan view. Fig. 4— is a top view of the machine folded, without the saw. Fig. 5— is a side view of the upper portion of machine, showing the bow spring in position to operate the saw in a reversed position from that shown in Fig. 1.

The same letters of reference denote the same parts throughout the several figures of the drawings.

The triangular upright frame A, is composed of two beams B, and the bottom beam C, which bottom beam forms one side of the triangular ground frame D, while the other side E, is hinged at *a*, to the front end of the said beam C; the rear end F, is hinged at *c*, to the rear end of the said beam C, thus forming a horizontal triangular frame. The free ends of the beam E, and the end F are connected by means of a hook *d*, and at this juncture each is provided with supporting legs *e*, and *f*, respectively. The beam B, extends below the beam C, and is provided with slidable legs G, having a slot G′, engaged by a thumb screw G^2 for adjusting the machine to a level, should it tip back too far, when the buck H which is at the other end of the beam C, is placed on top, or over a log. The two beams B, are joined together at their tops by a hinge plate *g*, extending across the said beams B.

L, denotes a brace beam secured at its top, by means of the hinge *h*, and its bottom, rests upon the beam E, and is provided with a hook I, attaching it to the said beam.

Near the top of the vertical triangular frame is secured the cross beam M, its end projecting beyond the beam B, and having one of its extreme ends provided with a detachable spring holder N. This beam M has slots M′ engaged by thumb screws M^2, for adjusting the said beam horizontally so as to make a slight change in the tension of the spring P, without displacing the ends of the latter.

Pivoted in the top end of the plate *g* is a lever O, extending down through the slotted cross beam *m*, and having a series of apertures *n* adapted to receive the ends of the bow spring P, secured upon the holder N. The pivot holes O′ allow the lever O to be adjusted vertically. This spring and lever returns the saw Q, which is suspended from the said lever, after the saw has made its cut, and in order to vary the tension of the spring upon the lever, the ends of the spring are moved or adjusted in the said apertures *n* as may be desired, to bring the ends nearer together or farther apart.

In the modification shown by Fig. 5 the cross beam has the spring holder reversed and the spring is shown in position to operate the saw from the opposite or front end of the machine without moving or changing the position of the machine.

By changing the position of the bow spring it has been found to be very convenient, saving much time and labor, when the machine is set up in position for operation, and not

sufficient space or room is left for the operator to work the saw from the rear end of the machine as usual.

The saw Q, is suspended at its front end from the spring controlled lever O, by means of the movable rod R, to the lower end of which the said end of the saw is bolted. The rod R is hung or suspended from the said lever O, by means of lugs *q*, through which the said rod passes. The rod has a central pin *r*, dividing two spiral springs S and T, and these springs are of sufficient tension to compel the saw to make its cut, while the rod enables the saw to be reversed and operated from the front end of the machine, when the bow spring is reversed, as hereinbefore stated.

When it is desired to fold the machine for transportation, the saw may or may not be removed, the beams unhooked and folded upon each other as shown in Fig. 4.

It will be observed that the triangular ground frame may be entirely dispensed with, and the remainder of the machine secured to the side of a wood house or barn, and operated in the same manner.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the hinged triangular frames, with the bow spring, the lever controlled by the said spring and means for suspending a saw from the said lever, consisting of the movable rod, the spiral springs surrounding the rod, and the lugs secured to the lever through which the rod is passed, and between which the spiral springs are operated, substantially as and for the purpose set forth.

2. The combination with the triangular frames hinged together, of the lever pivoted to the top of one of the said frames and having a series of apertures, the horizontally adjustable beam, the spring secured to the said beam its free ends engaging two of the said apertures to control the movement of the said lever, the saw, the spiral springs, the rod which the springs surround movably secured to the said lever and being attached to the said saw to control the vertical movement of the same, as set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JOB B. WETMORE.

Witnesses:
ROBERT K. YOUNG,
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