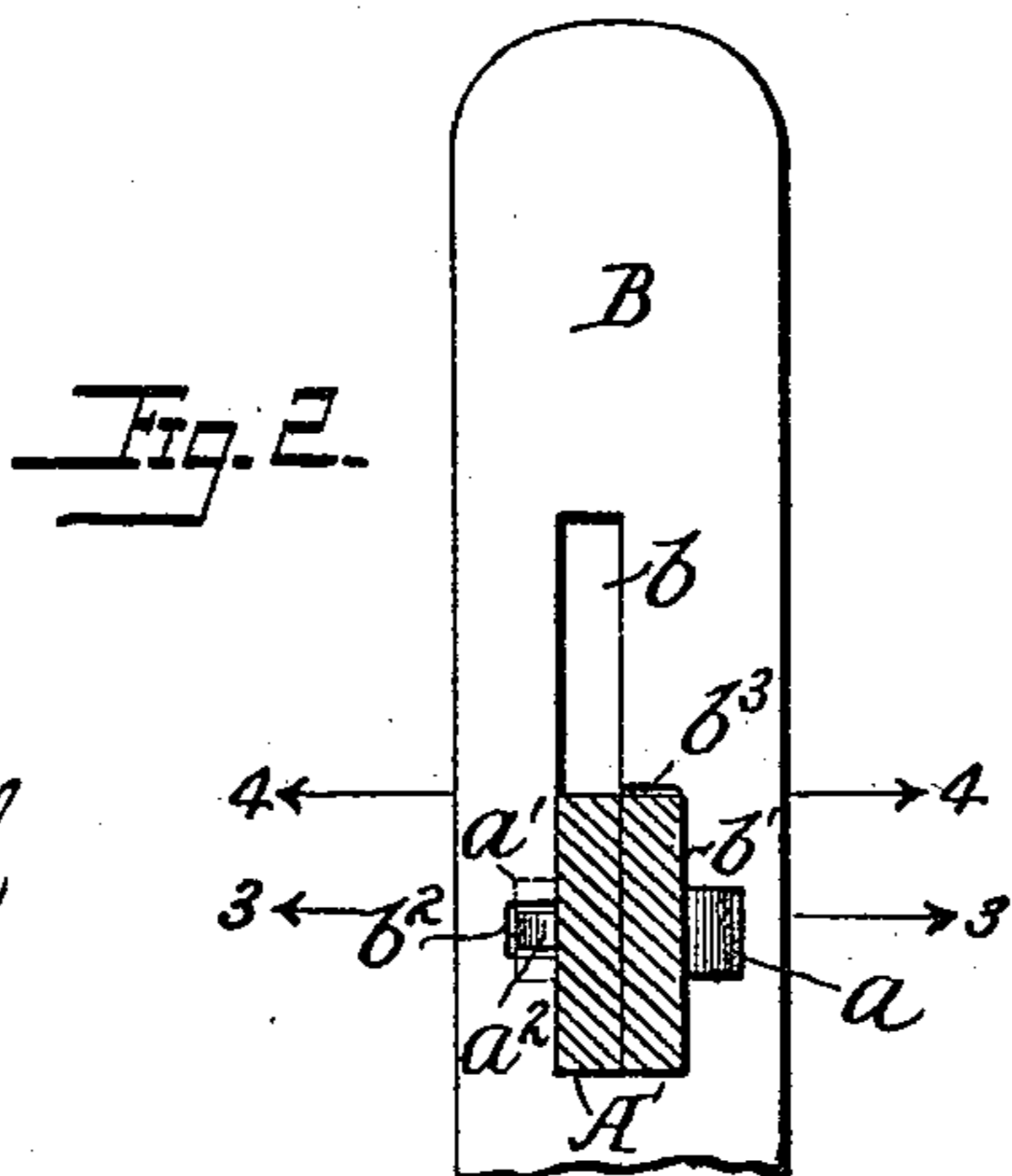
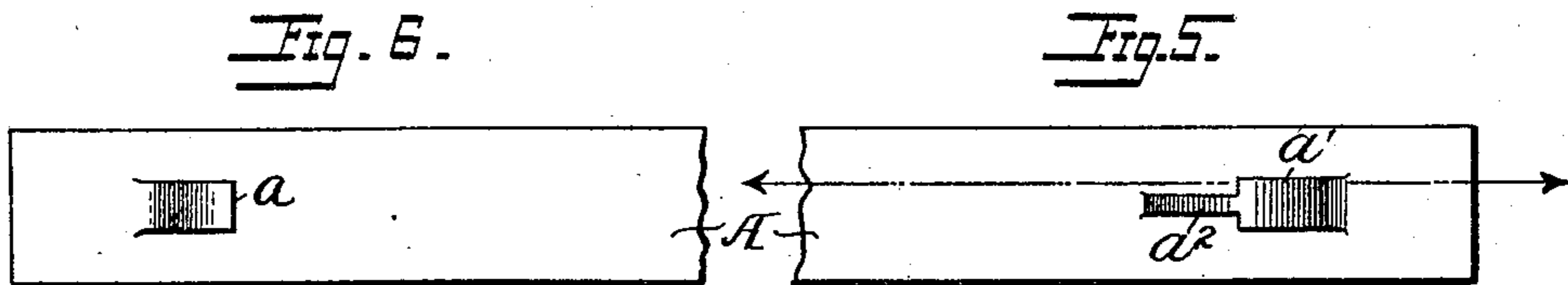
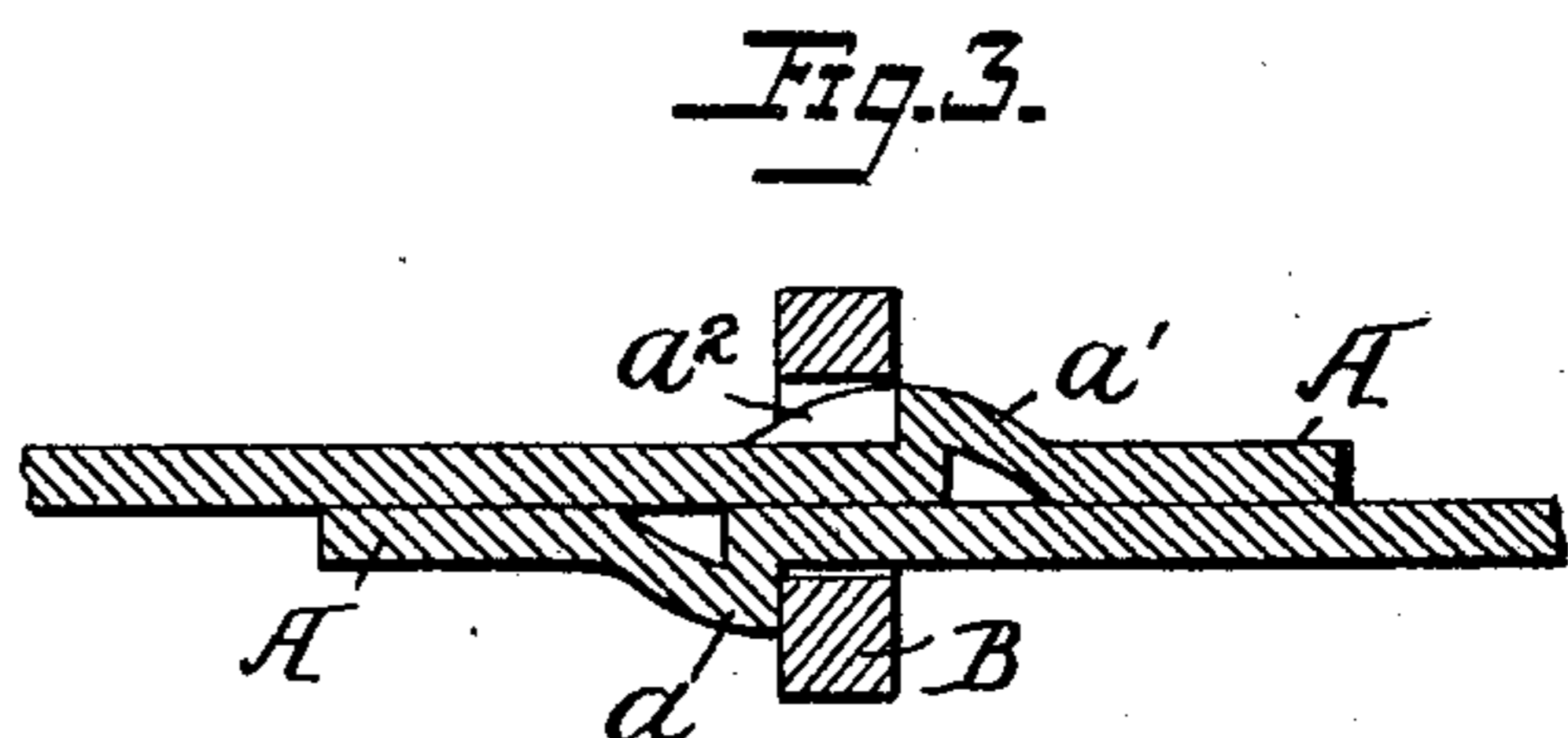
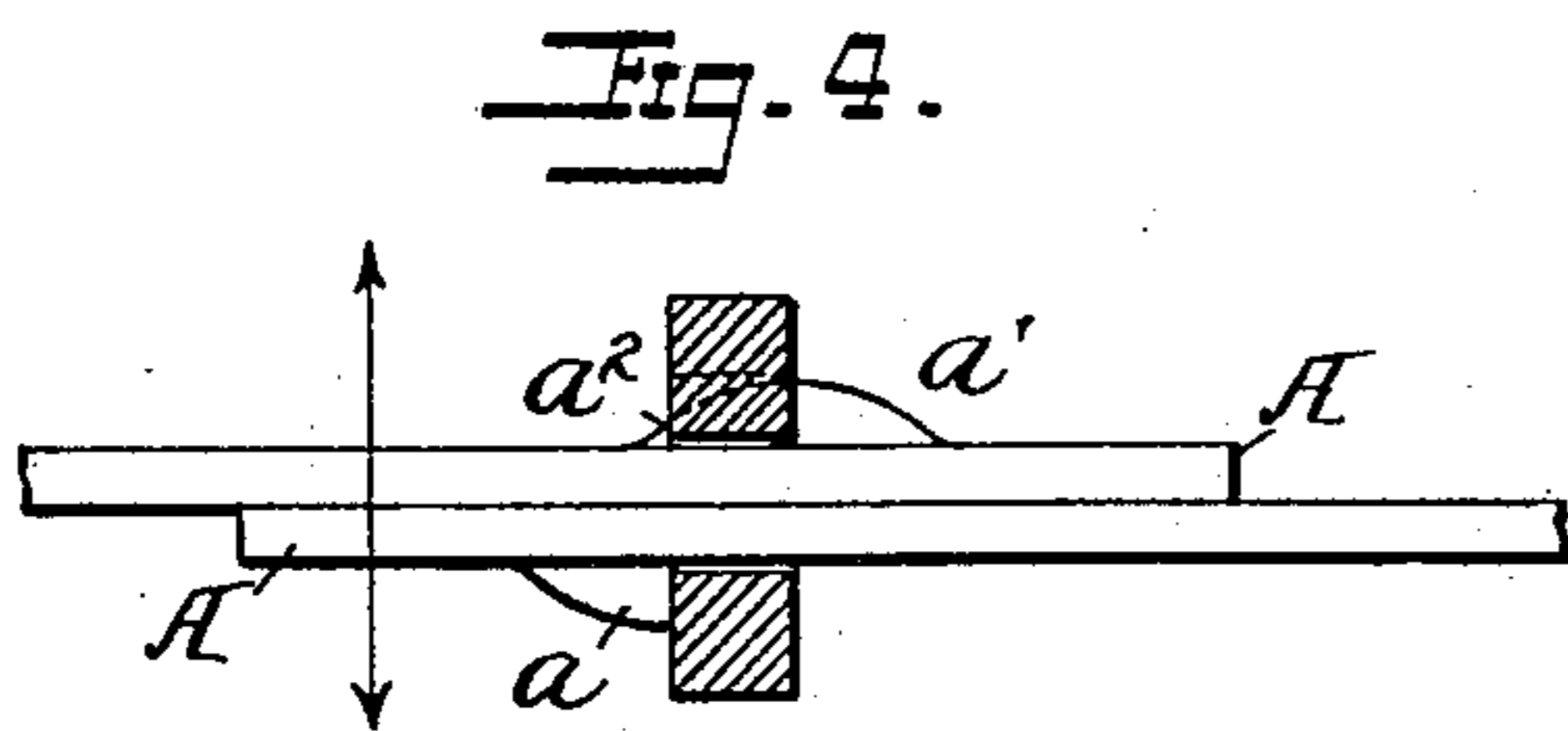
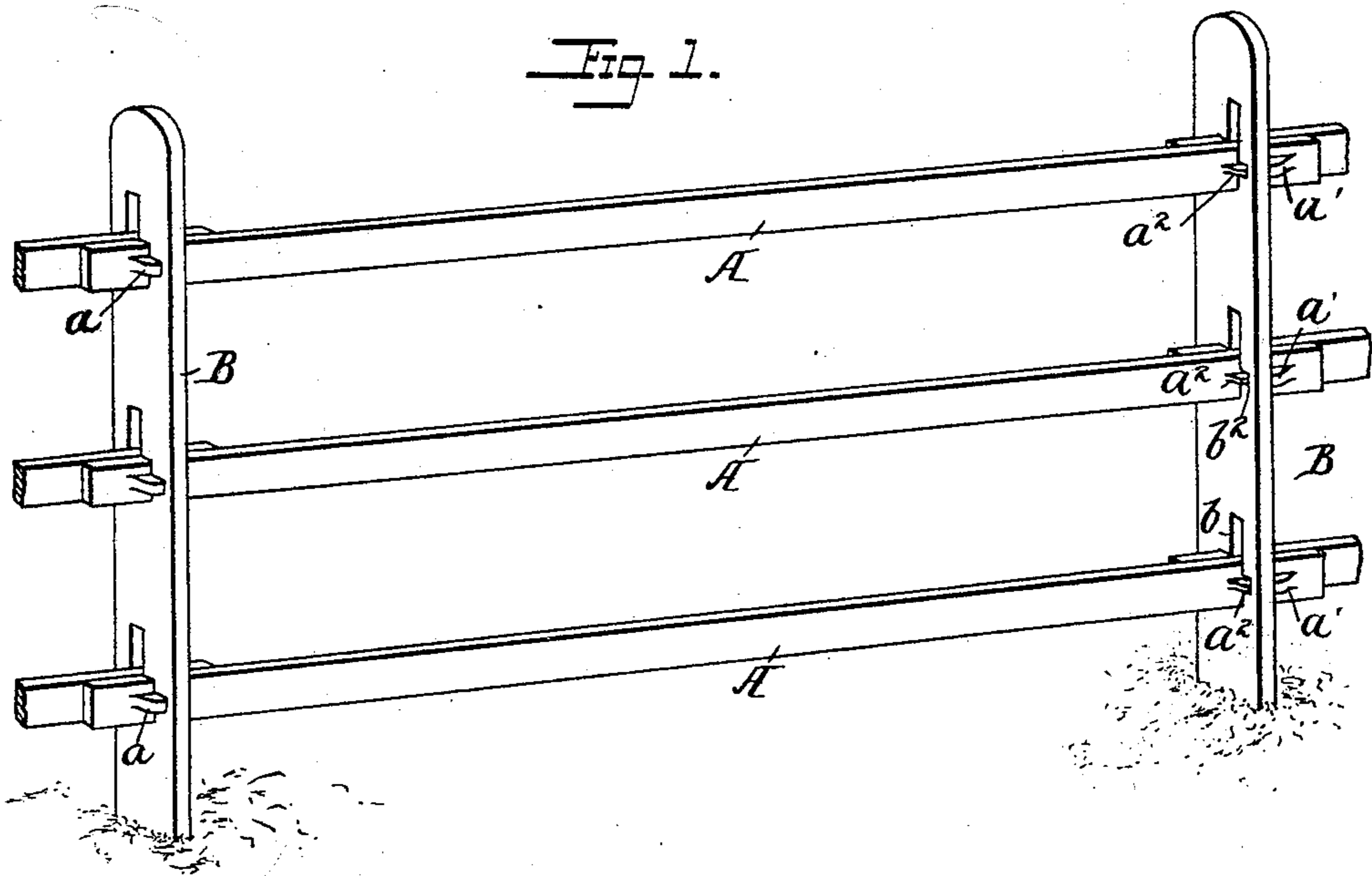


(No Model.)

L. BARNES.  
FENCE POST.

No. 457,860.

Patented Aug. 18, 1891.



WITNESSES.  
*J. H. Hunkel*  
*J. Watson*

INVENTOR  
*Lewis Barnes*  
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# UNITED STATES PATENT OFFICE.

LEWIS BARNES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE  
BARNES IRON FENCE COMPANY, OF NEW JERSEY.

## FENCE-POST.

SPECIFICATION forming part of Letters Patent No. 457,860, dated August 18, 1891.

Application filed April 4, 1891. Serial No. 387,613. (No model.)

*To all whom it may concern:*

Be it known that I, LEWIS BARNES, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Fence-Posts, of which the following is a specification.

My invention relates to an improvement in fences; and it consists in devices for securely interlocking the rails and posts in what are ordinarily denominated "rail fences."

In the accompanying drawings, Figure 1 is a perspective view of a portion of a fence embodying my improvement. Fig. 2 is a side elevation of a portion of one of the posts, showing two rails in cross-section. Figs. 3 and 4 are sectional views taken on the lines 3-3 and 4-4, respectively, Fig. 2; and Figs. 5 and 6 are enlarged views showing the lugs upon the rails in side elevation.

The present invention relates more particularly to an improvement on the fence shown in my patent, No. 445,531, dated February 3, 1891. In the fence shown in said patent the rails may be removed from any panel of the fence after the fence is completed unless some separate locking device is used to secure the parts. In the present invention I provide the rails with locking devices which hold each rail securely in its proper position, rendering it impossible to dismember the fence at any point between its ends, the rails of each panel forming keys to prevent the removal of the adjacent panels.

In the drawings, A represents the rails and B the posts. Each post is formed with one or more openings to receive the rails, and the openings are made substantially L-shaped. As shown, the stem  $b$  of the L-shaped opening extends upward from the foot  $b'$ , which extends to the right, as seen in Fig. 2; but it will be obvious that it is immaterial whether the L be turned to the right or to the left, or inverted, so far as the essential features of the present invention are concerned. As shown, the upper part  $b$  of the opening is made slightly larger than the section of the rail to be used, and the lower portion  $b'$  is made wide enough to admit two rails side by side, as shown in Fig. 2. At the back of the

L-shaped opening and opposite the portion  $b'$  is formed a notch  $b^2$ , for a purpose to be hereinafter described.

The rails A are preferably made of metal, and upon one end of each rail is stamped or cast a lug or lugs  $a$  and upon the other a lug  $a'$  and a tongue  $a^2$ . The lugs  $a$   $a'$  may be of any desired shape; but they should present abrupt shoulders facing toward the middle portion of the rail to engage the sides of the post. The tongue  $a^2$  is made to correspond with and fit into the notch  $b^2$  in the post.

As above stated, the rails are preferably made of metal, in which case the lug and tongue are usually formed integral therewith; but in some instances I may form the lugs separate and attach them to the rail, as shown in my prior patent.

The method of constructing a fence embodying my present improvements is as follows: The end of a rail provided with the tongue  $a^2$  is first passed through the wide portion  $b'$  of one of the openings and then raised up into the narrow portion  $b$ , the tongue being upon the same side as the notch  $b^2$ . The end of the adjacent rail provided with lug  $a$  is then inserted into the wide portion of the opening from the opposite side of the post and slid out into the offset of the opening, as shown in Figs. 2, 3, and 4. The first rail is then lowered until it comes opposite the second, and then drawn outward until its tongue  $a^2$  enters the notch  $b^2$  and the shoulder of its lug  $a'$  comes against the post. As the rail is thus drawn out to cause its tongue to enter the notch, its opposite end is passed into the wide portion of the corresponding opening in the adjacent post, the tongued end of another rail having been previously placed in the narrow portion of said opening. It will thus be seen that the rails of one panel act as keys to prevent lateral motion of the rails of the previous panel, and that vertical motion of the rails is prevented by the tongue engaging the notch upon one side and the shoulder  $b^3$  preventing the rail upon the other side from rising. The lugs  $a$   $a'$  prevent longitudinal displacement of the rails. Thus all parts are securely interlocked and it is impossible to disturb the bars while the fence remains intact.

As shown, the lugs upon each rail are upon the same side of the rail and the L-shaped openings in adjacent posts face in opposite directions. This arrangement enables me to  
 5 place the rails parallel to the direction of the fence, both ends of any particular rail being located in front of or behind the ends of the adjacent rails; but I may place all of the posts so that their L-shaped openings face in  
 10 the same direction and arrange the lugs *a a'* upon different sides of the rails, in which case the rails will overlap like shingles, one end of each rail being in front of and the other behind the ends of the adjacent rails. The  
 15 difference in construction just stated, it will be understood, is a mere matter of taste and not of the essence of the present invention.

Without limiting myself to the precise construction and arrangement of parts shown  
 20 and described, I claim—

1. A fence-post having L-shaped openings

to receive the rails and a notch at the side of each opening opposite the foot of the L, substantially as described.

2. A fence-rail having a shouldered inward- 25 ly-facing lug at each end and a tongue extending from the shoulder of one of the lugs, substantially as set forth.

3. The combination, with posts having L-shaped openings and notches *b<sup>2</sup>*, of rails hav- 30 ing each a shouldered inwardly-facing lug at each end and a tongue extending from the shoulder of one of the lugs, substantially as set forth.

In testimony whereof I have signed my 35 name to this specification in the presence of two subscribing witnesses.

LEWIS BARNES.

Witnesses:

STEWART H. SHINN,  
 EMMA S. CONOVER.