(No Model.)

C. L. KIRKSCEY & F. P. BOWDEN.

DRAG SAWING MACHINE.

No. 483,630. Patented Oct. 4, 1892.

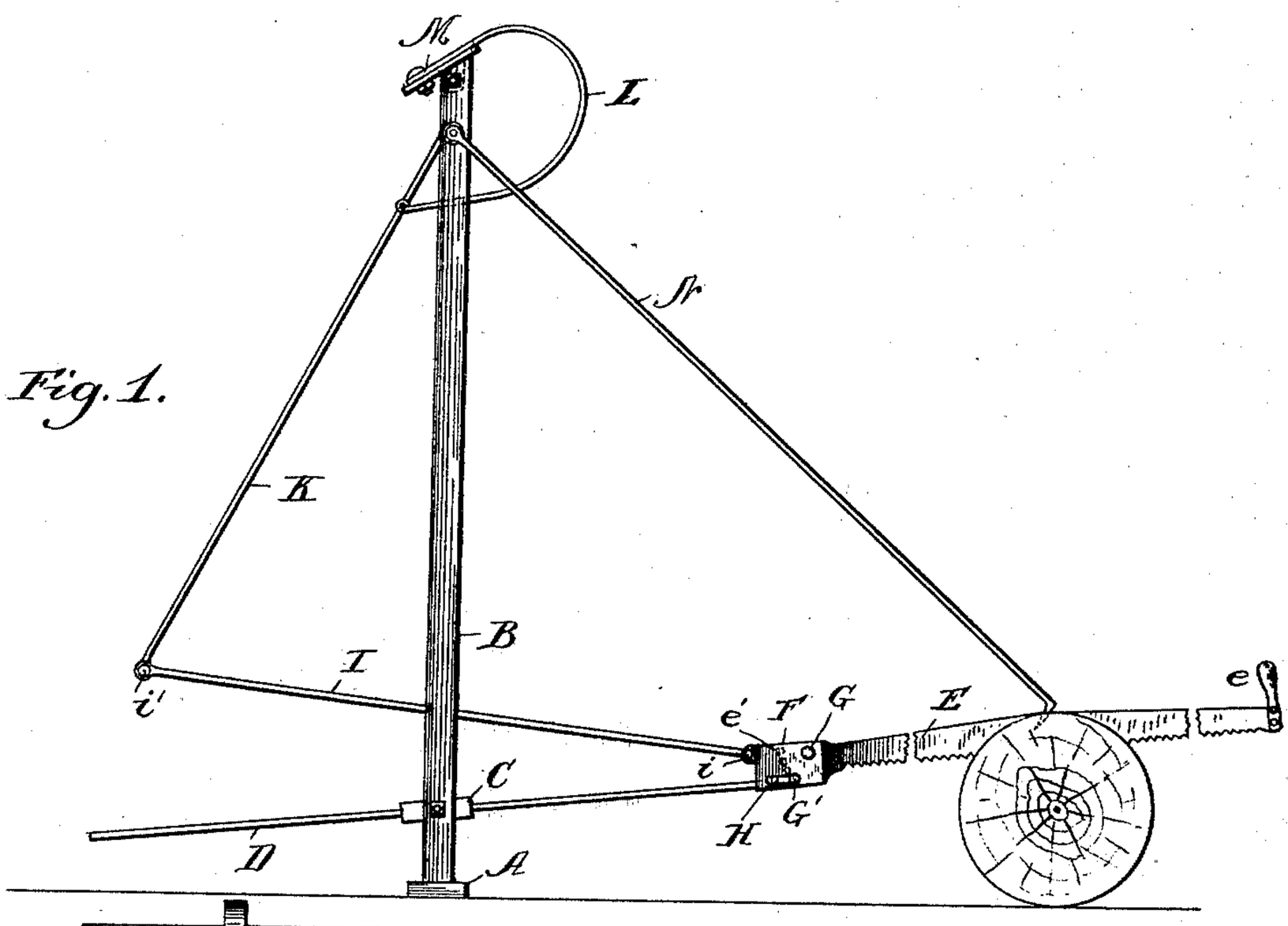


Fig. 1.

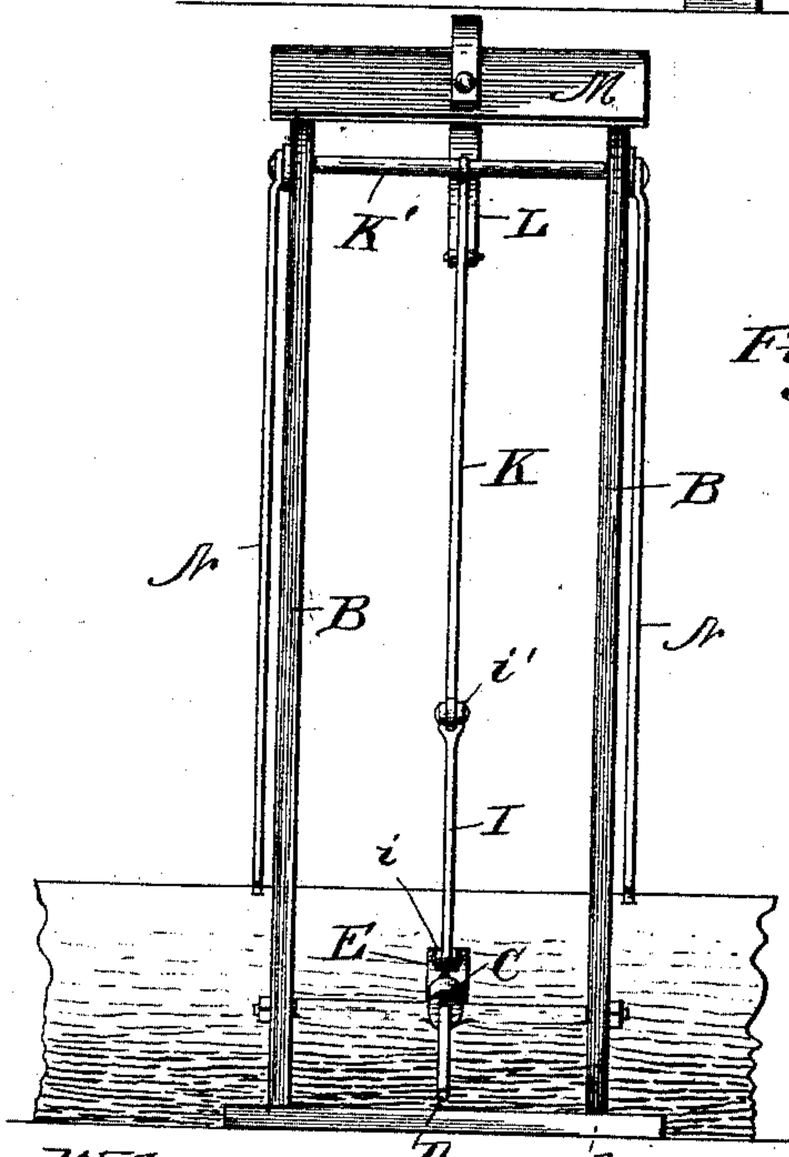
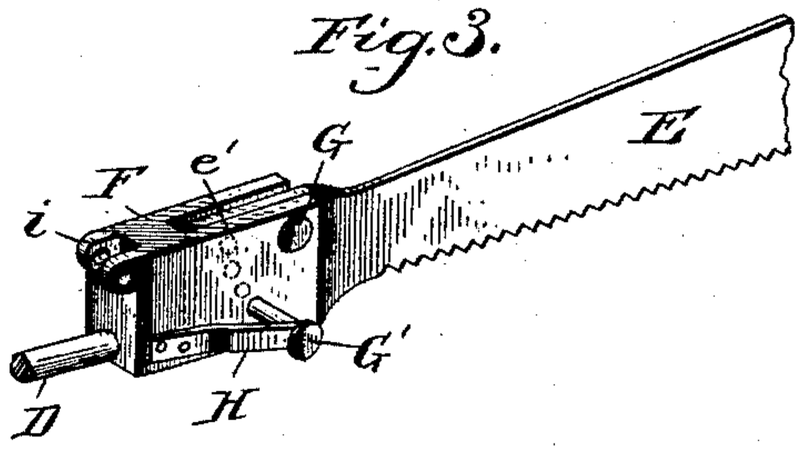


Fig. 2.

Fig. 3.



Witnesses:
J. B. McGirr.
J. S. Barker.

Cicero L. Kirksey and
Fountain P. Bowden Inventors,
by Charles Brun Bking,
Attorneys.

UNITED STATES PATENT OFFICE.

CICERO L. KIRKSCEY AND FOUNTAIN P. BOWDEN, OF DOVER, ARKANSAS.

DRAG-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 483,630, dated October 4, 1892.

Application filed February 24, 1892. Serial No. 422,642. (No model.)

To all whom it may concern:

Be it known that we, CICERO L. KIRKSCEY and FOUNTAIN P. BOWDEN, citizens of the United States, residing at Dover, in the county of Pope and State of Arkansas, have invented certain new and useful Improvements in Drag-Sawing Machines; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention has for its object to improve drag-sawing machines, whereby their construction is simplified and the cost of the apparatus reduced without impairing its effectiveness, but rather increasing the same.

Figure 1 is a side view of a drag-sawing apparatus embodying our invention. Fig. 2 is an end view. Fig. 3 is a detail view showing the adjustable connection of the saw with the block F.

The framework which supports the operative or working parts of the machine consist of a sill-piece A and parallel uprights B B. Near the lower ends of the uprights B is swiveled or pivoted a tubular guide C, through which extends a guide-rod D, connected with and extending from the end of the saw E opposite to that to which the handle *e* is attached. The rod D is connected with the saw by being screwed into or otherwise securely attached to a head or block F, which is slotted to receive the end of the saw-blade. The saw-blade is held in the slot in the block F by two pins or bolts G and G′, the bolt G being a permanent fastening upon which the saw-blade can turn when the detachable pin or bolt G′ is removed from engagement therewith. The end of the saw which enters the block F is provided with a series of holes *e*′, arranged on an arc, of which the hole for the bolt G is the center and into which the detachable pin G′ is adapted to enter. We prefer that the pin or bolt G′ should be carried by a spring H, as then it is always held in proper position and when the saw is in use it is not liable to become detached and lost. These means for connecting the saw-blade with the block F permit the adjustment of the block and saw to any desired angle relative to each other.

I is the rod, connected by a hinge *i* to the block F and by a hinge *i*′ to another rod K, which at its upper end carries an axle K′, mounted in the uprights B near their upper ends.

L is the spring, connected at one end with the rod K and at the other with the spring-holder M, supported between the upper end of the uprights B. The spring is of substantially C shape and operates to assist in starting the saw in its return movement when it has reached its limit of motion, thus causing it to operate more easily and regularly than were it not employed.

N is a dog secured to one of the uprights and adapted to be made to engage with the log or other object being sawed and so hold stationary the sawing-machine relative thereto.

By the use of this invention we have found that one man can cut as much timber and with great ease as two men can with an ordinary crosscut-saw. The guide-tube and the rod secured to the end of the saw opposite to that carrying the handle operate to cause the saw to run straight and smoothly and to move in a path which insures the most rapid and effective cutting.

The spring L and its connections with the saw very materially aid the operator by assisting in starting the saw after it reaches its limit of movement.

This apparatus may be used to saw timber lying flat or at an angle and for felling standing trees, the frame being placed and blocked at the proper angle to suit the timber being sawed.

What we claim, and desire to secure by Letters Patent, is—

1. In a drag-saw apparatus, the combination of the saw-blade having the handle at one end and the series of perforations *e*′ at the other end, the block F, the pin which permanently unites the saw-blade and the block, the detachable pin, which is adapted to engage with the said perforations *e*′ and thereby, also, unite the blade and the block, these parts being arranged substantially as set forth, whereby the parts may be adjusted and held relative to each other, the rod E rigidly secured to the block F, and a guide in line with the said rod through which it slides.

2. In a drag-saw apparatus, the combination of the supporting-frame, the saw-blade, the guide-rod secured to the end of the saw opposite to the handle, the guide in which the said rod slides, the rod I, pivotally connected with the saw above the said guide, the rod K, pivotally supported in the frame and also pivotally united with the rod I, and the spring L, supported in the frame and connected directly with the rod K, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

CICERO L. KIRKSCEY.
FOUNTAIN P. BOWDEN.

Witnesses:
THOMAS S. YOUNG,
MADISON L. KIRKSCEY.