

G. S. GRIER.
Sawing-Machines.

No. 147,389.

Patented Feb. 10, 1874.

Fig. 1.

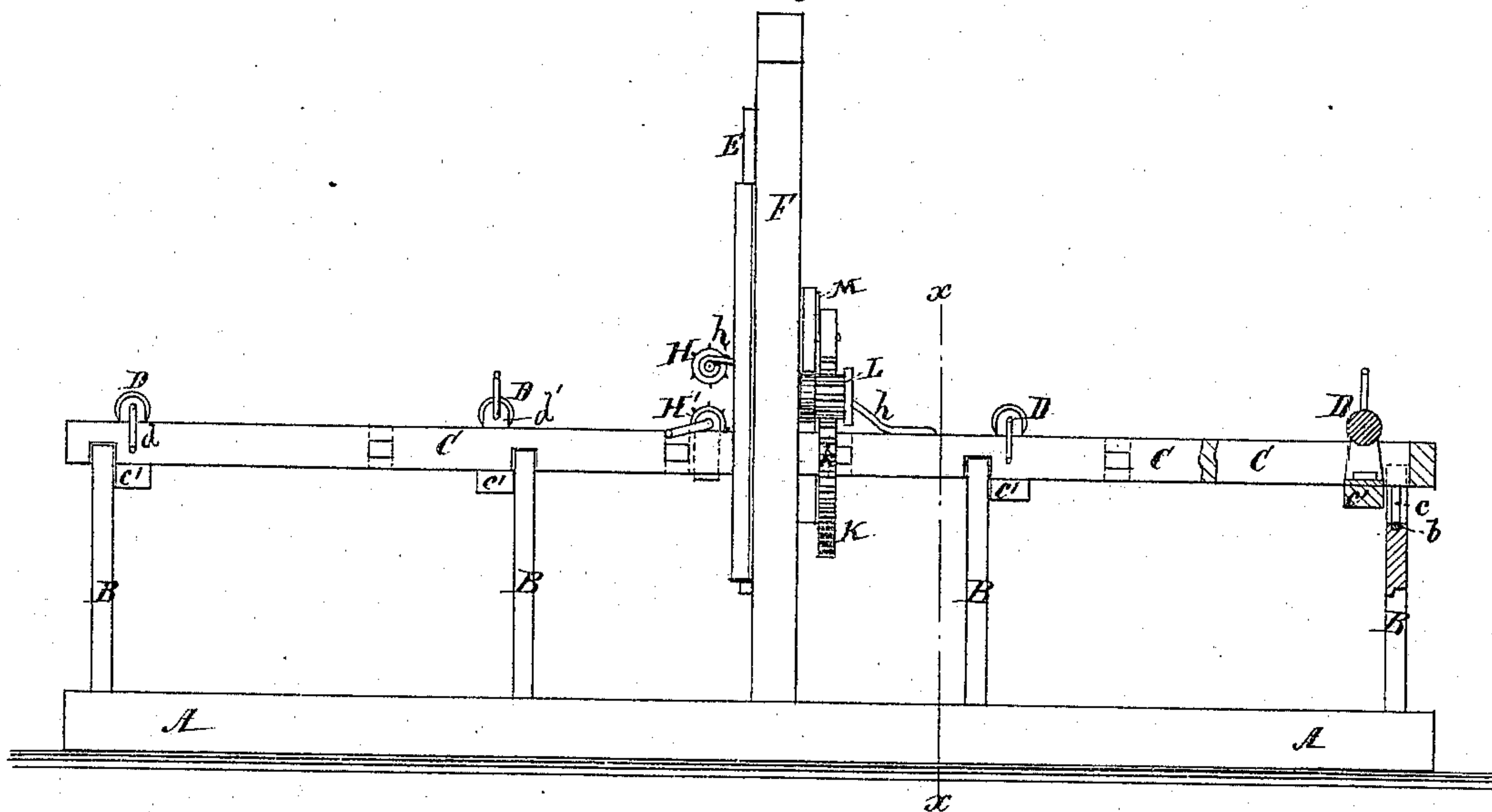


Fig. 2.

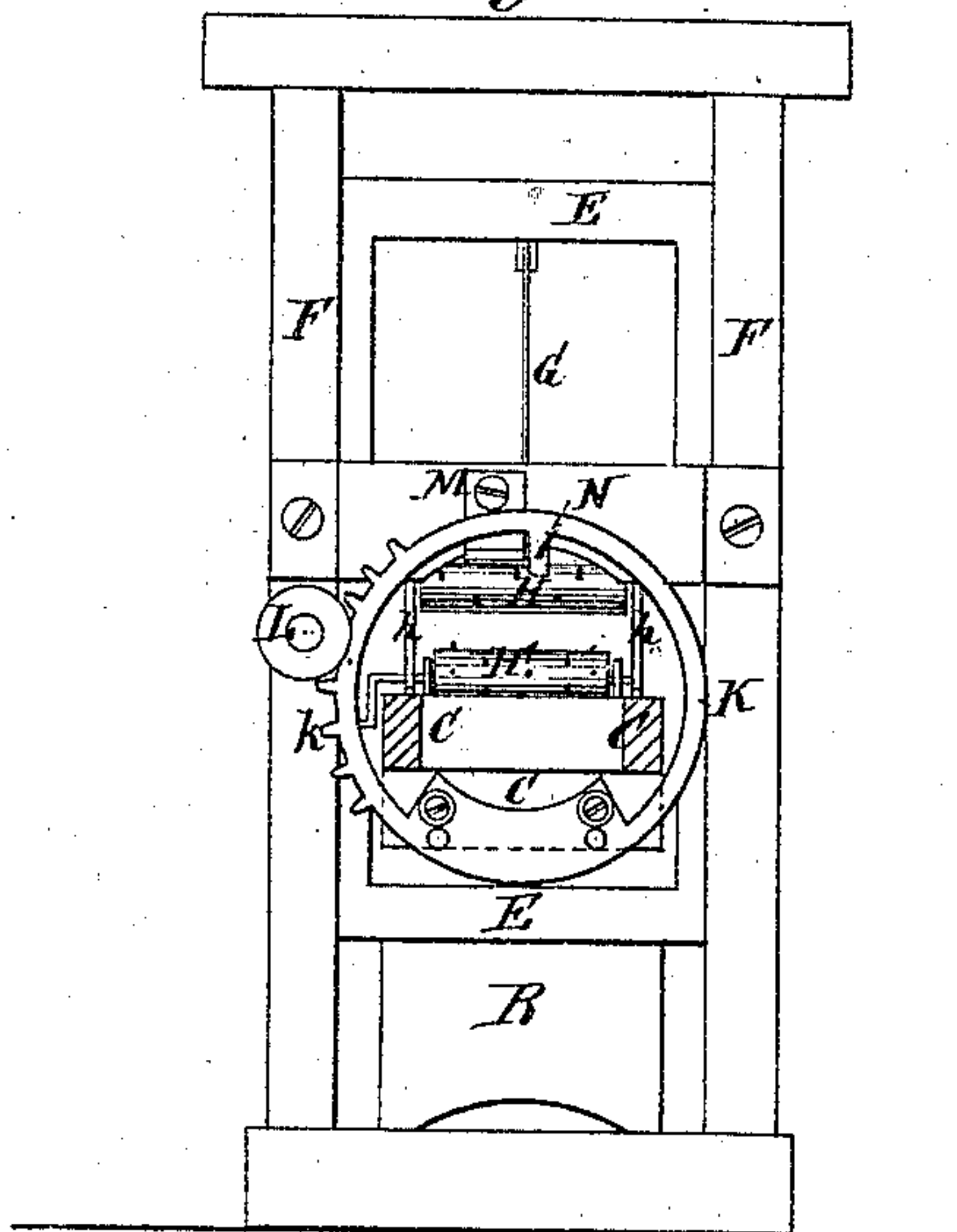
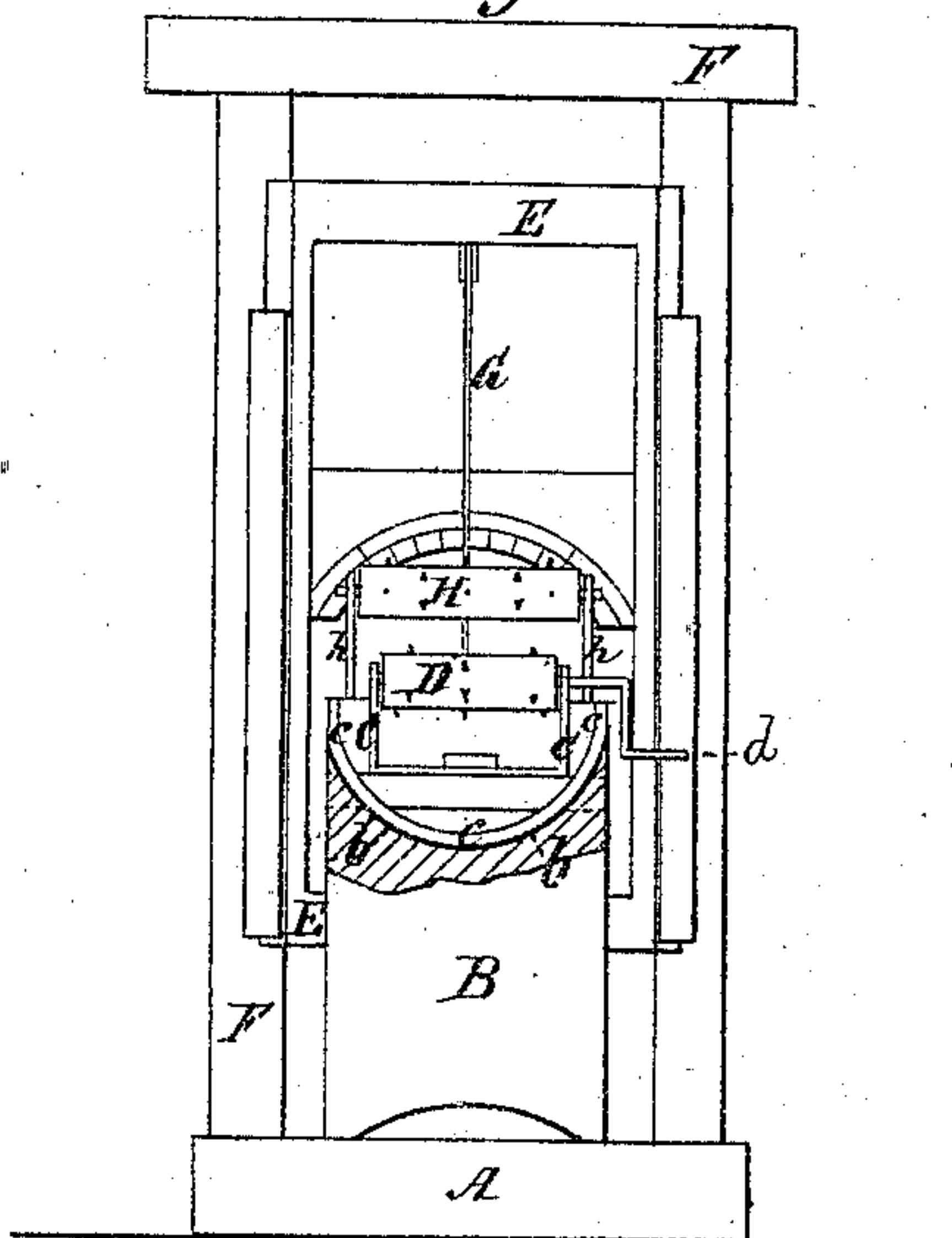


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE S. GRIER, OF MILFORD, DELAWARE.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. **147,389**, dated February 10, 1874; application filed October 8, 1873.

To all whom it may concern:

Be it known that I, GEORGE S. GRIER, of Milford, in the county of Kent and State of Delaware, have invented a new and Improved Bevel-Sawing Machine; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation; Fig. 2, a cross-section in line *xx* of Fig. 1. Fig. 3 is a front view.

The invention relates to means whereby timber for ship-building and other purposes may be beveled or cut into irregular forms.

The invention will first be fully described in connection with all that is necessary to a full understanding thereof, and then clearly pointed out in the claim.

A is the base, from which rise the uprights B, on which is supported the frame or feed-table C. The uprights are concavely curved on top at *b*, and in the concavities rest the arc-bars *c*, which enable the frame to cant or turn easily under suitable force. The frame is prevented from longitudinal motion by the cross-pieces *c'*, which are placed on the frame so as to come between two of the uprights B B. On the upper side of frame are journaled the rolls D, on which the timber rests, and by whose rotation it is advanced to the saw. They are provided with hand-cranks *d*, and supported in suitable frames *d'*. E is the saw-frame that reciprocates vertically on the posts F F and

G, the saw being attached thereto in any preferred manner. It is obvious that a circular, band, or sash saw may be used instead with equal advantage. H H' are the spiked rolls, that gripe and hold the timber in close proximity to the saw, the former being journaled in springs *h h*, and thus adapted to accommodate itself to different thicknesses of timber. To the frame C is rigidly attached a circumjacent circle-plate, K, having on its periphery spurs *k*, which are operated by a pinion, L, moved by any suitable lever or other mechanism. The circle-plate or ring K is provided with a plate, M, thereabove, of suitable curvature, while it has also an inwardly-projecting stud, N, which forms with the plate a stop when the frame is in a horizontal plane. From this stud, as a starting-point, the ring is moved in order to bring the frame to the desired cant, and the angle thereof is shown on the indicator-plate M.

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

The combination, with vertically-reciprocating saw, of the canting frame C, the rack-ring and pinion, and the feed-table, having arc-bars *c*, supported in concavities of the uprights, as and for the purpose described.

GEO. S. GRIER.

Witnesses:

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