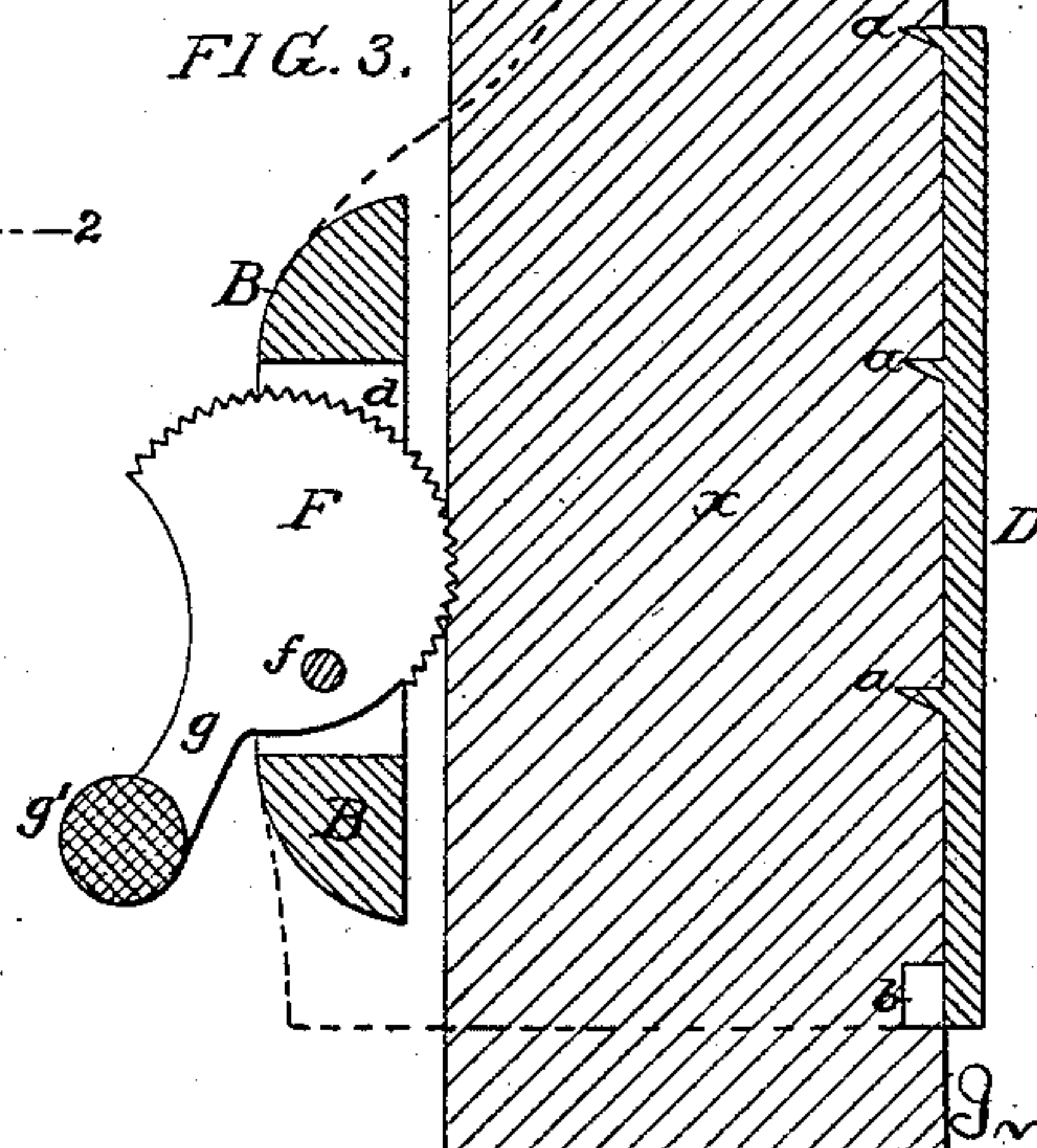
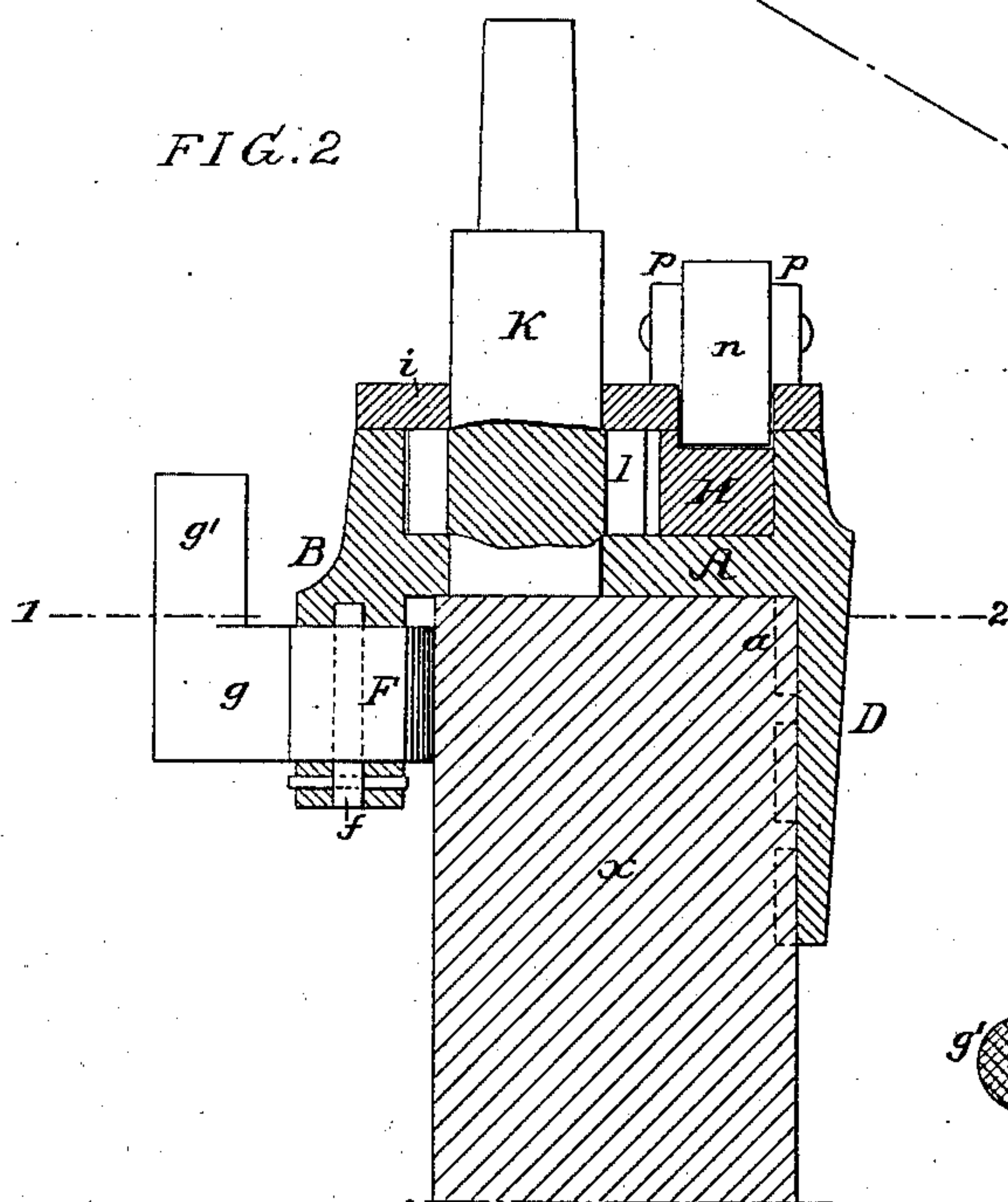
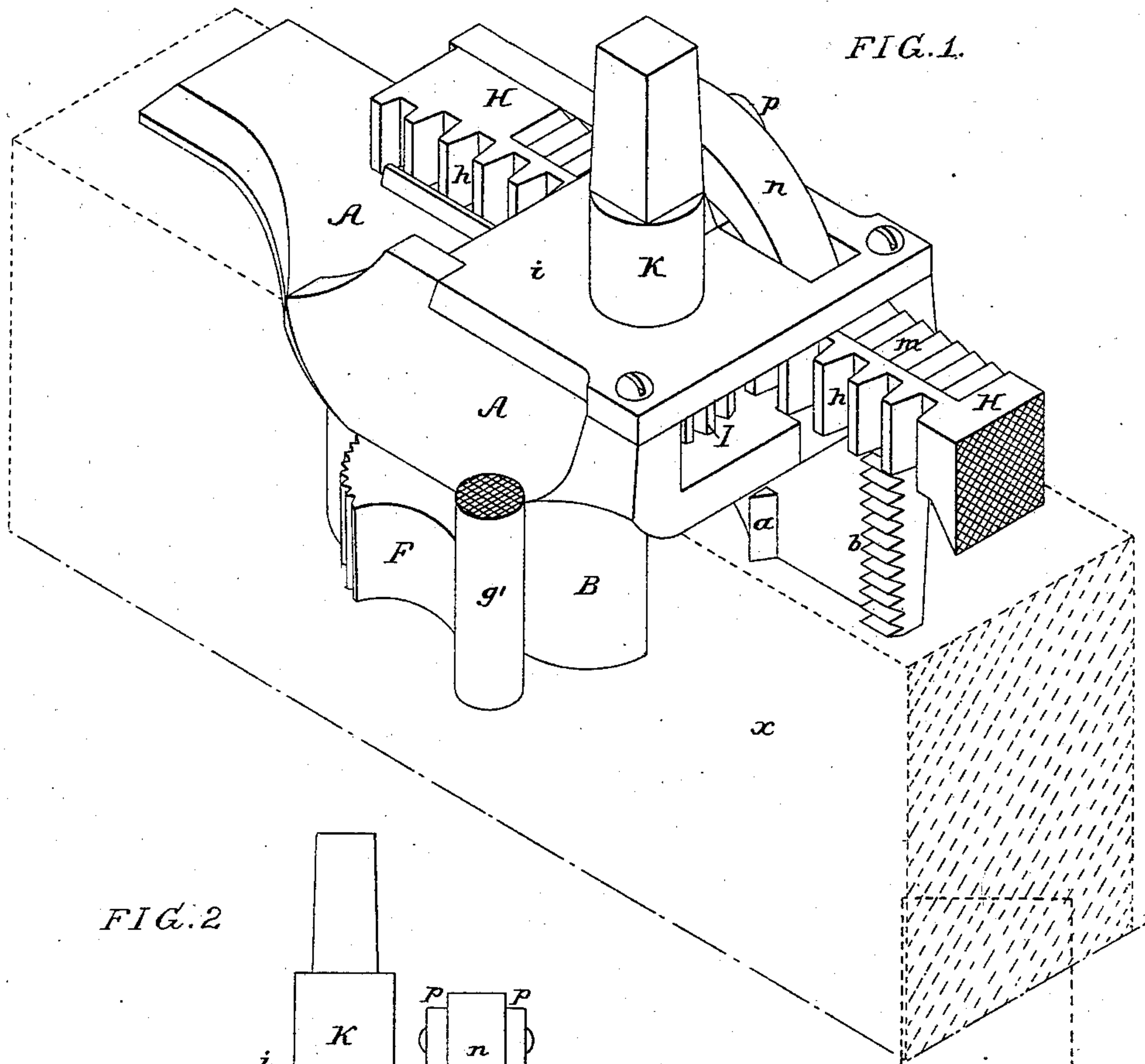


(No Model.)

J. B. TAYLOR.  
JACK.

No. 308,811.

Patented Dec. 2, 1884.



Witnesses:  
John M. Clayton  
Harry Drury

Inventor:  
James B. Taylor  
By his Attys.  
Howell and Co.



# UNITED STATES PATENT OFFICE.

JAMES B. TAYLOR, OF PHILADELPHIA, PENNSYLVANIA.

## JACK.

SPECIFICATION forming part of Letters Patent No. 308,811, dated December 2, 1884.

Application filed October 2, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES B. TAYLOR, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Jacks, of which the following is a specification.

My invention relates to that class of jacks which are secured to joists or beams for the purpose of setting up floor-boards, &c., my invention having for its object the construction of a jack of this class in such a manner that it will be compact in form, direct in action, and capable of being firmly clamped to the beam or joist when in use, the release of the jack, however, being readily effected when it is desired to shift the same to a new position.

In the accompanying drawings, Figure 1 is a perspective view of my improved jack, the dotted lines showing part of a joist to which the jack is clamped; Fig. 2, a transverse section, partly in elevation, and with the joist shown by full lines; and Fig. 3, a sectional plan view on the line 1 2, Fig. 2.

The frame of the jack consists of a substantial casting, A, having opposite depending flanges, B and D, the space between which is sufficient to receive the beam or joist *x*, to which the jack is clamped.

On the flange D are a series of vertical spurs or projections, *a*, and at one end of said flange is a vertical rib, *b*, with horizontal teeth, both the latter and the spurs *a* being so sharp that they will bite into the joist *x* when the jack is clamped thereto.

The clamping of the jack is effected by an eccentric, F, contained within a recess, *d*, in the flange B, and hung to said flange by a pin, *f*, the face of this eccentric being roughened or toothed, as shown in Fig. 3, so that it will take a firm hold on the side of the joist. The eccentric has an arm, *g*, having at the outer end the finger *g'*, which serves as a handle for operating the eccentric, in order to cause it to bind upon the joist, or so as to release it therefrom. The frame A is recessed for the reception of the movable bar H of the jack, this bar having its front end roughened, as shown in Fig. 1, and having on one side a

rack, *h*, into which gears a pinion, I, on a shaft, K, adapted to bearings in the frame A, and in a cover-plate, *i*, thereon.

On the top of the bar H are formed ratchet-teeth *m*, with which engages a pawl, *n*, hung to bearings *p* on the cover-plate *i*, the pawl passing through an opening in said plate. The upper end of the shaft K is squared for the reception of a lever, whereby said shaft may be turned, the movement being transmitted through the pinion I to the bar H, which is thus caused to press upon the flooring-boards or other objects to be acted upon, the bar being held in the advanced position by the engagement of the pawl *n* with the ratchet *m*, and said pawl being raised from the ratchet when it is desired to retract the bar H. The slipping of the clamp on the joist *x* is prevented by the spurs or teeth *a*, and by the tendency of the eccentric F to turn on its pivot, so as to more firmly bind the joist on any rearward movement of the frame A. The toothed rib *b* effectually prevents any prying up of the front end of the frame, due to the strain upon the bar H, and in order to aid the rib in the performance of this duty that portion of the frame A which rests upon the top of the joist is extended, as shown in Fig. 1, and by dotted lines in Fig. 3, so as to give a long bearing at the rear.

I have shown my improved jack as applied to a horizontal joist; but it will be evident that it may be applied to beams occupying other positions, and it may be used as a support for a trestle or platform, or for other purposes, as well as for a jack.

Two or more eccentrics may be used instead of a single one, when the frame A is of sufficient length.

I claim as my invention—

1. The combination of the pivoted eccentric F with the frame A of the jack, having a recessed flange, B, and a flange, D, with vertical spurs *a*, as set forth.

2. The combination of the eccentric F with the frame A, having a flange, B, to which said eccentric is hung, and an opposite flange, D, with toothed bar *b*, for preventing the rise of the frame, as set forth.

3. The combination of the frame A, having  
flanges B and D, the latter having spurs *a*  
and toothed rib *b*, the eccentric F, the guided  
bar H, having a rack, *h*, and ratchet *m*, the  
5 shaft K, having a pinion, I, and the pawl *n*,  
as set forth.

4. The bar H, having a rack, *h*, formed on  
one side thereof, and a ratchet, *m*, on the top,  
as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES B. TAYLOR.

Witnesses:

JOHN M. CLAYTON,  
HARRY SMITH.