

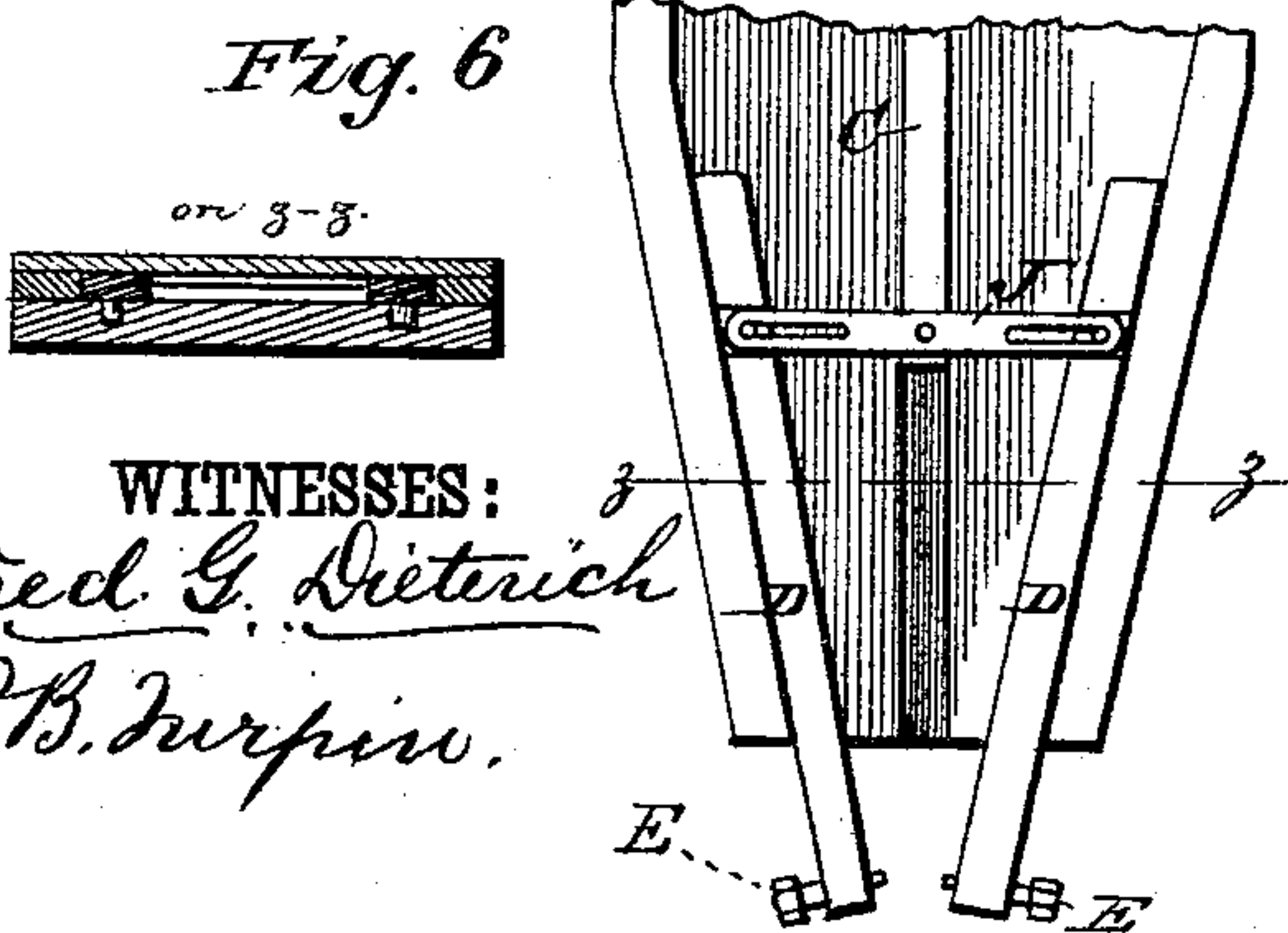
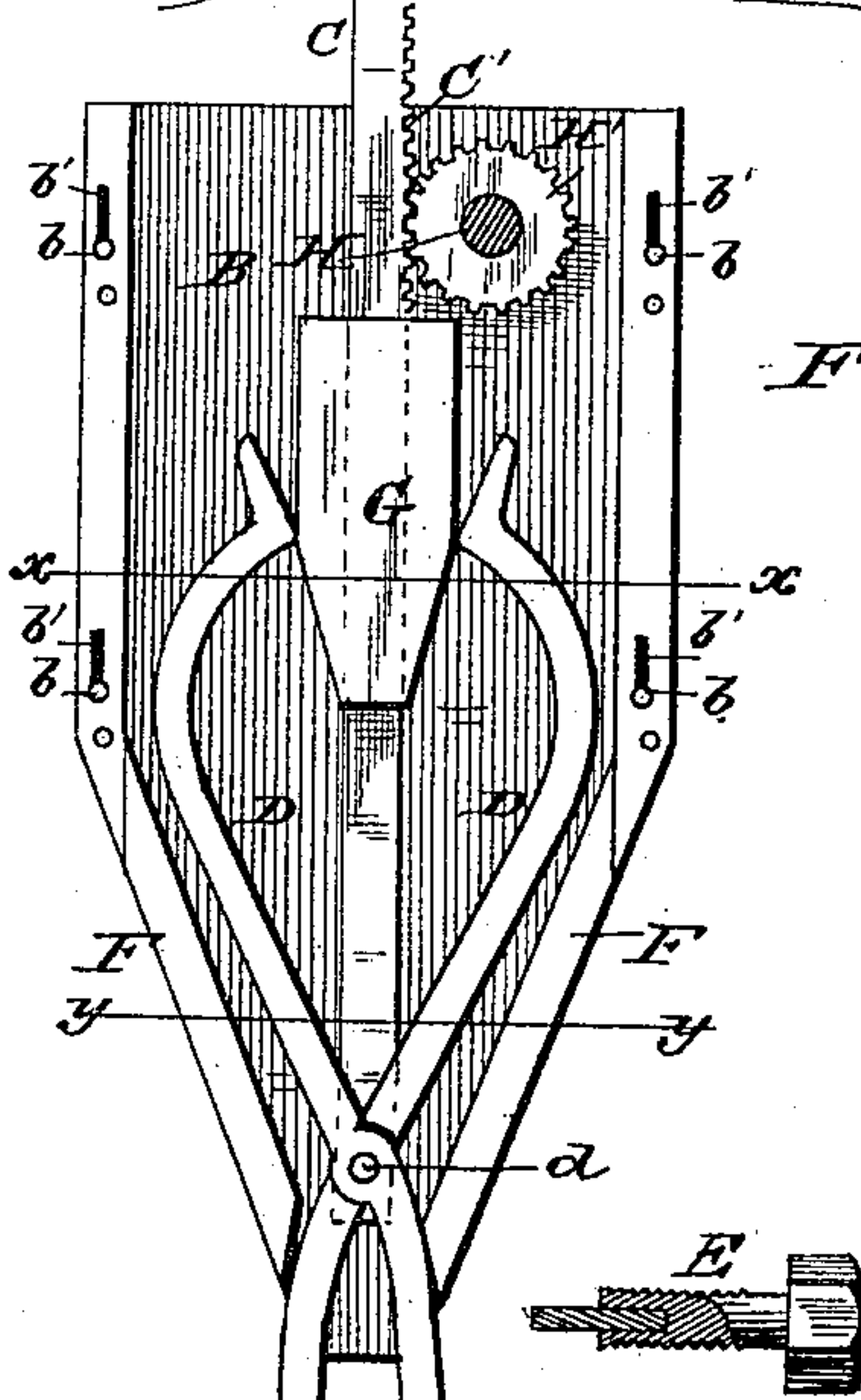
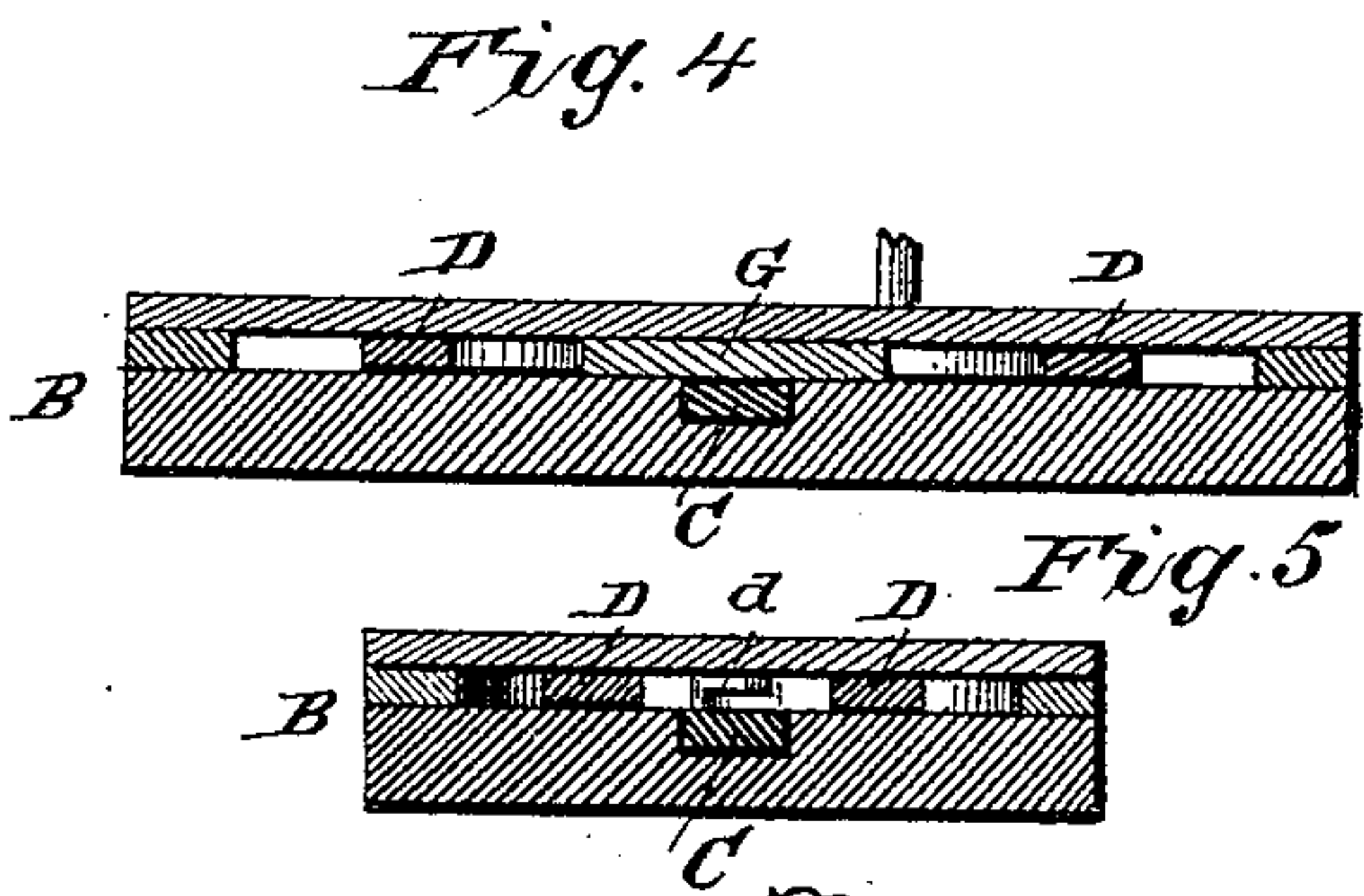
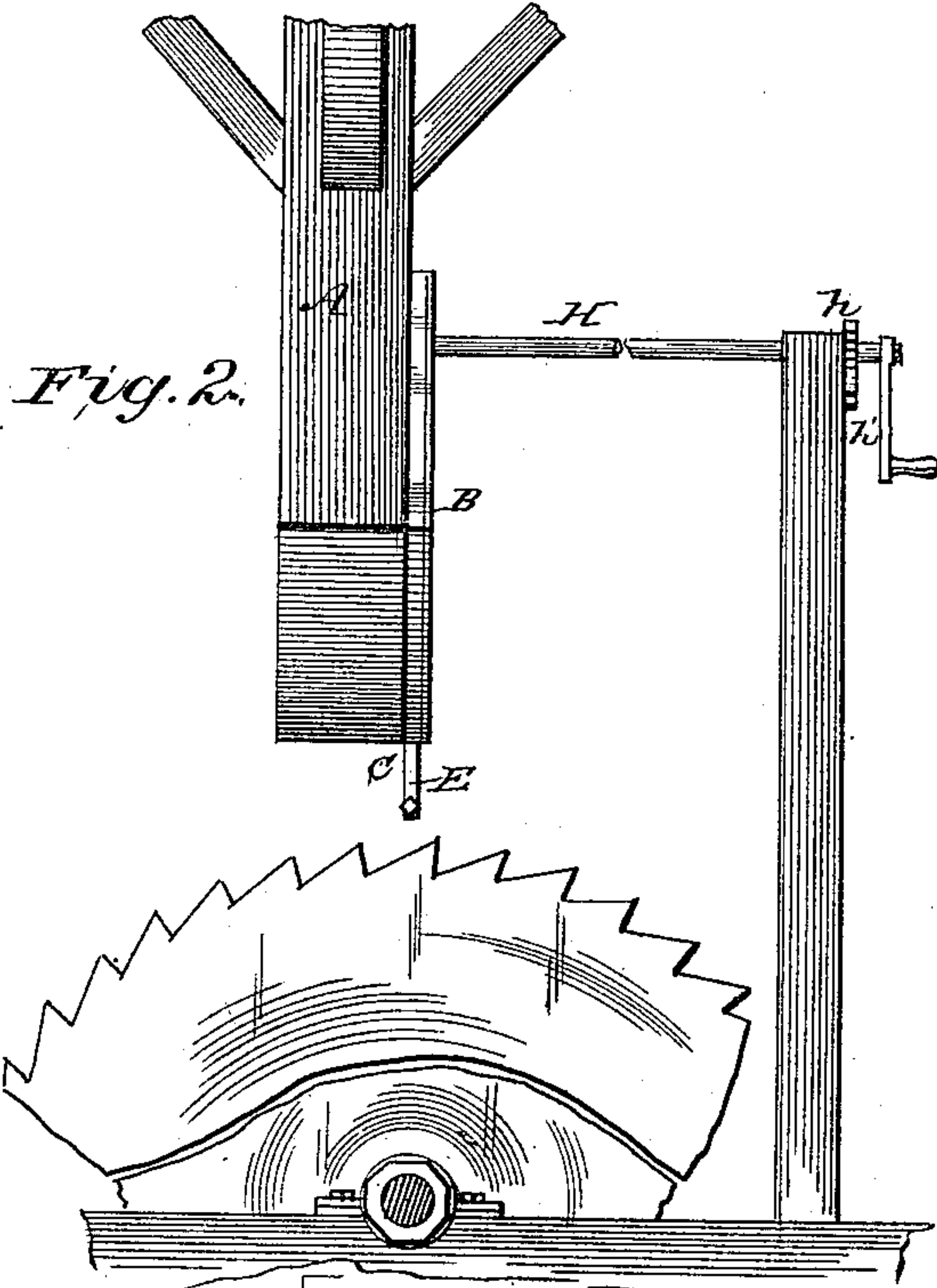
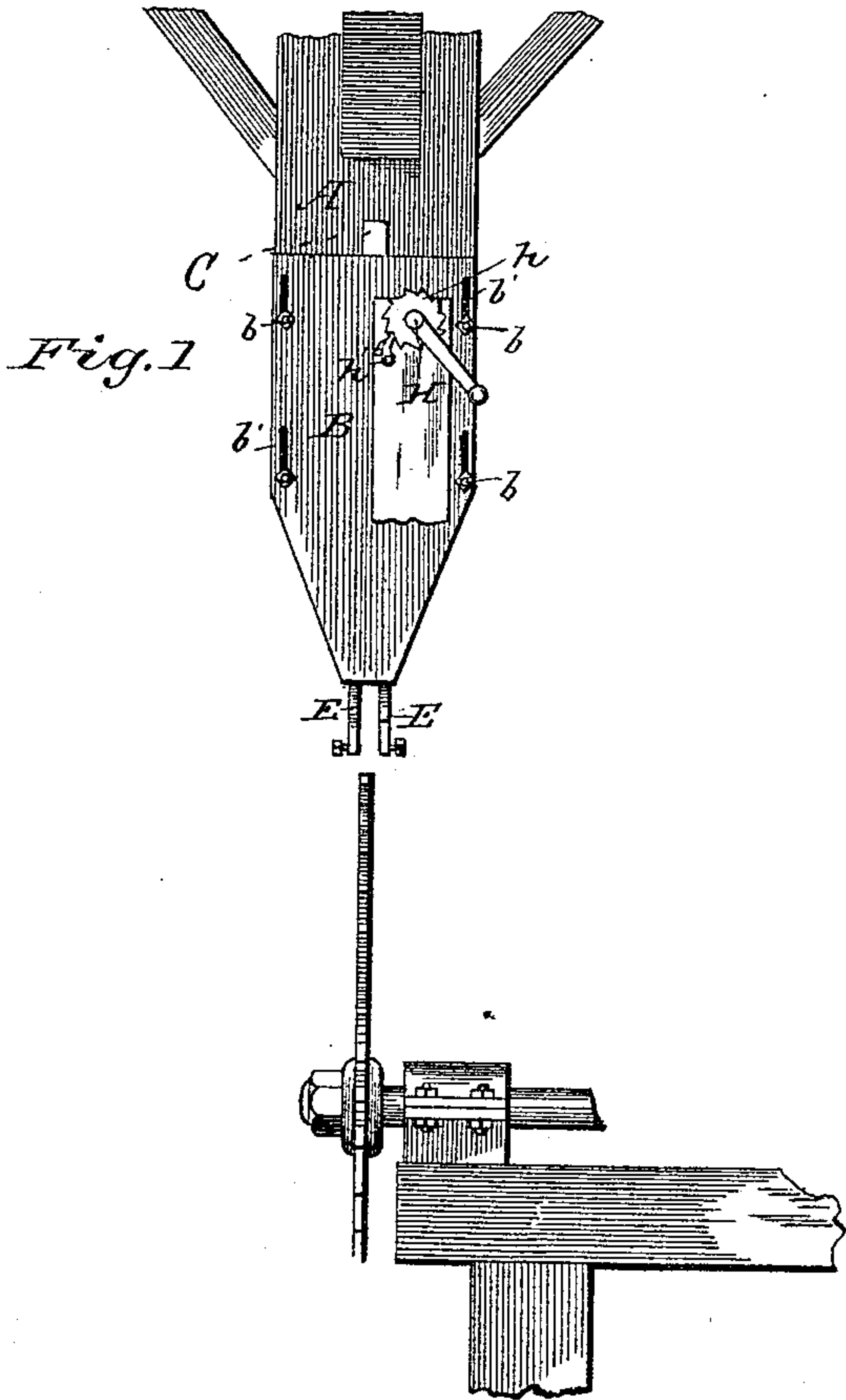
(No Model.)

J. F. EAST.

SAW GUIDE.

No. 344,175.

Patented June 22, 1886.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN F. EAST, OF TANNER'S CREEK, VIRGINIA.

SAW-GUIDE.

SPECIFICATION forming part of Letters Patent No. 344,175, dated June 22, 1886.

Application filed October 16, 1885. Serial No. 180,084. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. EAST, of Tanner's Creek, in the county of Norfolk and State of Virginia, have invented a new and useful Improvement in Top Guides for Circular Saws, of which the following is a description.

This invention is an improvement in top guides for circular saws, and has for an object to provide a simple construction by which the guide may be spread laterally in adjusting such guide onto and off the saw, in order that such guide may clear the saw-teeth, as will be described and claimed.

The invention consists, broadly, in a support and guide-carrier arms held thereby and having their guide ends adjustable laterally, substantially as set forth.

The invention further consists in a support, a pair of guide-carriers pivoted between their ends, and a cam for engaging the upper ends of the carriers.

The invention consists, further, in certain novel constructions and combinations of parts, as will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a front view, and Fig. 2 a side view, of a sawing-machine provided with my improvement. Fig. 3 is a face view of the guide mechanism, the top face of the case being removed and parts being shown in section. Figs. 4 and 5 are detached sections on lines *x x* and *y y*, Fig. 3; and Fig. 6 shows a modification.

I usually support my guide mechanism on a beam, as A, depending from the ceiling above the saw, though, manifestly, such beam or frame for the guide device may be connected in other manner with the framing of the building or with that of the sawing-machine or husk. To this beam the case B is secured, preferably by bolts *b*, passed through vertically-elongated slots *b'*, so that the case may be set higher or lower to adjust the guide to saws of different diameters. The case is closed in, as shown in Figs. 1 and 2, to prevent dust and dirt from accumulating and clogging the working parts. This case has a way for the support C, which is movable vertically. To this support, near its lower end, I pivot at *d* the guide-carrier arms D. The guides E are supported in the lower ends of the carrier-arms,

and may be of ordinary construction, as shown, the lower ends of the carriers being separated sufficiently to straddle the saw, so that the guide proper will bear on opposite sides of the saw.

In the case I provide cams F, which I call the "lower cams," and they are located in position to engage the outer side of the carrier-arms adjacent the pivot *d*. A cam, G, is also arranged to engage between the upper ends of the carrier-arms, and its cam-surfaces, as well as the portions of the arms it engages, are formed in lines approximately parallel with the lower cams, as shown. Thus in operation, when it is desired to raise the guide off the saw, and the support described is moved upward, the upper cam will spread the upper ends of the carrier-arms, causing the lower ends to separate, so the guides proper will escape past the teeth of saw. When the guide is lowered, the lower cams will strike the arms and press the lower guide-carrying ends thereof inward, so the guides will properly engage the sides of the saw.

Manifestly, the support may be raised and lowered by hand, or a lever might be arranged to operate it; but I prefer to employ a shaft, H, journaled and having a pinion, H', geared with a rack, C', on the support, and having a ratchet, *h*, and pawl *h'*, by which it may be secured in any desired rotary position, so that the support can be locked in any position to which it may be set.

The opposite sides of the lower end of the case are beveled off, or may be rounded, to give room for a large log when cutting off the side of same.

It will be understood that the lower cams might be dispensed with if a spring were arranged to draw the upper ends of the arms together; or such spring and lower cams might be dispensed with and the upper cam be formed of two grooves and the ends of the carrier-arms have pins arranged to project thereinto, so said cams would actuate the arms both together and apart.

Another modification is shown in Fig. 6. In this construction the arms are not pivoted, but have their upper ends provided with pins or projections sliding in inclined ways, and are connected to a support, as J, which may be

raised and lowered, and will cause the lower ends of the carrier-arms to move laterally from and to the saw. This construction, manifestly, would be no departure from the broad principle of my invention; but I prefer to pivot the arms and to arrange and adjust them as shown, and before described.

Having thus described my invention, what I claim as new is—

10 1. The combination, in a saw-guide, of a support, guide-carrier arms connected to said support and having their lower ends movable to and from the saw, and cams arranged to engage said arms, substantially as set forth.

15 2. The combination of a case, a framing having cam-surfaces, a support movable longitudinally of said cam-bearing frame, and arms connected with such support and arranged to engage the cam-surfaces, substantially as set forth.

20 3. The combination, with a case or framing and a support in the same, of guide-carrier arms pivoted to said support, and cam-surfaces arranged to engage said arms, substantially as set forth.

4. A saw-guide comprising a movable support, guide-carrier arms connected with such support, substantially as described, whereby they are movable with and have a movement independent of said support, and cams arranged to engage said arms, substantially as set forth. 30

5. The combination of the beam located above the saw, the case connected with and adjustable vertically on said beam, and the guide-carrier arms supported by said case and having their lower ends movable laterally, substantially as set forth. 35

6. The improvement in saw-mill guides, substantially as set forth, consisting of a casing or frame having cam-surfaces, the support in such case, the carrier-arms pivoted to said support and arranged to engage the cams, the shaft having a pinion geared with the support, and the ratchet-wheel and pawl, substantially as set forth. 45

JOHN F. EAST.

Witnesses:

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