

(No Model.)

D. H. BALL.
DRAG SAWING MACHINE.

No. 251,504.

Patented Dec. 27, 1881.

Fig. 1.

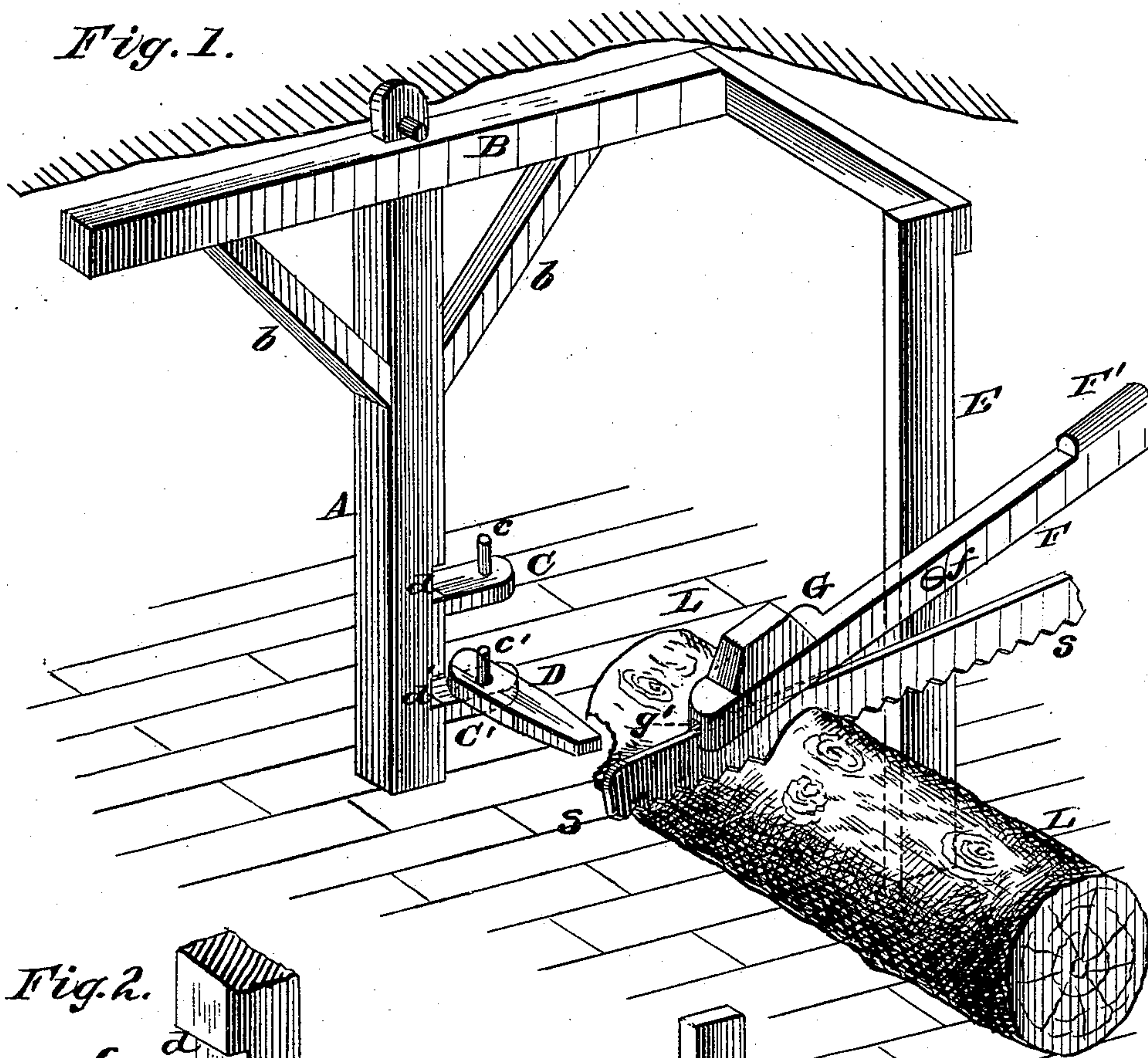


Fig. 2.

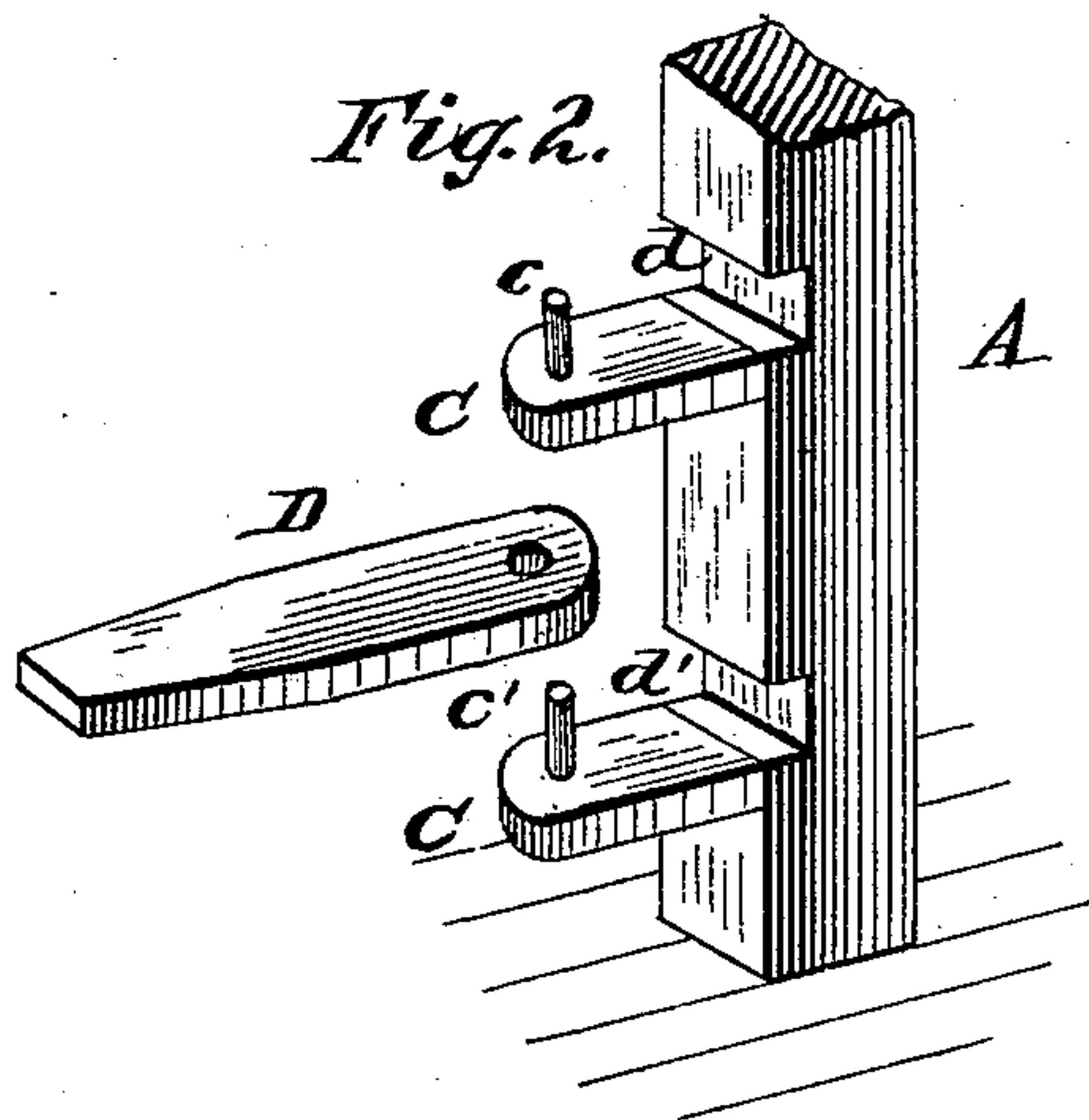
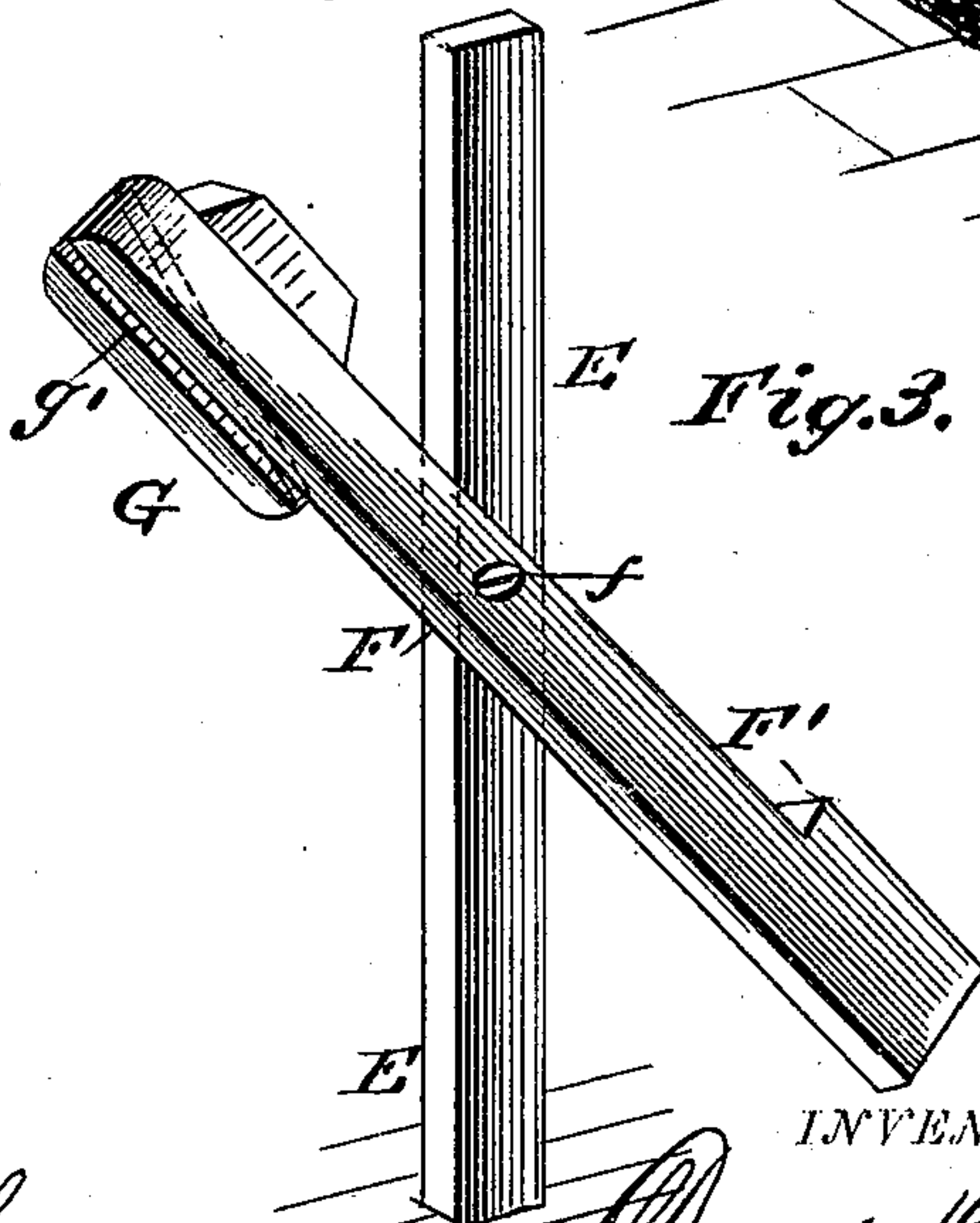


Fig. 3.



WITNESSES

Ad. L. Dieterich
F. C. Dieterich

By his Attorneys

Louis Ragger & Co.

INVENTOR

David H. Ball.

UNITED STATES PATENT OFFICE.

DAVID H. BALL, OF RENOVO, PENNSYLVANIA.

DRAG-SAWING MACHINE.

SPECIFICATION forming part of Letters Patent No. 251,504, dated December 27, 1881.

Application filed May 16, 1881. (No model.)

To all whom it may concern:

Be it known that I, DAVID H. BALL, of Renovo, in the county of Clinton and State of Pennsylvania, have invented certain new and useful Improvements in Drag-Saw Mills; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view, illustrating the application of my improvement. Fig. 2 is a detail view of the log-gage post with its detachable and changeable arms, and Fig. 3 is a detail view of the swinging saw-guide and its supporting-post.

Similar letters of reference indicate corresponding parts in all the figures.

My invention contemplates certain improvements in devices for guiding drag-saws across the lumber or log to be cut, and also in gaging the length of the cut; and to this end it consists in the construction and arrangement of parts of a hinged saw-guide, which operates in conjunction with a gage-post provided with detachable and changeable gage-arms, substantially as hereinafter more fully described.

In the annexed drawings, A represents a vertical post having a cross-beam, B, at its upper end suitably braced by braces *b b*. At the lower end of post A, near the carriage or floor of the saw-mill, are two laterally-projecting brackets, C and C', each of which has a vertical bolt or pintle, (shown respectively at *c* and *c'*.) The body of the post is notched or recessed in a line with the brackets C and C', as shown at *d'* and *d*, for the purpose hereinafter set forth.

D represents one of the gage-arms, which are of different length, and have a bore or hole at the rear end to enable them to be placed upon either one of the pintles *c* or *c'*. When in this position the rounded rear end of the arm will project into the notch or recess *d* or *d'* (as the case may be) in the post, thus preventing downward tilting or sagging of the outer end of the arm and holding it at right angles to the vertical post A, which may be bolted to the roof or beams of the mill by its upper cross-beam, B.

E is another vertical post, the upper end of which may be braced against one end or side of cross-beam B, the other end of the post being attached to the floor. This post has a pin or bolt, *f*, inserted transversely through it, which serves as a fulcrum for a swinging beam or cross-arm, F, the outer end of which forms the saw-guide G, which consists of a slot, *g'*, into which the saw-blade is inserted, the guide or slotted guiding-plate being of such a length as to project down over a considerable portion of the saw-blade, and thus prevent bending or twisting of the saw-blade in starting.

The rear end of the guide-arm or lever F may be weighted, as shown at F', so as to nearly balance the weight of the slotted saw-guide G; yet there should be a slight preponderance in favor of the latter, to insure its being kept automatically down against the back or ridge of the saw-blade, and thus always keep it in position.

In the drawings I have lettered the saw S and the log L. The relative positions of the posts or uprights A and E being such as indicated, it will be seen that the log as it is fed forward abuts upon the gage-arm D, which stops its further progress while it is being sawed. By using gage-arms of greater or lesser length the length of the cut may, of course, be regulated, thus insuring cuts of uniform length. At the same time the brackets C and C' (of which there may be two or more) permit the adjustment of the gage-arms vertically, according to the heft or thickness of the log.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

In a drag-saw mill, the vertical or upright gage-post A, and the laterally-projecting brackets C C', provided with pintles *c c'*, to receive detachable and changeable gage-arms D, as set forth.

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

DAVID H. BALL.

Witnesses:

W. R. CHESNUTT,
J. D. TINSLEY.