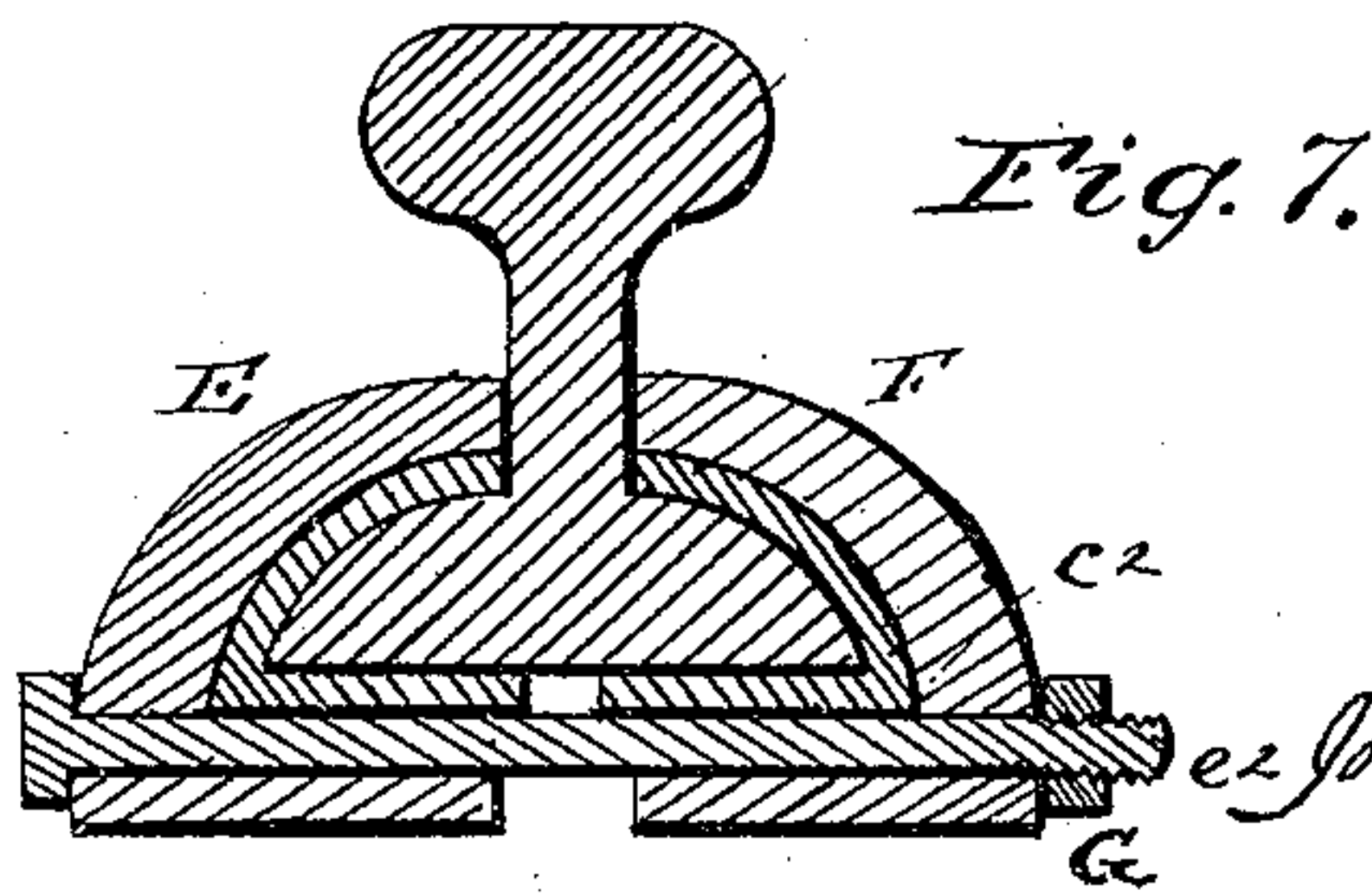
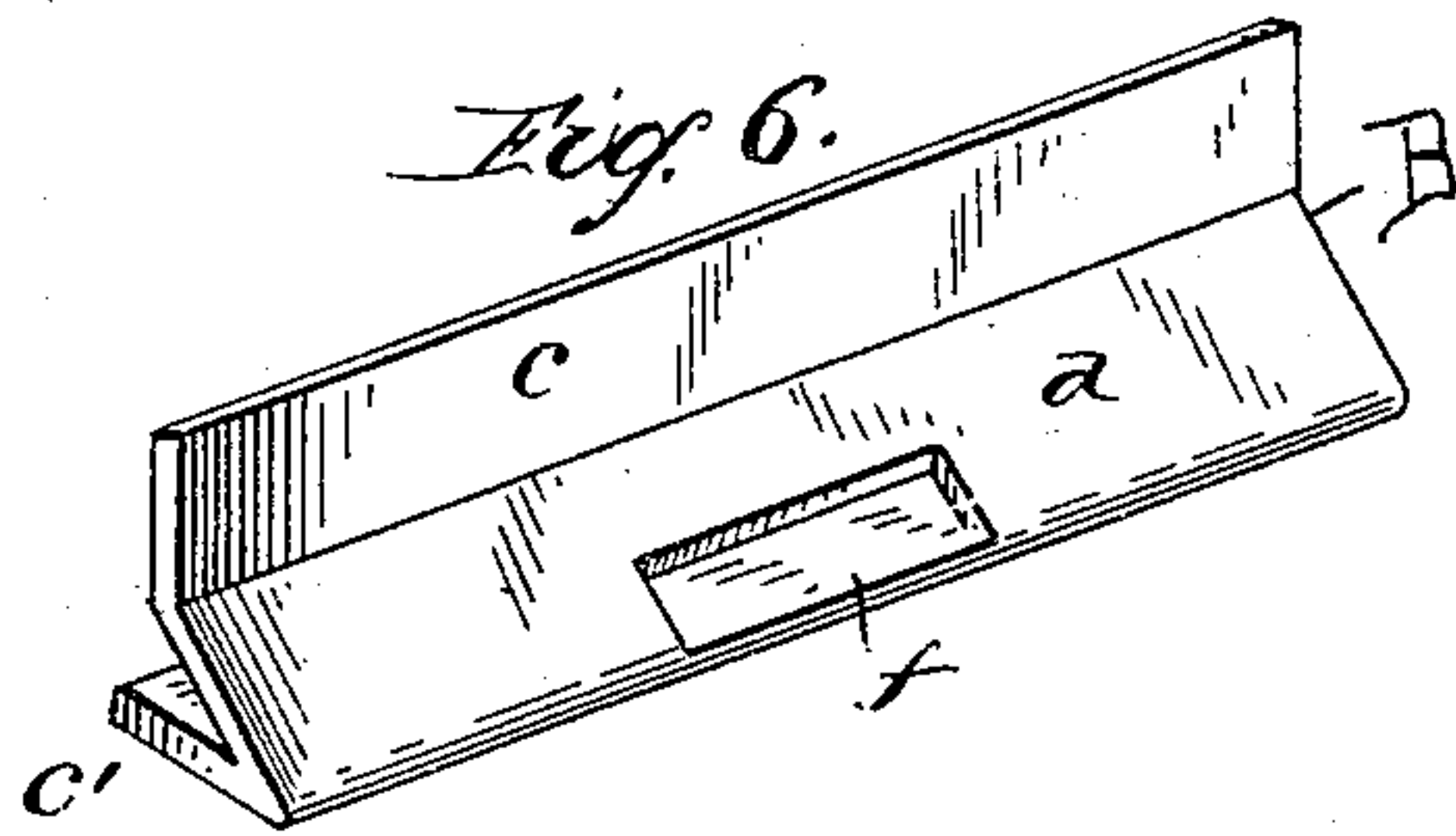
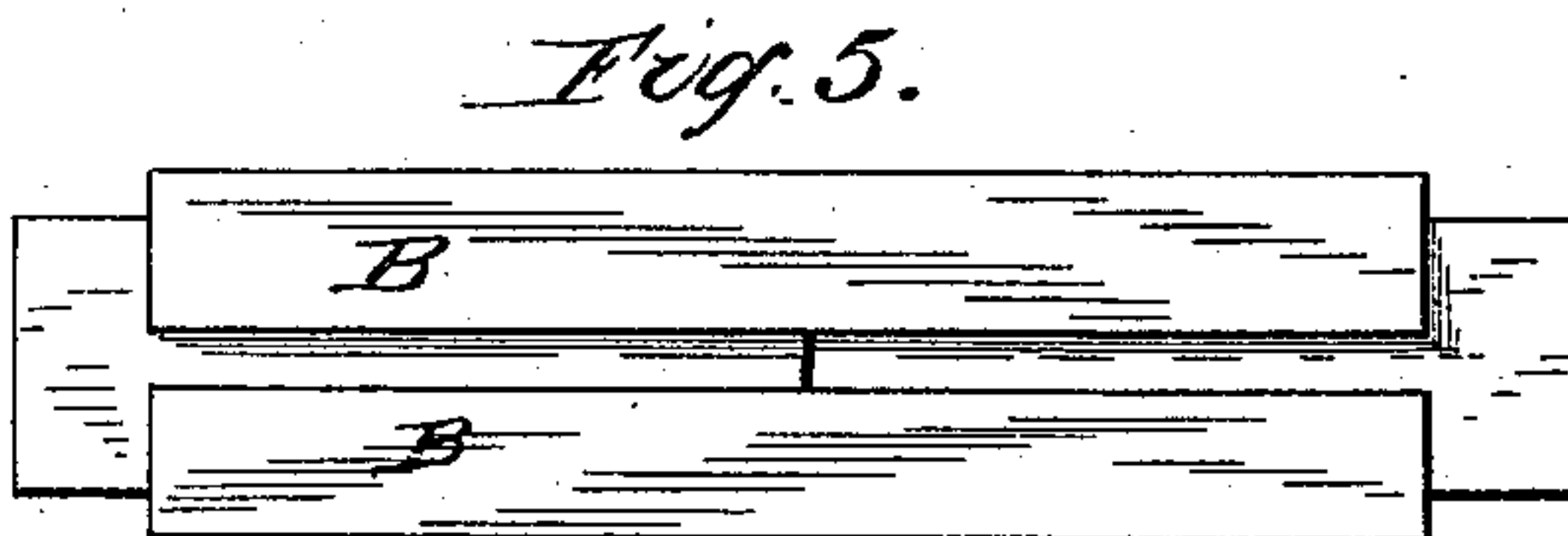
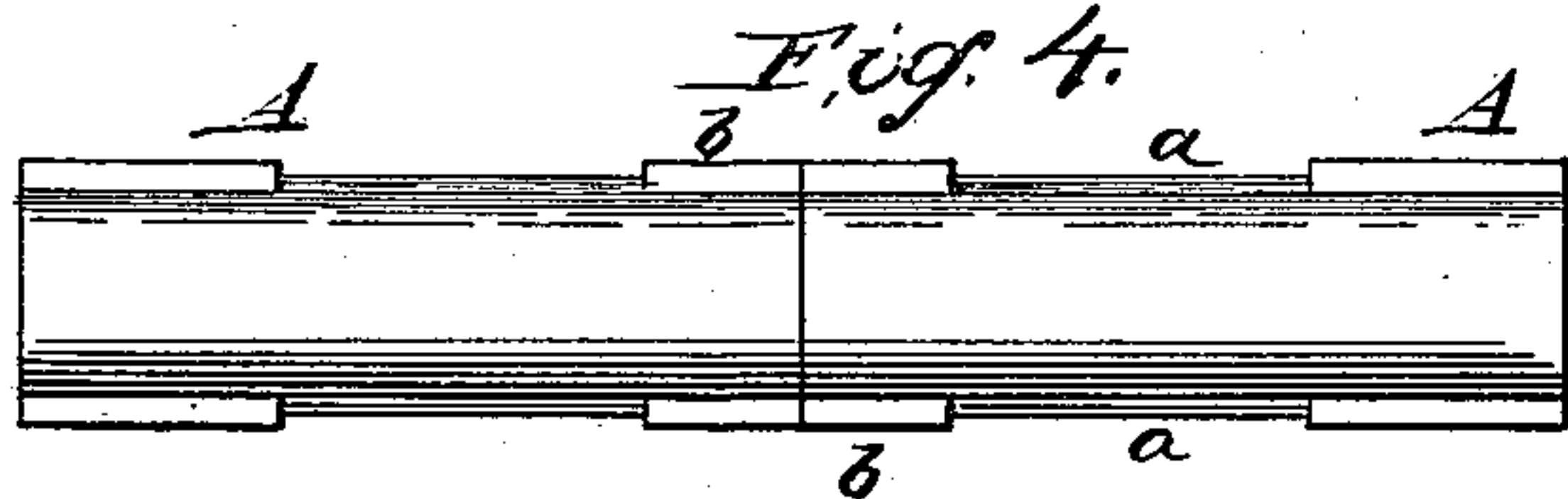
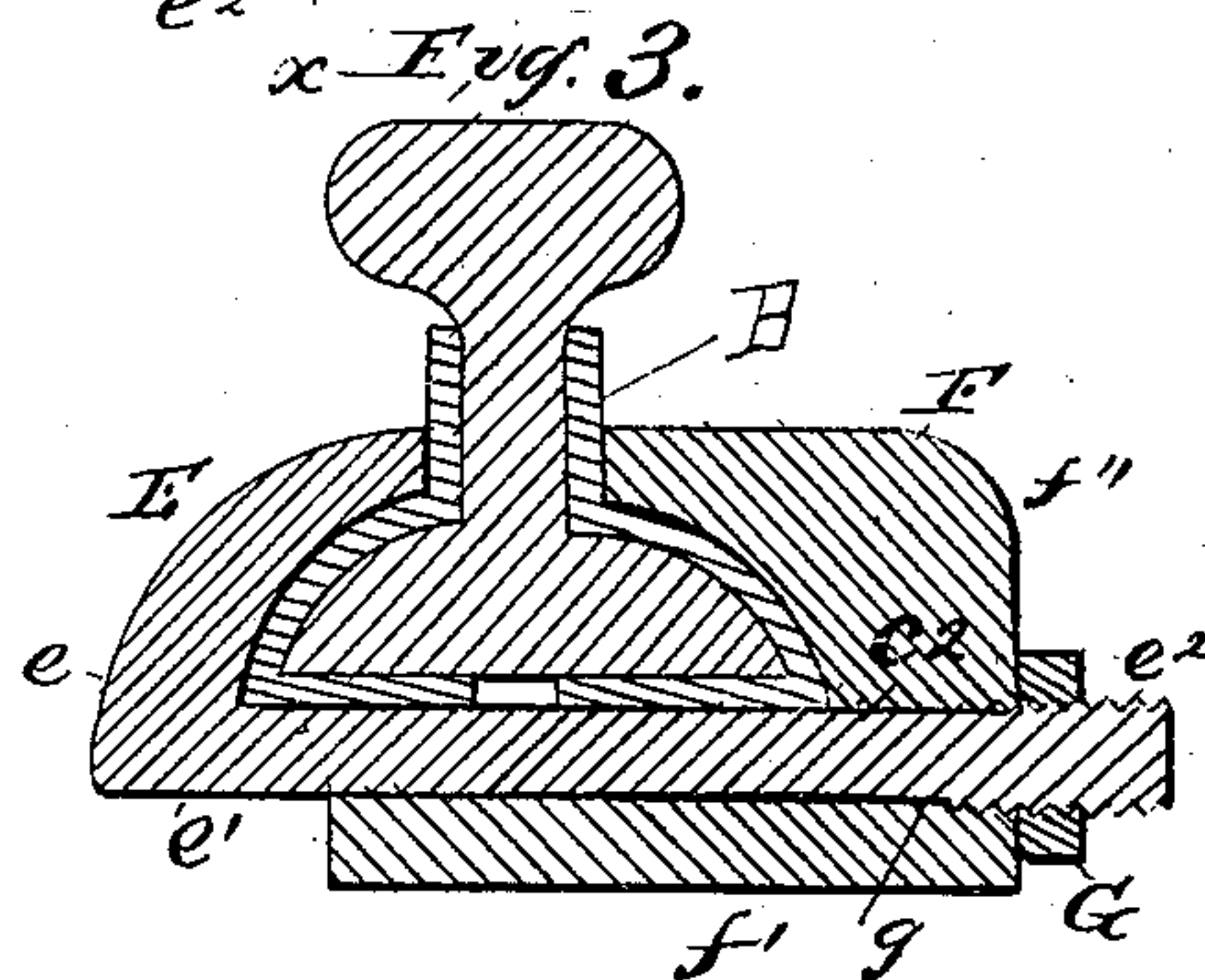
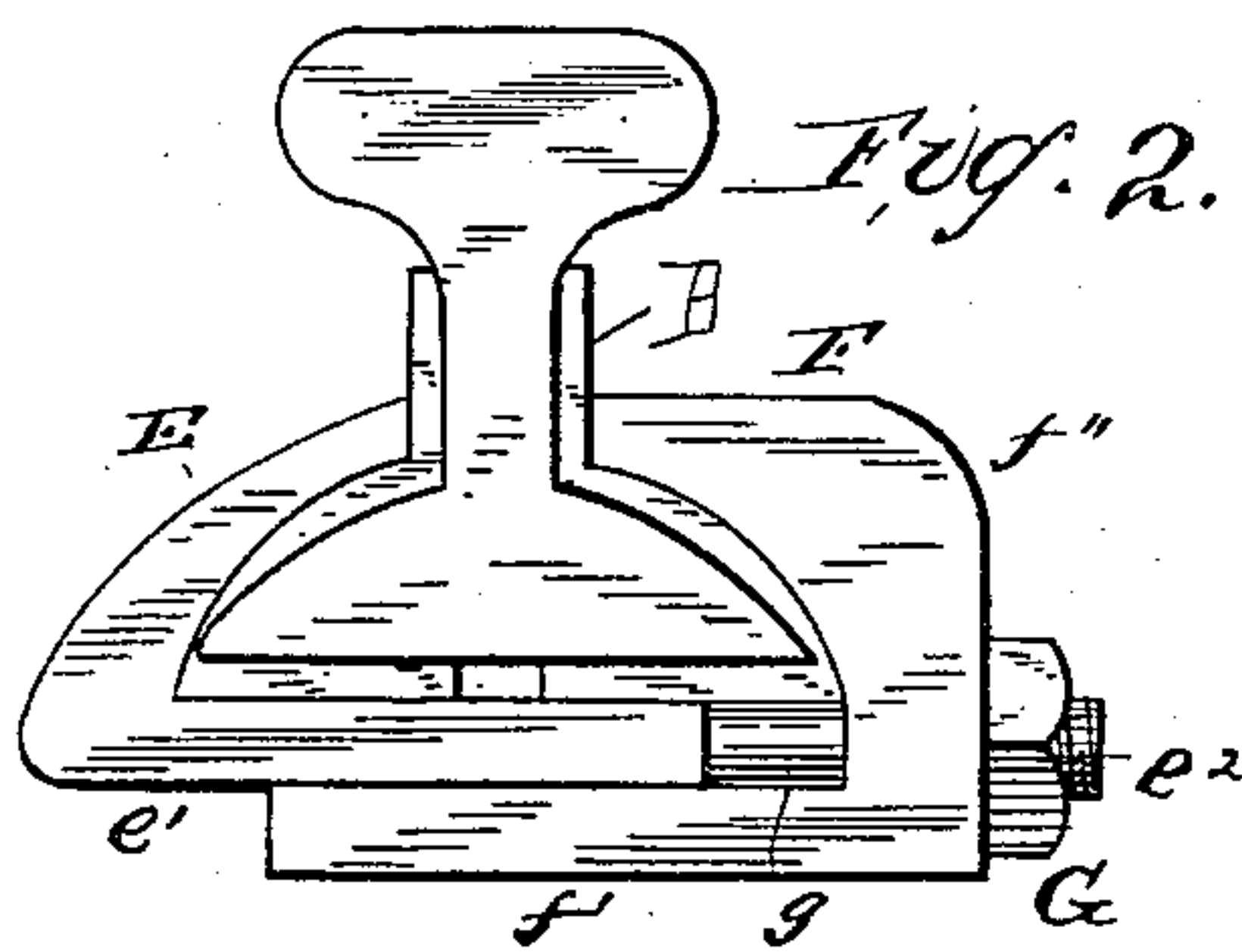
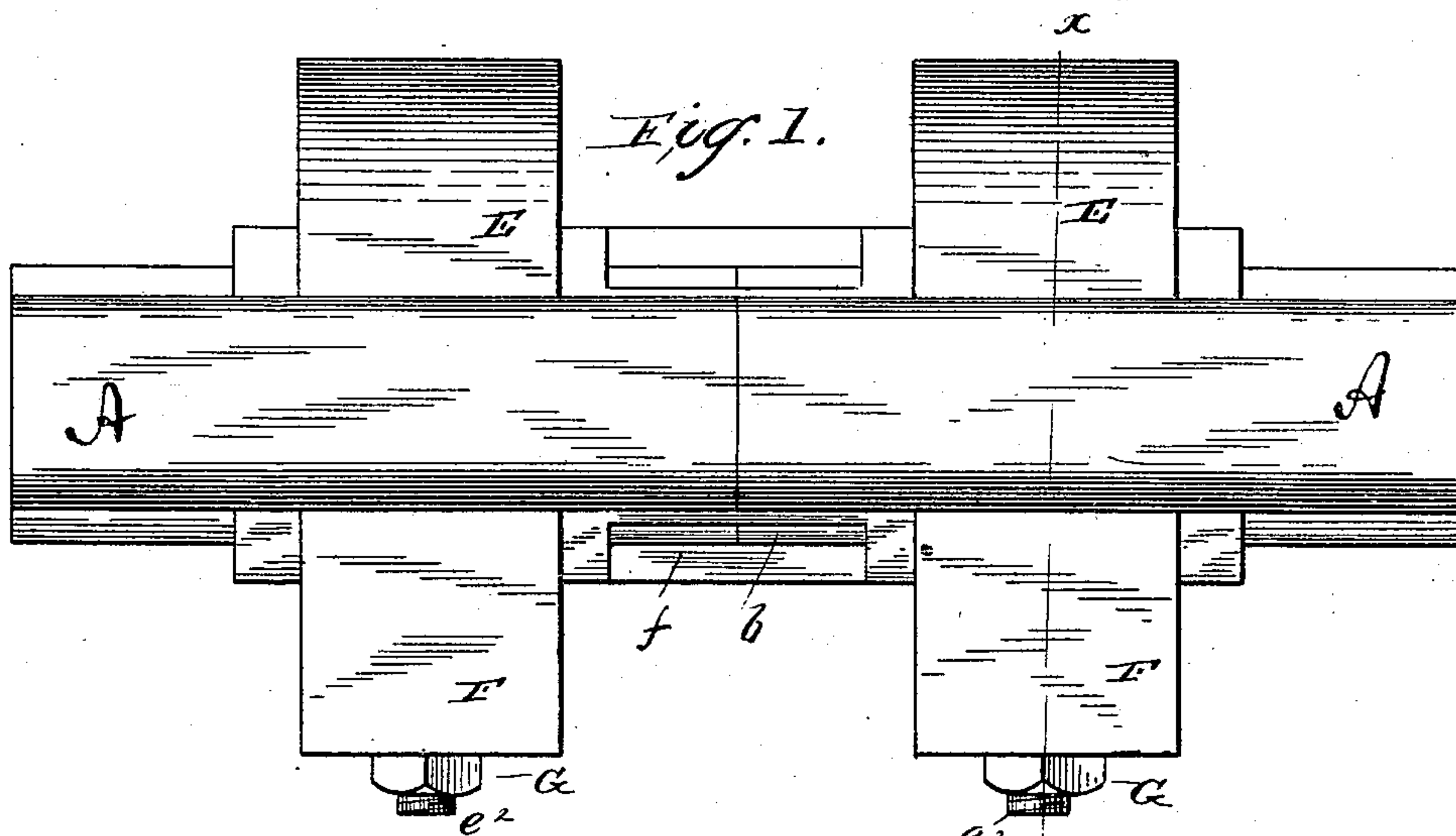


(No Model.)

J. DICKSON.  
RAILROAD RAIL JOINT.

No. 370,382.

Patented Sept. 27, 1887.



Witnesses:  
Wm H Scott  
Chas W. Merle

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Attorney



# UNITED STATES PATENT OFFICE.

JONATHAN DICKSON, OF AGOSTA, OHIO.

## RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 370,382, dated September 27, 1887.

Application filed June 20, 1887. Serial No. 241,849. (No model.)

*To all whom it may concern:*

Be it known that I, JONATHAN DICKSON, of Agosta, in the county of Marion and State of Ohio, have invented certain new and useful  
5 Improvements in Railroad-Rail Joints; 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,  
10 reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to joints for railroad-rails, its object being to avoid the forming of bolt-holes in the web of the rails, and to provide a cheap and durable double joint, which will facilitate the joining of two sections of rails, and will effectually prevent  
20 both lateral and longitudinal movement of the rails, and which will materially stiffen and strengthen the joint, the joint being capable of uniting a joint of rails at any point without holes either in the base or neck of the rail.

25 The invention consists in the features of construction and combination of parts herein fully described, and pointed out in the claims.

In the drawings, Figure 1 represents a plan view of the rail secured by my improved devices. Fig. 2 is an end elevation of Fig. 1. Fig. 3 is a section of the line *xx* of Fig. 1. Fig. 4 is a plan of one of the rail-sections with the fastening devices removed. Fig. 5 is an inverted plan of the rail-sections with the fish-plate sections applied. Fig. 6 is a view in perspective of one of the fish-plate sections or angle-irons detached; and Fig. 7 is a view, in section, showing a modification of a part of my invention.

40 A A indicate the rail-sections, each having opposite recesses *a* in its base to form edge lugs, *b*.

B B represent counterpart fish-plate or angle sections, consisting of sides *c* and base-flanges, *c'*, and curved plates *d*. Each section is formed with an elongated slot, *f*. The lugs *b* at the ends of the rails project through these slots *f*, as seen in Fig. 1. The fish or angle plate sections fit upon the rails snugly,

as shown, and are held in place and the whole joint is secured by two clamps, each consisting of two parts, E and F. The part E has a curved arm, *e*, to fit on one of the fish-plates, and a horizontal base, *e'*, to clamp the rail beneath and above the fish-plate and ends of the rail-sections, and terminates in a draw-bolt extension, *e<sup>2</sup>*, which latter projects well beyond the rail, and is threaded to receive a nut, G. The part F of the clamp consists of a horizontal base, *f'*, and a curved arm, *f<sup>2</sup>*, adapted to fit over the side of the fish-plate, as shown. The part F is furnished with an opening, *g*, through which the pin *e<sup>2</sup>* extends. The base *f'* rests below and overlaps the base *e'* of the part E.

Fig. 7 shows a modified construction of the clamping device. Here the two parts E and F are constructed alike, and they are secured together by means of a bolt which passes through them beneath the rail. The bolt is threaded at its end *e<sup>2</sup>* to receive the nut G, or the opposite clamp may be screw-threaded and the bolt screwed into it.

The joint devices thus described serve to firmly clamp the parts together and insure a reliable connection between the rail-sections at any desired point without making holes either in the neck or base of the rail. Lock-nuts may be used to prevent the unscrewing of the nut. Thus should the rails "creep" there is no danger of an accident, and when rails of an irregular length are to be inserted it is readily done, as before stated, without punching or boring holes therein, which in railroad building and repairing is a great consideration.

I claim—

1. The combination, with the rails recessed, as described, to form lugs, of independent fish-plate sections provided with slots to receive the said lugs, and a two-part clamp for securing the fish-plates, substantially as described.

2. The combination, with the meeting ends of two rails, each of said rails being provided with an edge lug at its base, of slotted fish-plate sections, and a clamp consisting of two overlapping parts, one of said parts having an in-

tegral threaded pin adapted to pass through an opening in the other part and receive a nut, substantially as described.

3. The combination, with the rails recessed  
5 as described, of slotted fish-plate or angle-iron sections provided with flanges which rest beneath the rails, and a two-part clamp provided with a screw and nut, substantially as described.

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

JONATHAN DICKSON.

Witnesses:

JAMES BROWN,  
C. H. JOLY.