

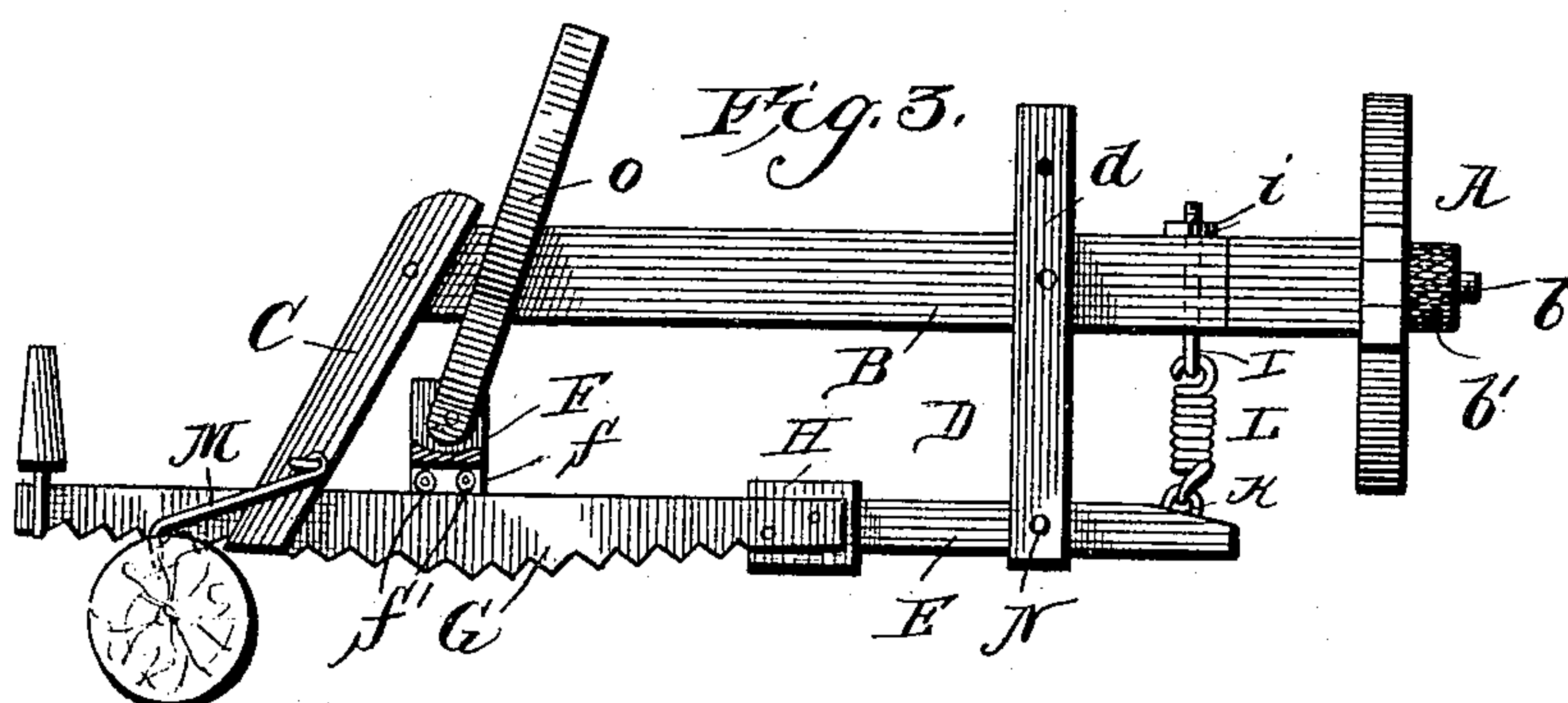
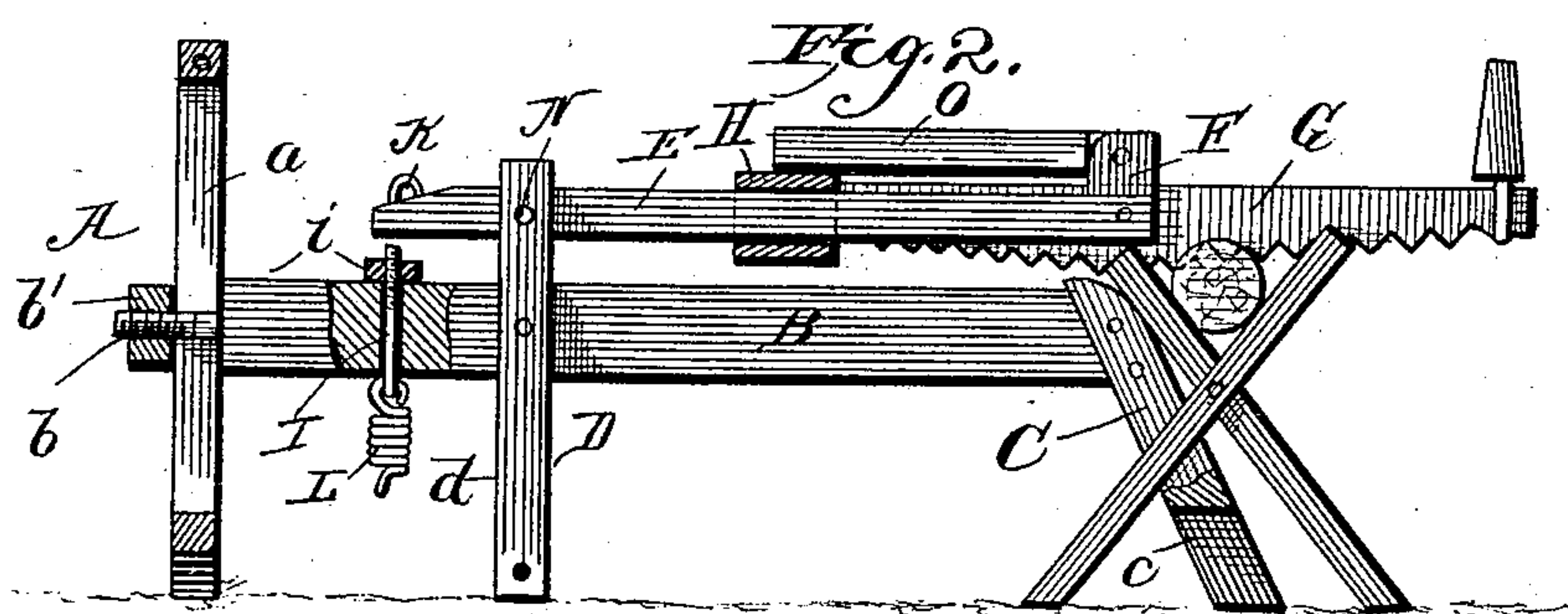
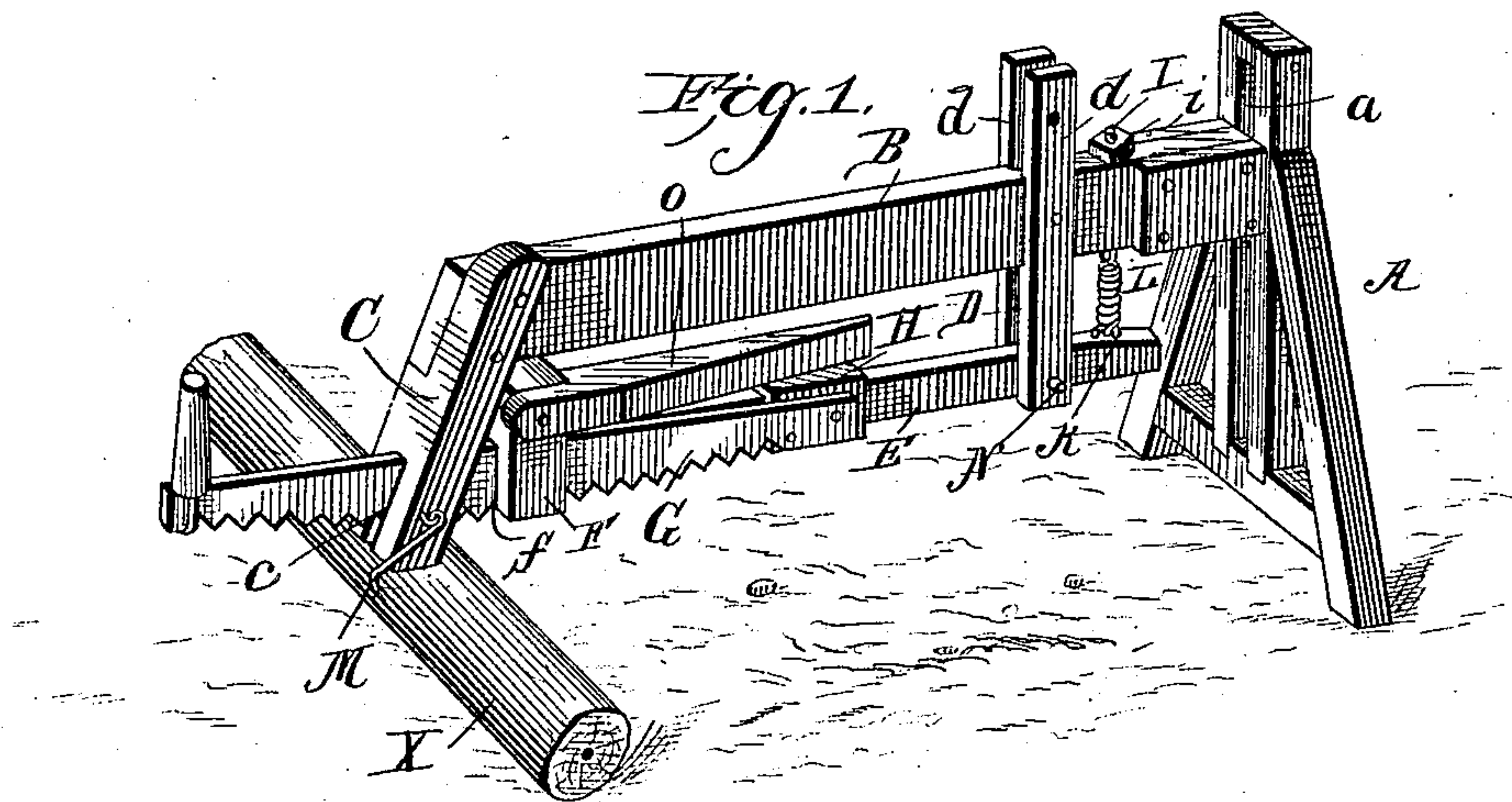
(No Model.)

W. E. PATTERSON.

SAWING MACHINE.

No. 397,203.

Patented Feb. 5, 1889.



Witnesses,

Henry G. Dietrich

C. E. Doyle

Inventor,

Wm. E. Patterson,

By *his* Attorneys

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UNITED STATES PATENT OFFICE.

WILLIAM E. PATTERSON, OF COLOGNE, MINNESOTA.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 397,203, dated February 5, 1889.

Application filed August 25, 1888. Serial No. 283,725. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. PATTERSON, a citizen of the United States, residing at Cologne, in the county of Carver and State of Minnesota, have invented a new and useful Improvement in Sawing-Machines, of which the following is a specification.

The object of this invention is to provide a simple, cheap, light, and durable sawing-machine which may be arranged in any desired position to cut either standing trees or horizontal logs; and it consists in a certain novel construction and combination of devices, fully set forth hereinafter in connection with the accompanying drawings, and specifically pointed out in the appended claim.

In the drawings, Figure 1 is a perspective view of the sawing-machine embodying my improvements in the operative position. Fig. 2 is a side view, partly in section, arranged to cut kindling-wood. Fig. 3 is a view of the device in position to cut trees.

Referring by letter to the drawings, A designates the standard, which is provided with a central vertical slot, *a*; and B designates the beam, which is arranged at one end adjacent to the standard, and is secured thereto by a bolt, *b*, which is secured at one end to the end of the beam, projects through the slot *a*, and is engaged by a suitable nut, *b'*. The free end of the beam is provided with a depending inclined support, C, having a guide-slot, *c*, at its lower end.

D represents a hanger, which is secured to the beam near the standard; and it consists of the side bars, *d d*, arranged parallel with each other and extending above and below the beam; and E represents the swinging arm, which is pivoted near one end between the lower extremities of the hanger, and is provided at its free end with the guide-block F, having a guide-slot, *f*, therein similar to the slot *c*.

The saw G operates in the registering guide-slots *c* and *f*, and is attached at one end to a sliding block, H, which slides on the swinging arm E, which is pivoted in the hanger between the lower ends of the bars *d d*. The upper edge of the saw bears against an anti-friction roller, *f'*, which is arranged in the slot *f*.

I represents a vertical adjusting-bolt, which

is passed through the beam between the hanger and the standard, and is engaged at its upper end by the nut *i*, and the lower end of this bolt is connected to a loop, K, on the extremity of the swinging arm by the contractile spring L. It will be seen that when the bolt is raised by turning the nut the free or outer end of the swinging arm is pressed downward, and therefore presses the saw with greater force against the wood which is being sawed. The lower end of the support C bears on the log X, as shown in Fig. 1 of the drawings, and the said log is engaged by the loose hook M, which is connected to the support.

The operation of the improved sawing-machine will be readily understood from the foregoing description, taken in connection with the accompanying drawings. To raise or lower the beam, it is simply necessary to loosen the set-nut *b'* and readjust it when the beam is properly arranged. To adjust the device to cut kindling-wood, as shown in Fig. 2, remove the pin or bolt N, which pivots the swinging arm in the lower end of the hanger, and pivot the same in the upper end of the hanger above the beam, allow the lower end of the support to bear on the ground, and place a saw-horse at the free end of the beam, on which to support the kindling-wood. To adjust the machine to cut down trees or other vertical objects, loosen the nut *b'*, turn the beam over until the saw is in a horizontal position, and after arranging the end of the support against the side of the tree engage the hook therein. To prevent sagging of the swinging arm when the machine is in this position, I provide a guiding-arm, O, which is pivoted to the guide-block, and is adapted to be extended over the beam to bear thereon and support the free end of the said swinging arm.

The improved machine is simple, light, and may be readily adjusted to cut logs in all positions.

Having thus described my invention, I claim—

In a sawing-machine, the combination of the standard provided with a vertical slot, *a*, the beam B, provided with a bolt, *b*, which passes through the slot *a* and is engaged by a thumb-nut, *b'*, the inclined support C, pro-

vided with a guide-slot, *c*, and an engaging-hook, *M*, the hanger *D*, comprising the parallel bars *d d*, projecting at their ends above and below the beam, the swinging arm *E*,
5 pivoted near its rear end between the extremities of the said bars and provided at its front end with a guide-block, *F*, having a slot, *f*, the adjusting-bolt *I*, arranged in the beam between the hanger and the standard and
10 connected to the rear end of the swinging arm by the coiled spring *L*, the saw *G*, operating in the slots *c* and *f*, and provided at its

rear end with a block, *H*, sliding on the swinging arm, and the guiding-arm *O*, pivoted to the block *F* and bearing on the beam *B*, to
15 prevent sagging of the swinging arm, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM E. PATTERSON.

Witnesses:

GEO. A. DU TOIT,

O. W. LUNDSTEN.