

J. A. ELSTON.
 Improvement in Sawing Machines.
 No. 120,051. Patented Oct. 17, 1871.

Fig. 1.

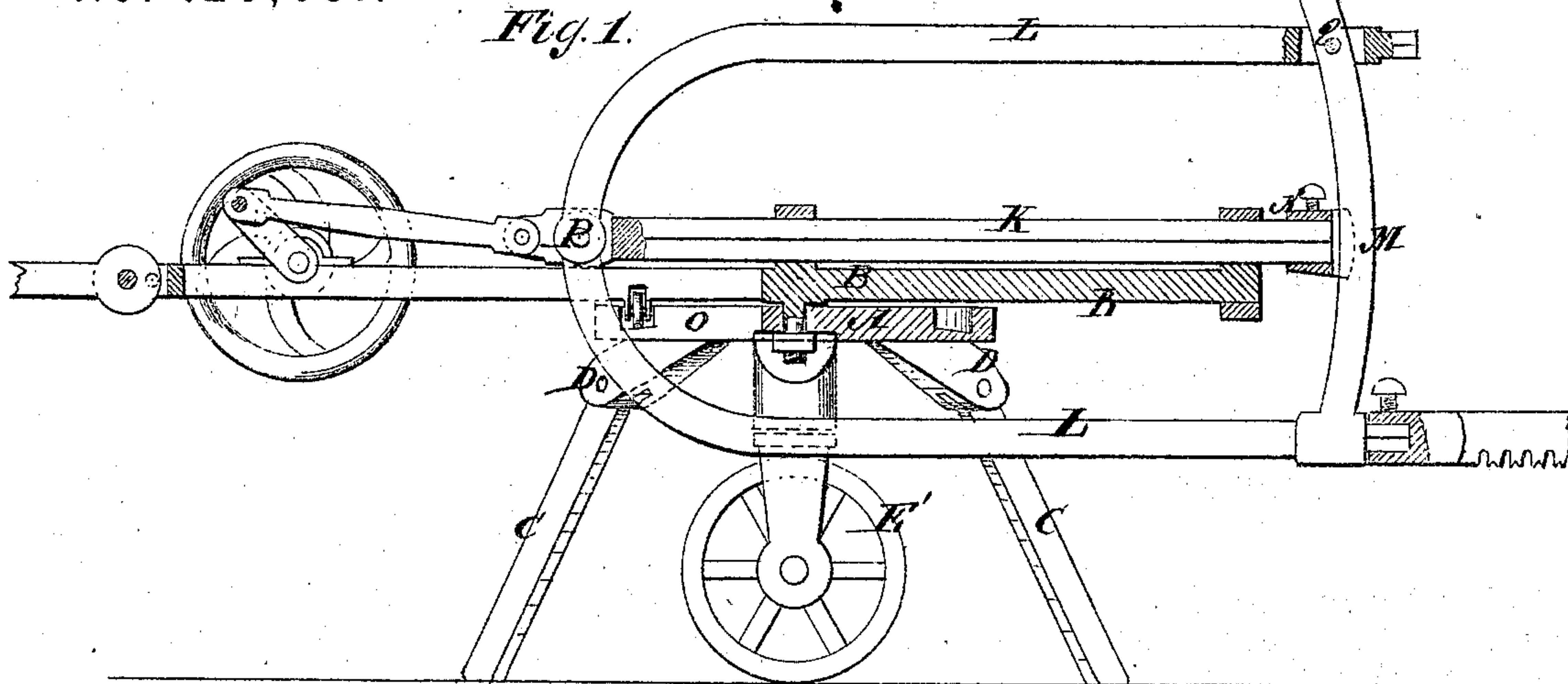


Fig. 2.

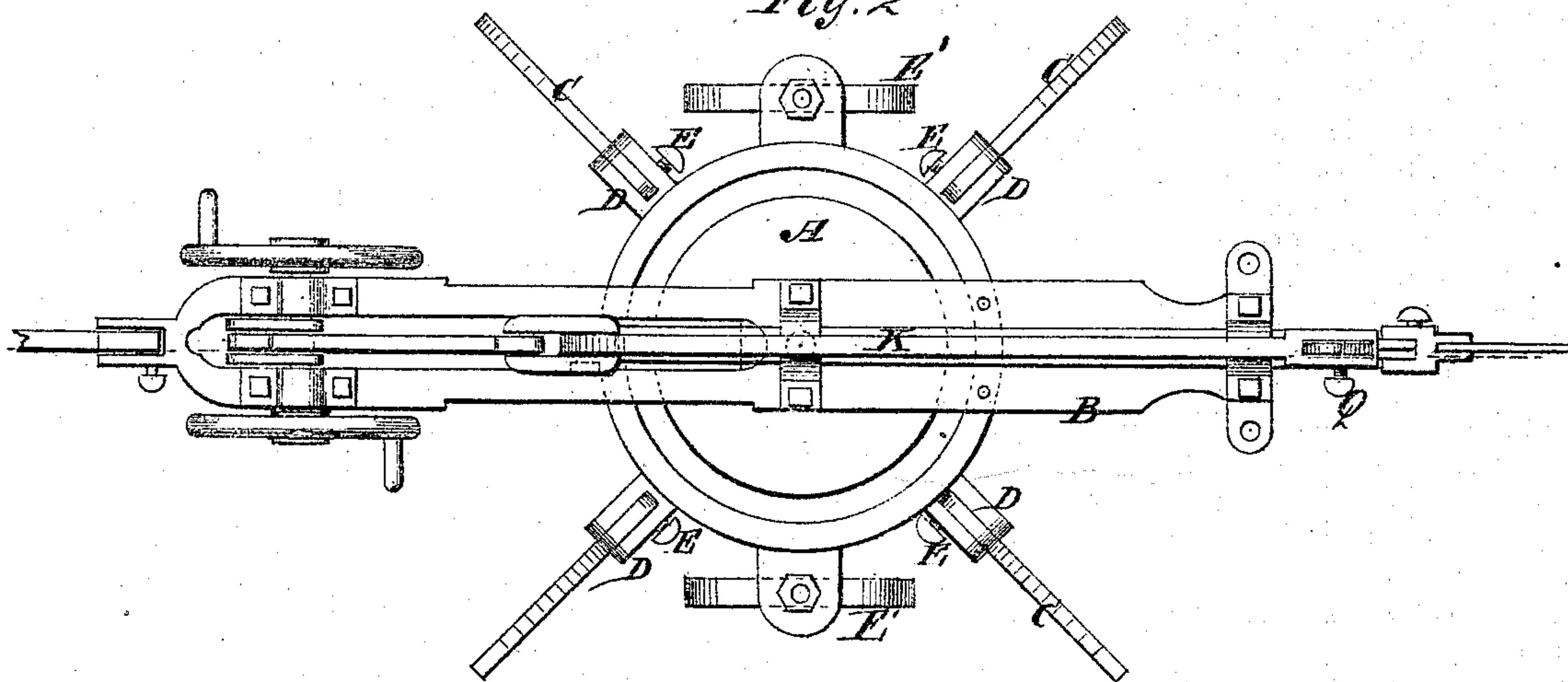
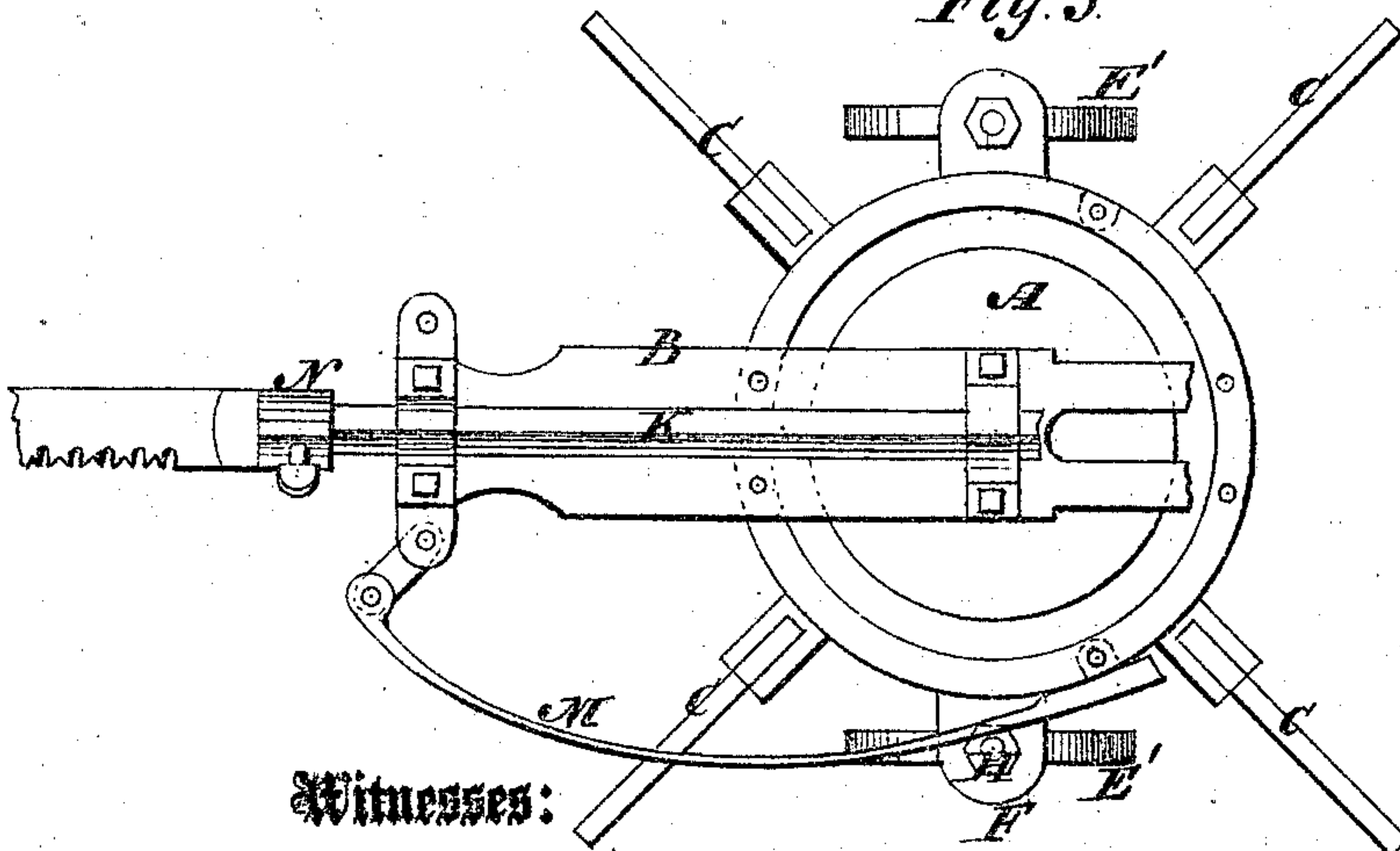


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES ANTHONY ELSTON, OF ELSTON STATION, MISSOURI.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 120,051, dated October 17, 1871.

To all whom it may concern:

Be it known that I, JAMES ANTHONY ELSTON, of Elston Station, in the county of Cole and State of Missouri, have invented a new and Improved Sawing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention consists in certain improvements upon the patent granted to me August 2, 1870, which will be first hereinafter fully described and subsequently clearly pointed out in the claims.

Figure 1 is a sectional elevation of the improved machine when in condition for sawing vertically. Fig. 2 is a plan view of Fig. 1, and Fig. 3 is a partial plan view when in the condition for sawing horizontally.

Similar letters of reference indicate corresponding parts.

A is a circular table or platform, with a long slotted frame, B, pivoted to its vertical axis upon its top, said frame being to support the operating mechanism. The platform A is supported on legs C pivoted to slotted radial projections D on the periphery and under side of the platform, said legs being capable of swinging up over the table vertically, and provided with binding-screws E for holding them in such positions; also for holding them in the right position for supporting it in the working position. I propose now to provide the platform with a pair of wheels, E', to facilitate the moving of it from place to place, and for this purpose provide the platform with the lugs F and connect the forked standards G having the wheels mounted in them by means of the vertical spindles H fitted in vertical holes in the said lugs, and secured by nuts at the upper ends, which will clamp the broad shoulders of the standards up against the lower sides of the lugs F and prevent said standards from turning. The wheels may, however, be connected in any approved way. The said wheels will also assist in supporting the machine when at work, the legs being pressed down upon the ground to brace and support the frame against moving laterally. This is greatly facilitated by the employment of the clamp or binding-screws, which, screwing against the en-

larged flattened upper ends of the lugs, make them fast in any position required. The reciprocating bar K carries a yoke, L, with a guide, M, to be used in vertical sawing for holding and guiding the saw, the yoke being jointed to the rear end of said bar, and the guide working up and down in a vertically-slotted block, N, on the front end of the bar K, as clearly shown. Now in order to have the slotted plate or frame B carrying this reciprocating bar and the crank-shaft by which it is driven as short as may be, and have the machine work efficiently, I provide a radial slot, O, in the platform A, extending from the periphery as nearly to the center as may be and connect the yoke L to the bar K, which is made shorter than it could otherwise be, so that in making the forward stroke the lower member of the yoke will work into the slot to the inner end. The frame B is therefore shortened as much as the length of the depth of the slot O. The yoke L consists of two bent rods, forming when pivoted together and to the bar K at P a figure similar to the letter U, and one of these members has the curved vertical guide-bar M permanently attached to it, while the other has a mortise for reception of the bar and a binding-screw, Q, for securing it. This construction admits of attaching or detaching said yoke readily, which is often required, for it is not used in sawing down trees. The adjustment of the saw and the feeding-spring M are the same as described in the patent already granted to me, being the same as indicated in Fig. 3.

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

1. The jointed saw-frame L, constructed to receive the saw on the end of either arm, and provided with a vertical arc-bar, M, on which the arms of the saw-frames are adjustable toward each other, all arranged for the purpose of adaptation to large or small timber, as set forth.

2. The frame or table A, combined with wheels E' E' and adjustable braces D, both arranged on the outside of the table to give a firm support to the table, while the braces may be turned over the top thereof, when the wheels are used to transport the machine.

JAMES ANTHONY ELSTON.

Witnesses:

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