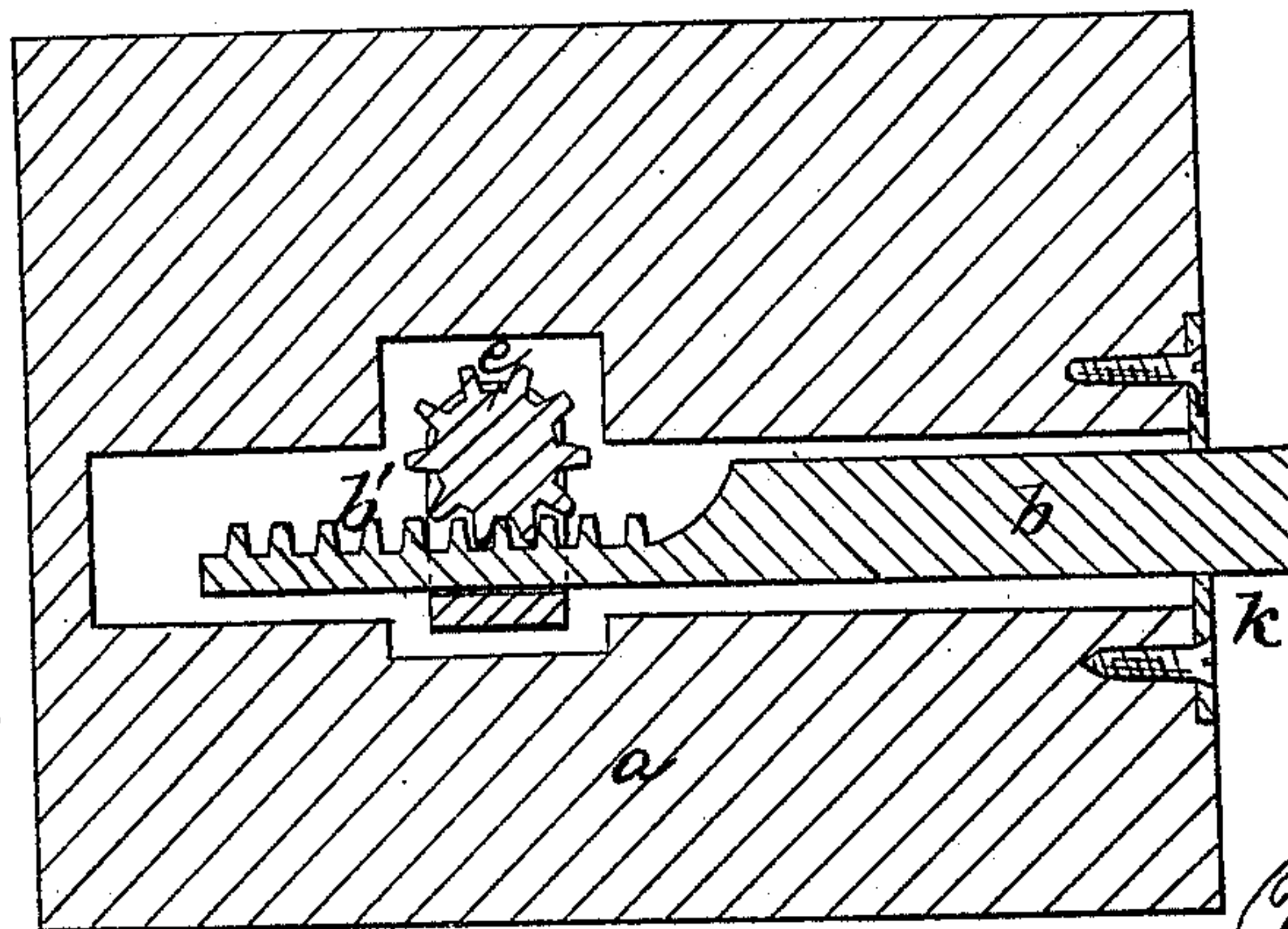
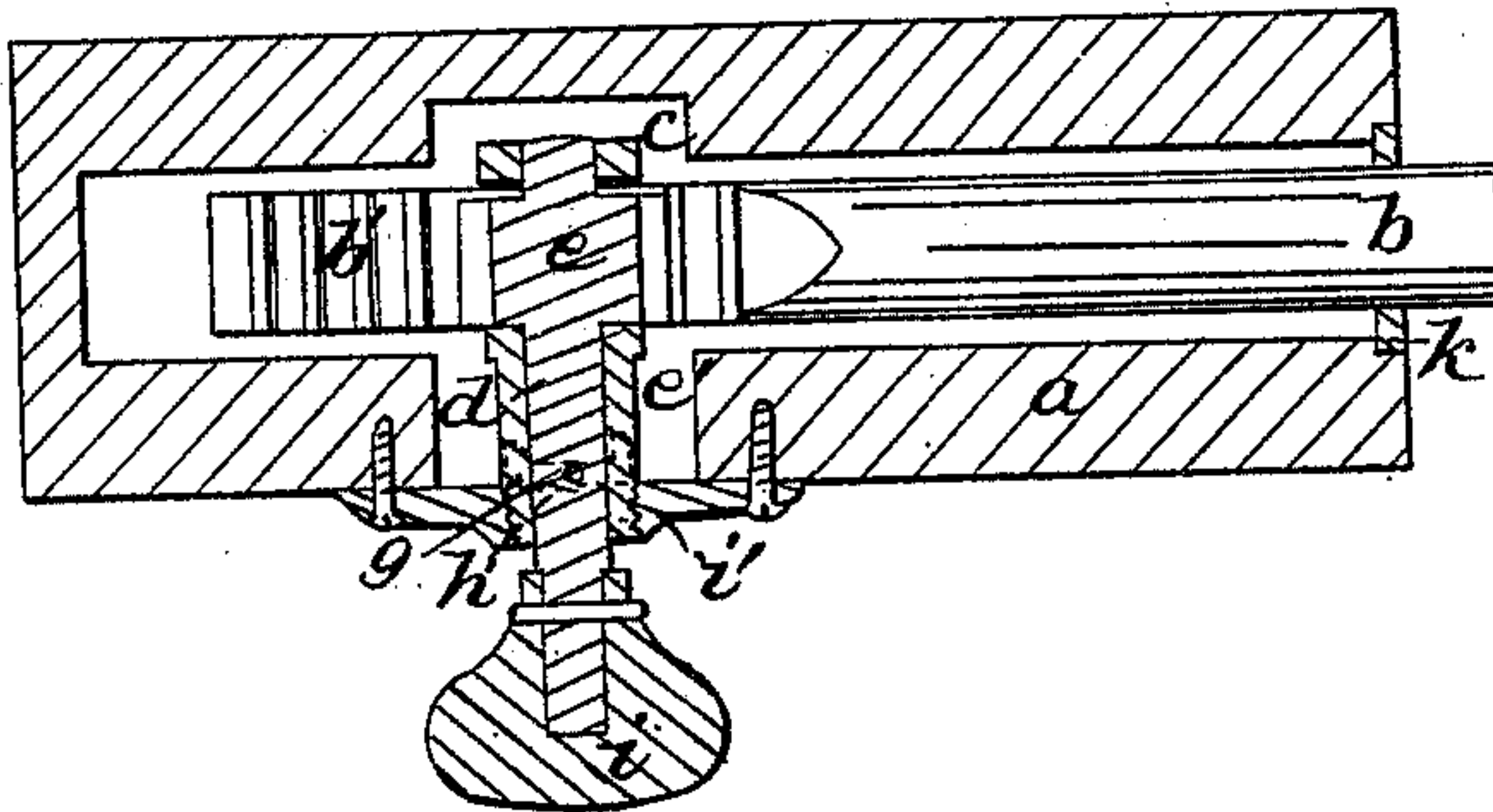
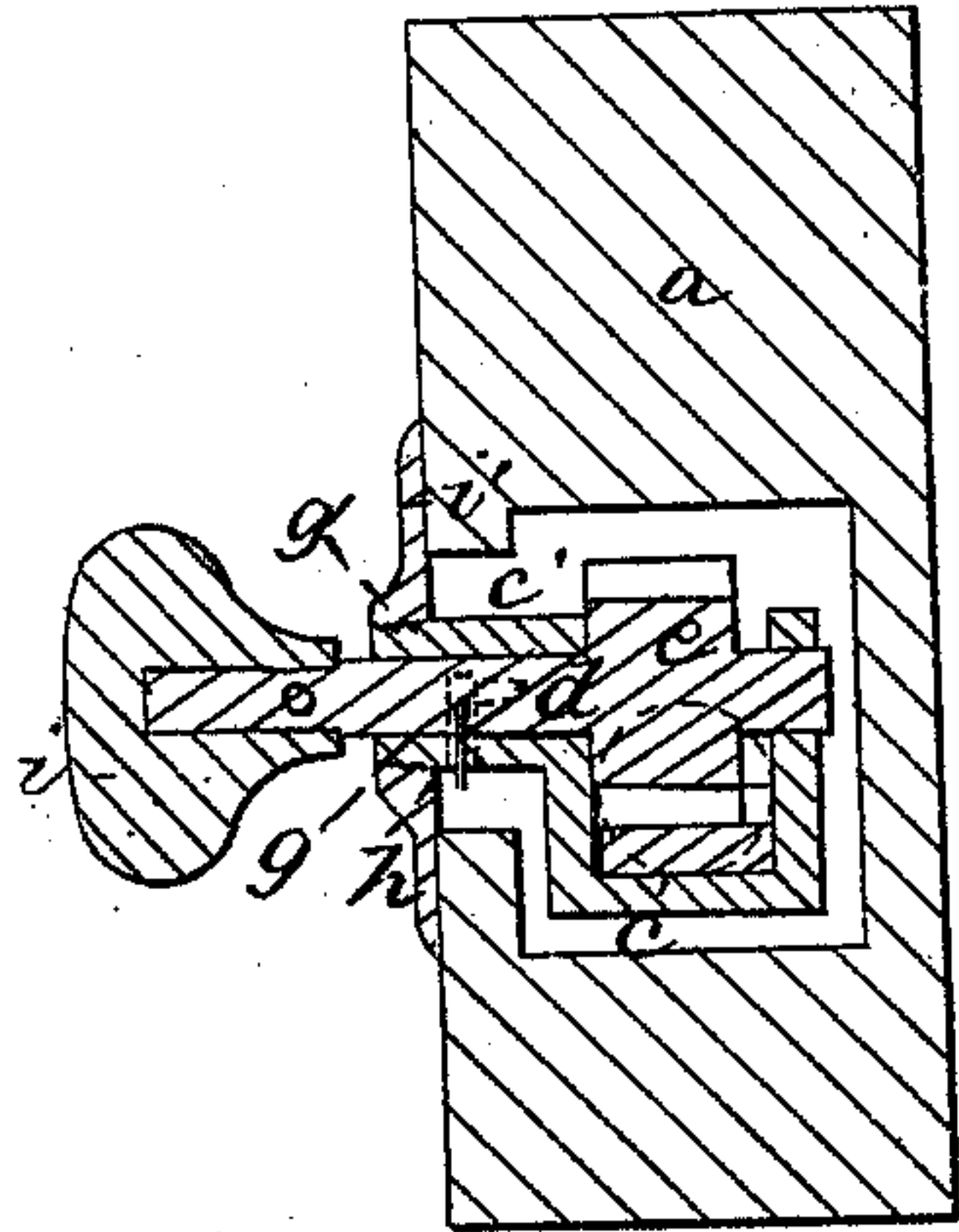


B. E. Fowler,

Door Bolt.

N^o 61,185.

Patented Jan. 15, 1867.



Witnesses:

*C. C. Gantner
Jerry H. Bay*

Inventor:

Benjamin E. Fowler

United States Patent Office.

BENJAMIN E. FOWLER, OF HARTFORD, CONNECTICUT.†

Letters Patent No. 61,185, dated January 15, 1867.

IMPROVEMENT IN DOOR BOLTS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, BENJAMIN E. FOWLER, of the city and county of Hartford, and State of Connecticut, have invented certain new and useful Improvement in Door Bolts; and to enable others skilled in the art to make and use the same, I will proceed to describe its construction and operation, referring to the drawings, in which the same letters of reference marked thereon indicate like parts in each of the figures.

The nature of this improvement in door bolts will be understood from the specification and drawings.

The object desired to be attained thereby is to produce a bolt, cheap and simple of construction, quickly and easily fitted into a door, safe and reliable for use, and self-locking in its operation. In the accompanying drawings—

Figure 1 is a sectional side view.

Figure 2 is a sectional top view.

Figure 3 is a sectional end view.

a represents the door, or place into which it is fitted. *b* is the bolt, which may be made either square or round, as desirable, the back end of which is flattened or depressed, and is provided with teeth, *b'*, on the depressed side, the object of which is to receive the teeth of a gear, *e*, and be operated thereby. *c* is a metallic frame of three sides, made about the same width of the back end of the bolt *b*, so as to have it fit closely and work freely therein. Near the upper end of one side of this frame is formed a hub, *c'*, and nearly at right angles therewith, through the centre of which, and directly through the opposite side of the frame, is formed a hole or bearing, into which is fitted a spindle, *d*, having a pinion or gear, *e*, secured thereon, the width or length of which is less than the distance between the sides of the frame, so as to allow it to play back and forth between the sides of the frame. The object of this frame *c* is to hold and steady the back end of the bolt *b*, and cause it to work closely and freely in proximity with the operating gear *e*, the washer *i'* is fitted or screwed on to the outer end of the hub *c'*, so that when the washer *i'* is secured to the door, the mechanism will be held firmly in working order. The knob *i* is fitted and secured to the spindle in the usual way. This spindle has a groove or depression, *g*, formed around or partly around its diameter, in which to allow the end of the pin *h*, (fitted into the hub *c'*), to work. From this groove or depression, and in direction lengthwise of the spindle, is formed a slit or groove, *g'*, so that when the bolt *b* is thrown forward by the action of the knob *i*, through the action of the rack and pinions *b'* *e*, by pulling the knob *i* forward, the end of the pin *h* will enter the slit *g'*, and lock or prevent the bolt *b* from moving in either direction until it is again pushed back to its original position. The plate *k*, through which the outer end of the bolt plays, is fitted into the wood or door in the usual way. The mode of securing this bolt to a door is to bore a hole into the edge thereof a proper distance for the length of the bolt; then bore a hole into the side of the door to intercept the first, the parts arranged therein and secured in the ordinary way, in working order, by means of the plate *k* and washer *i*.

I believe I have thus shown the nature, construction, and operation, so as to enable others skilled in the art to make and use the same.

What I claim, therefore, and desire to secure by Letters Patent, is—

The rack bolt *b*, in combination with the pinion *e*, spindle *d*, pin and groove *h g*, substantially as and for the purpose described.

BENJAMIN E. FOWLER. [L. s.]

Witnesses:

C. C. GARDNER,

JEREMY W. BLISS.

†
Assist to Benjamin F. Ellis, of the same place