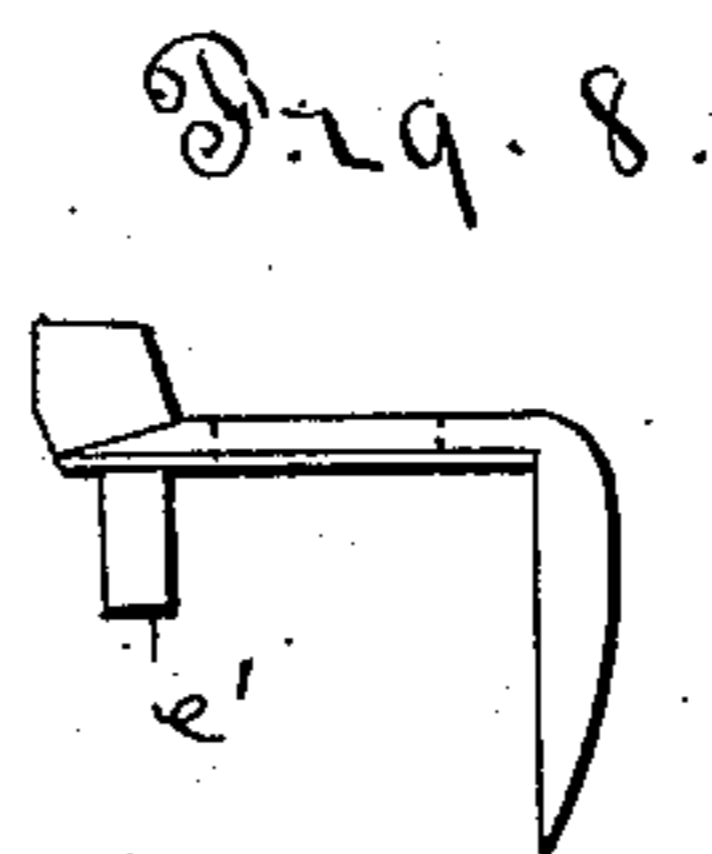
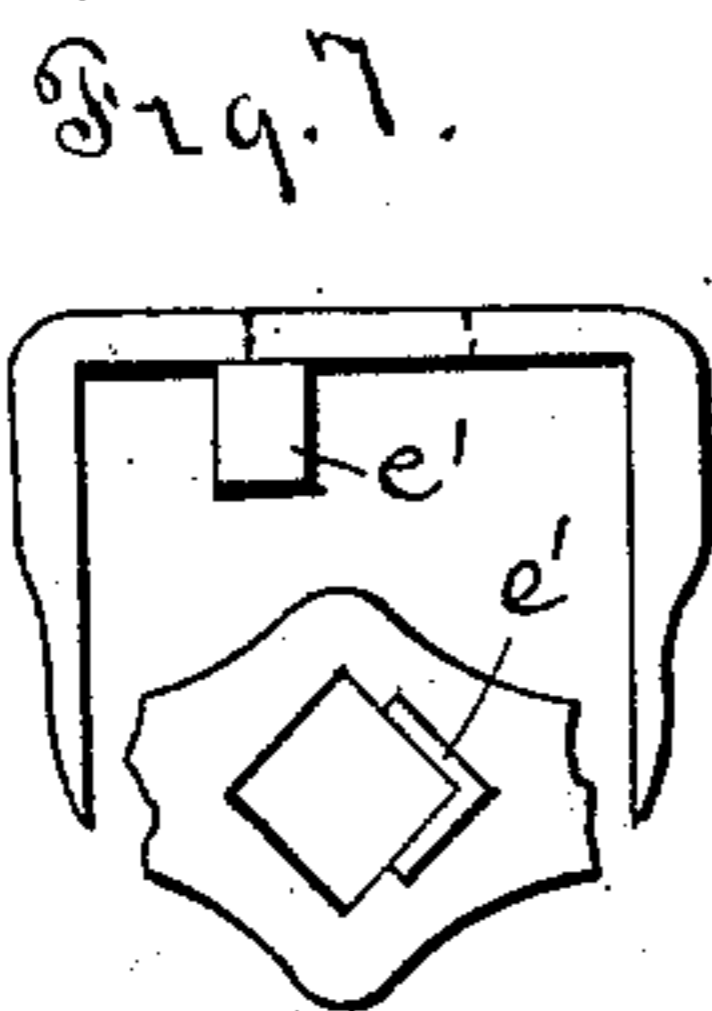
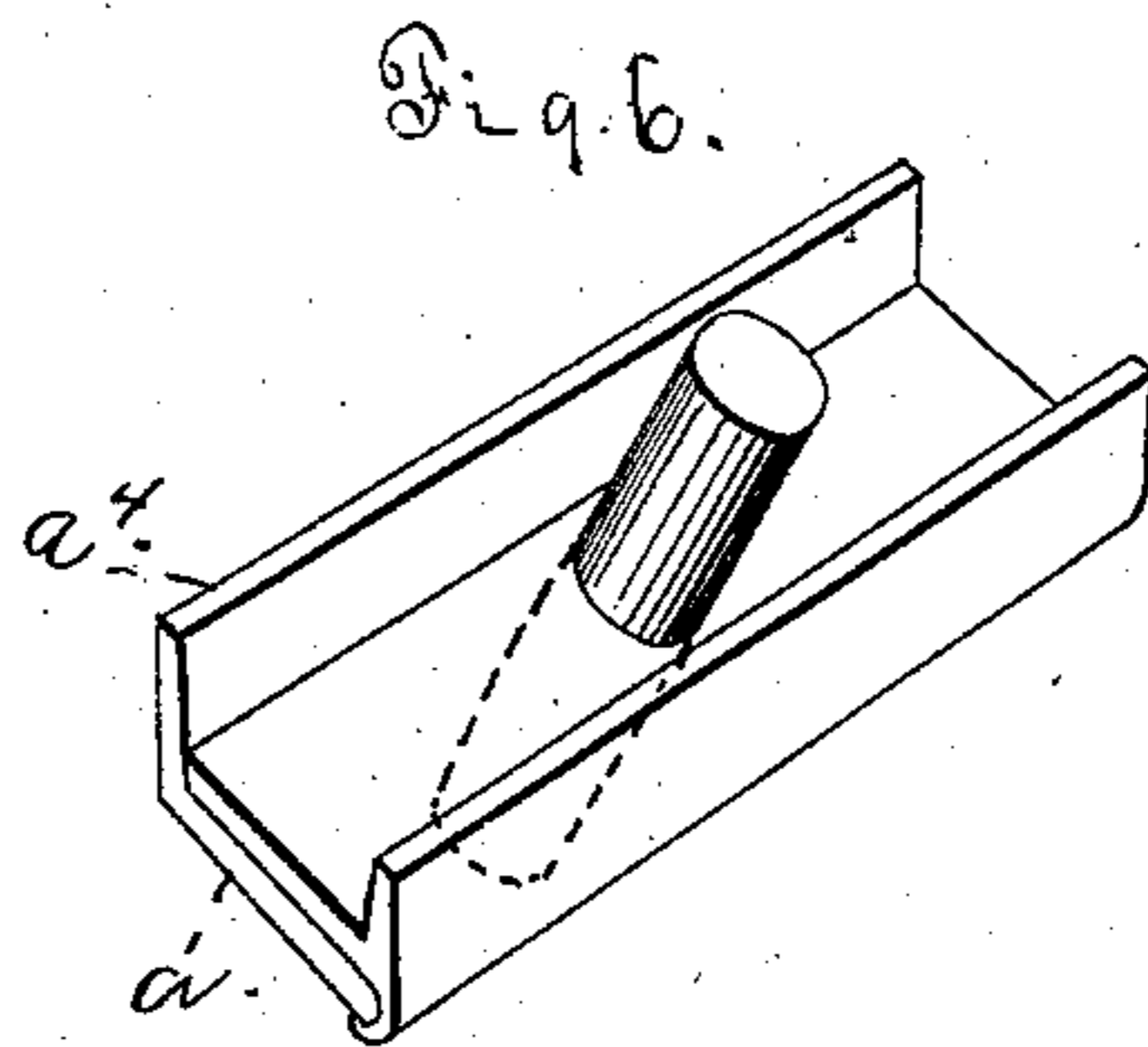
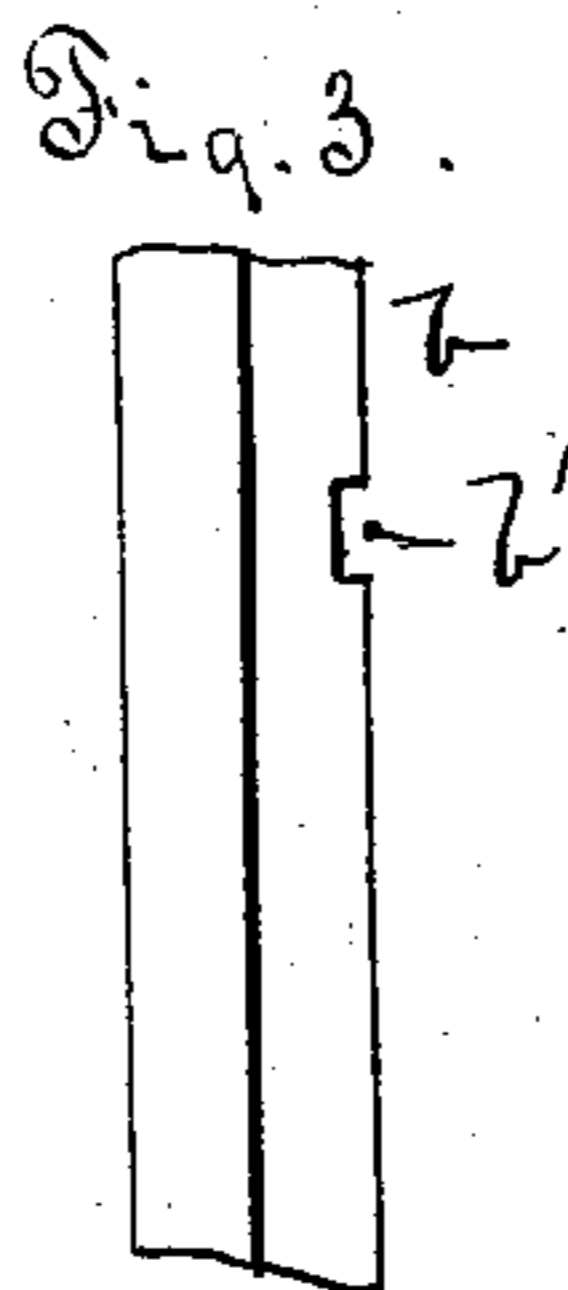
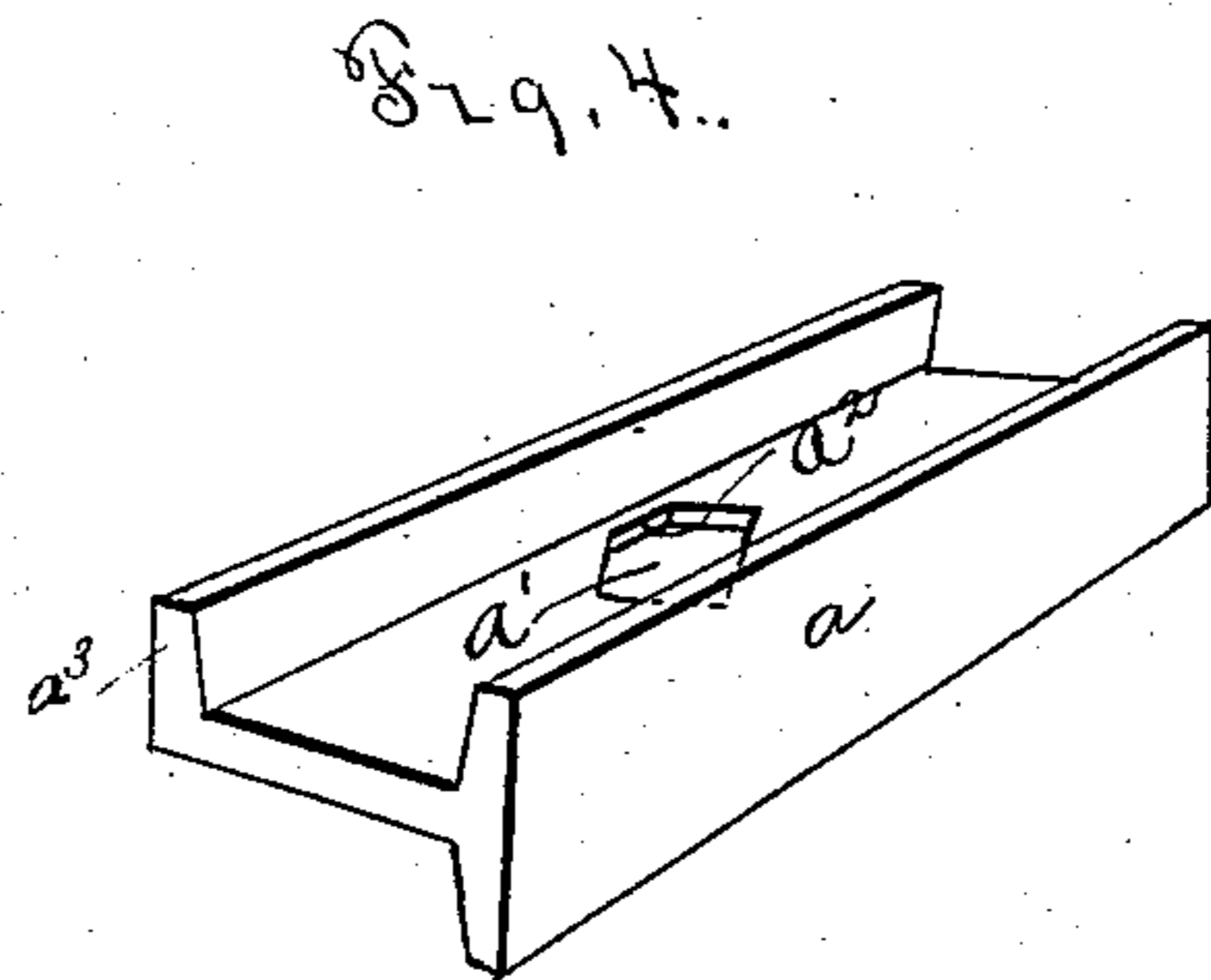
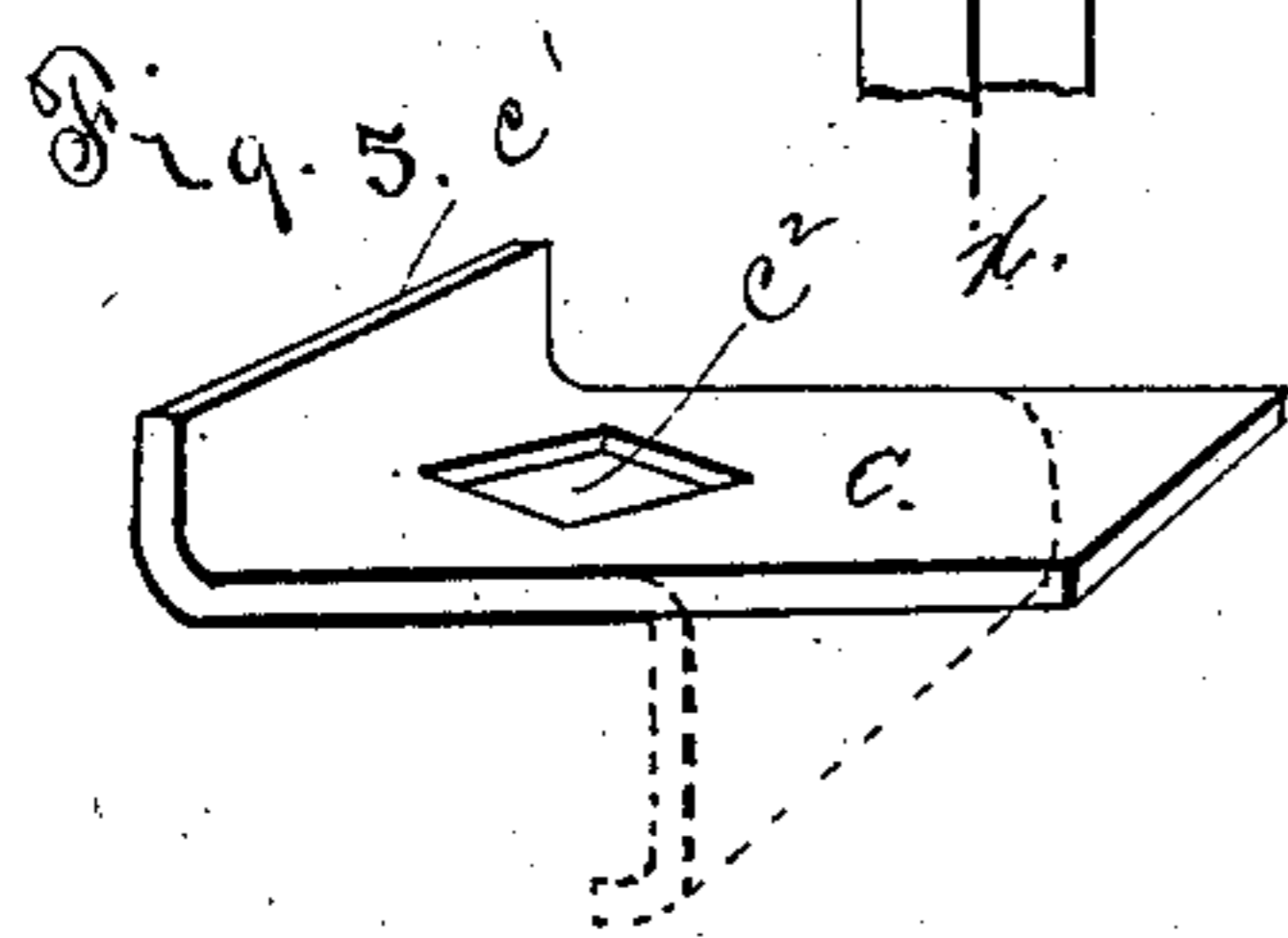
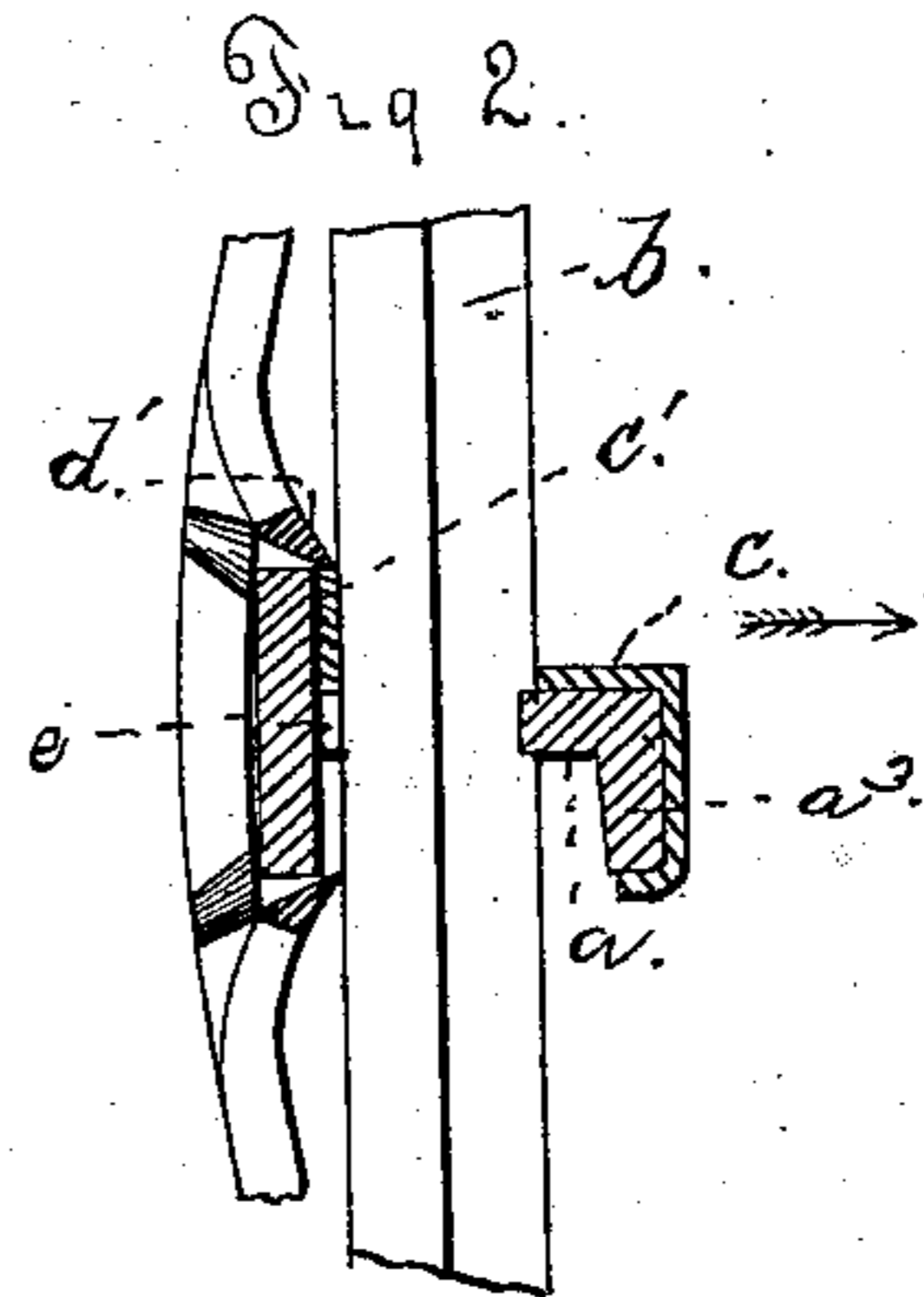
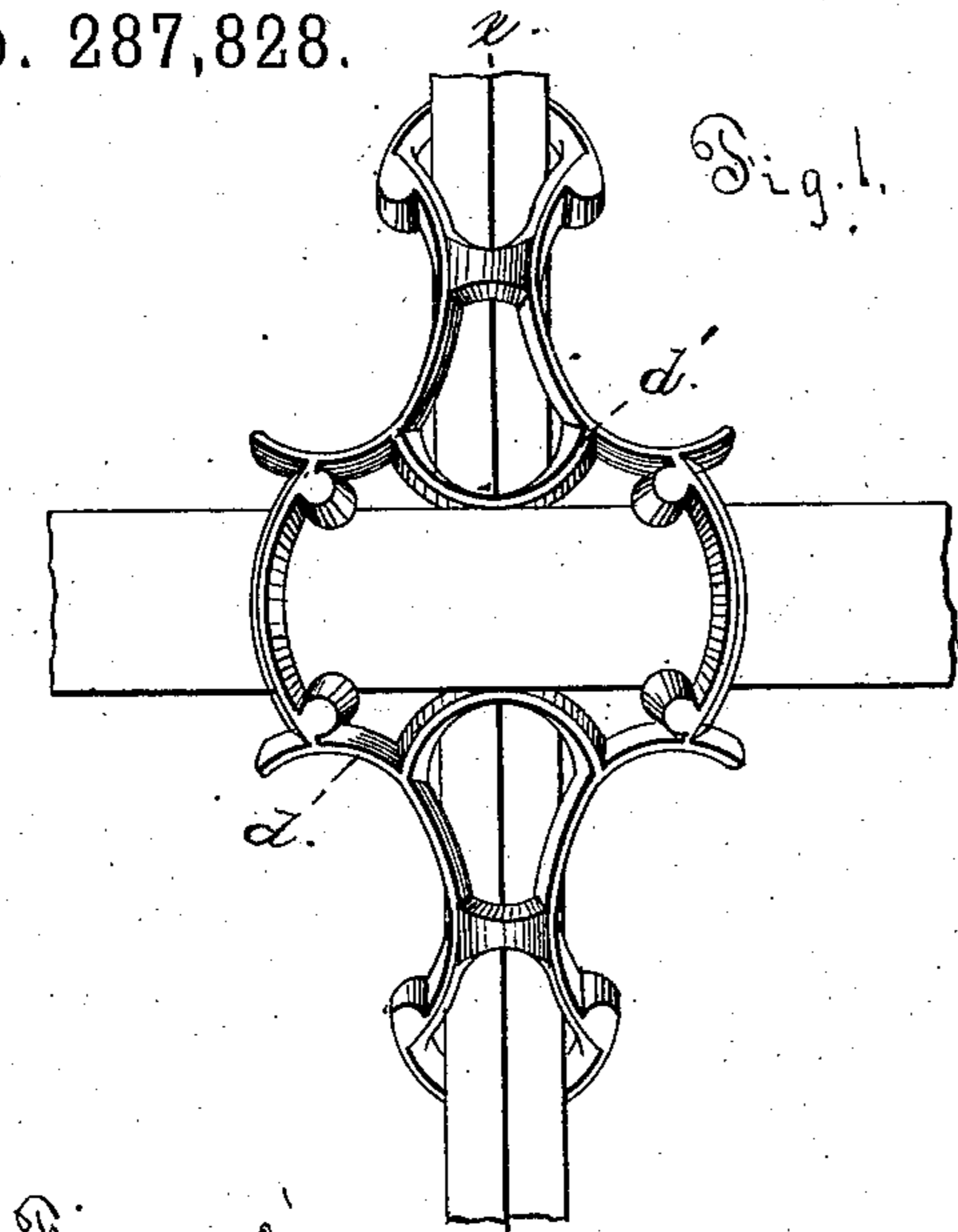


(Model.)

C. HANIKA.  
FENCE.

No. 287,828.

Patented Nov. 6, 1883.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

CHRISTIAN HANIKA, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE HANIKA  
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## FENCE.

SPECIFICATION forming part of Letters Patent No. 287,828, dated November 6, 1883.

Application filed April 5, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, CHRISTIAN HANIKA, a citizen of the United States, residing at Springfield, in the county of Clarke and State of Ohio, have invented certain new and useful Improvements in Fences; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has relation to improvements in metallic fences; and it consists in the construction, combination, and arrangement of the several parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a front view of a portion of my fence. Fig. 2 is a detached vertical section on line *x x*, Fig. 1. Fig. 3 is a detail view of the picket. Fig. 4 shows the rail in perspective. Fig. 5 is a detail view of the locking-plate; and Fig. 6 shows a different mode of locking the rail and picket, and Figs. 7 and 8 show a preferred form of the locking-plate.

The angle-iron rail *a* is formed T-shaped on its forward edge and L-shaped on its rear edge, with the wing of the L turned down, as clearly shown in Figs. 2 and 4. Through this rail I form a series of picket-holes, *a'*, made somewhat larger than the picket, and having their rear corners closed or squared, as shown, providing the face *a''*, over which the notch of the picket extends. The wing *a'''* is turned down for a considerable distance, as it thus provides a firmer hold for the locking-plate, as will be fully understood when the operation of putting up the fence has been described. Where so desired, the flange on the front edge of the rail may be only extended above the main body of the same, as shown by *a''* in Fig. 6; but I prefer to extend it both above and below the body of the rail, as shown in Figs. 1, 2, and 4, as thereby a firmer bracing of the parts is had when the ornament or scroll has been applied, as will be described.

The picket *b* is made of any suitable shape in cross-section, angular preferred, and is provided with one or more notches, *b'*, correspond-

ing to the number of the rails employed for the fence.

The locking-plate *c* is made, preferably, of malleable iron, and its forward edge is turned up, to provide a flange, *c'*, nearly or quite as high as the upturned flange of the rail, and it is provided with an opening, *c''*, corresponding to the shape of the picket, and adapted to be slipped down over the same and rest close above the rail.

In addition to the mechanism before described, I employ the ornament or scroll *d*, which I construct with a rod or bar, *d'*, which extends to and bears on the top of the flange *c'* of the locking-plate, and braces the same in its position when applied to the picket and rail, as will be described. This ornament is secured to the picket above and below the rail by any of the common means—usually by forming loops on its opposite ends, which slide on the pickets, as illustrated in my drawings.

In the operation of setting up my fence the picket is slipped down through the picket-opening until the notch *b'* is brought opposite the body of the rail. The locking-plate *c* is then slipped down over the picket until it rests close over the rail, as shown in Fig. 2, with its outer or rear portion extended out, as shown in dotted lines, Fig. 2. The plate is then drawn in the direction indicated by the arrow in Fig. 2 until the notch *b'* is brought over and into engagement with the rail at the wall or edge of the picket-opening, as shown in Fig. 2. The plate is then bent down alongside and turned under the depending wings *a'''* of the rail, and the rail and picket are locked firmly together. The ornament or scroll is properly applied, so that the bar *d'* will bear firmly against the flange *c'* of the locking-plate and hold the latter against the body of the rail *a*, bracing the plate and the rail together, adding greatly to the strength and solidity of the fence.

In Fig. 6 the body of the rail is not provided with the depending wing *a'''*, and the locking-plate is shown as constructed of a heavier metal, and having a depending flange or portion, which is swaged under the body of the rail. I prefer the construction shown in Figs. 1, 2, 3, 4, and 5.

In fences constructed as before described it

will be seen that the hole through the locking-plate corresponds to the size of the picket, while that through the rail is larger, in order to permit the lateral movement of the picket, as before described. Thus when the picket has been moved into engagement with the rail and locked, as shown in Fig. 2, a space, *e*, is left in front of the said picket and between the same and the rail. This space gives room for the "wabbling" of the picket, and renders the same unsteady; and in order to obviate this difficulty I preferably construct the locking-plates as shown in Figs. 7 and 8, and make them with depending flanges on one or both ends, according as the rail on which they are to be used is J-shaped, or what is usually called "channel-shaped" rail. These plates, it will be seen, are provided with a lug or filling-piece, *e'*, depending from their lower side at the edge of the picket-opening opposite, or on the other side from, the picket-notch, which filling-piece is adapted and intended to be forced down into the space *e* and fill the same, and hold the picket in a firm, steady, and true vertical position. I prefer to hold the locking-plates in position on the rail by means of the depending end flanges turned under the under side of the rail; but it will be understood they could be secured to the rail in other manner, which it does not seem necessary to describe.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The metallic fence, substantially as described and shown, consisting of the picket provided with a suitable notch, the rail having the picket-opening formed vertically through it, and the locking-plate provided with an opening corresponding to the shape of the picket, and placed down over the same close to the rail and drawn laterally, so as to force the notch in the picket into engagement

with the rail, and having its outer side turned down against and under the outer edge of the rail, locking the rail and picket firmly together, as and for the purposes specified.

2. In a metallic fence, the combination of the picket provided with a notch, the rail having a picket-opening and constructed with an upturned flange on its forward edge, the locking-plate having an opening to fit the picket, and placed down over the same close to the rail, and locking the latter and the picket together, and having its forward edge extended up alongside the upturned flange of the rail, and a suitable ornament or scroll secured to the picket above and below the rail, and having a rod or bar extended therefrom and bearing against and bracing the locking-plate, substantially as set forth.

3. In a metallic fence, the combination of the notched picket, the rail placed thereon opposite to and in position to engage the notch in the picket, and the locking-plate placed on and movable laterally with the picket, and provided with means, substantially as described, whereby it may be made fast to the rail, as and for the purposes specified.

4. In a metallic fence, the combination of the rail, the notched picket, the locking-plate having suitable opening to slip over the picket, and placed down thereon, and movable laterally to force the picket-notch into engagement with the rail, and a lug or filling-piece extended from the locking-plate down between the rail and the picket on the opposite side of the latter from the notch, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CHRISTIAN HANIKA.

Witnesses:

J. J. SMITH,  
G. C. BOWLUS.