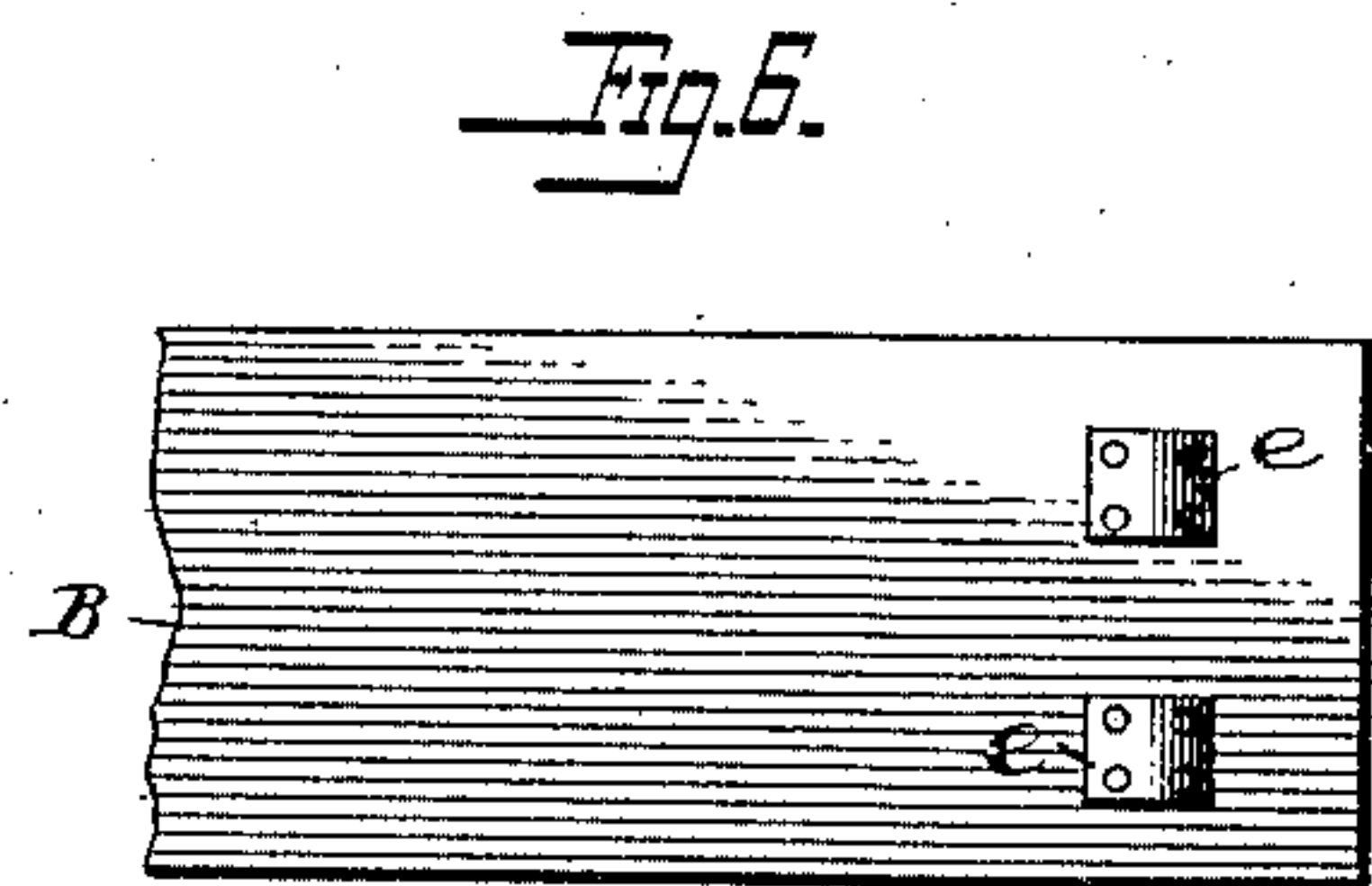
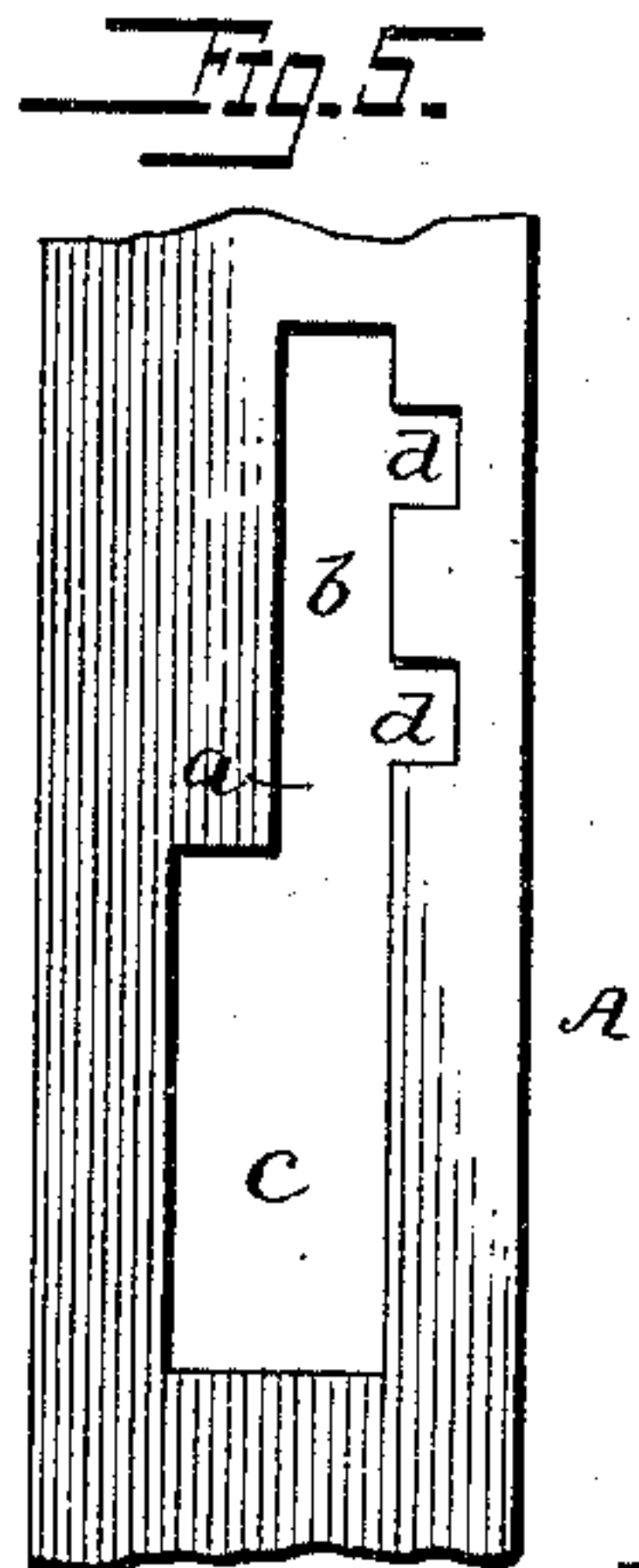
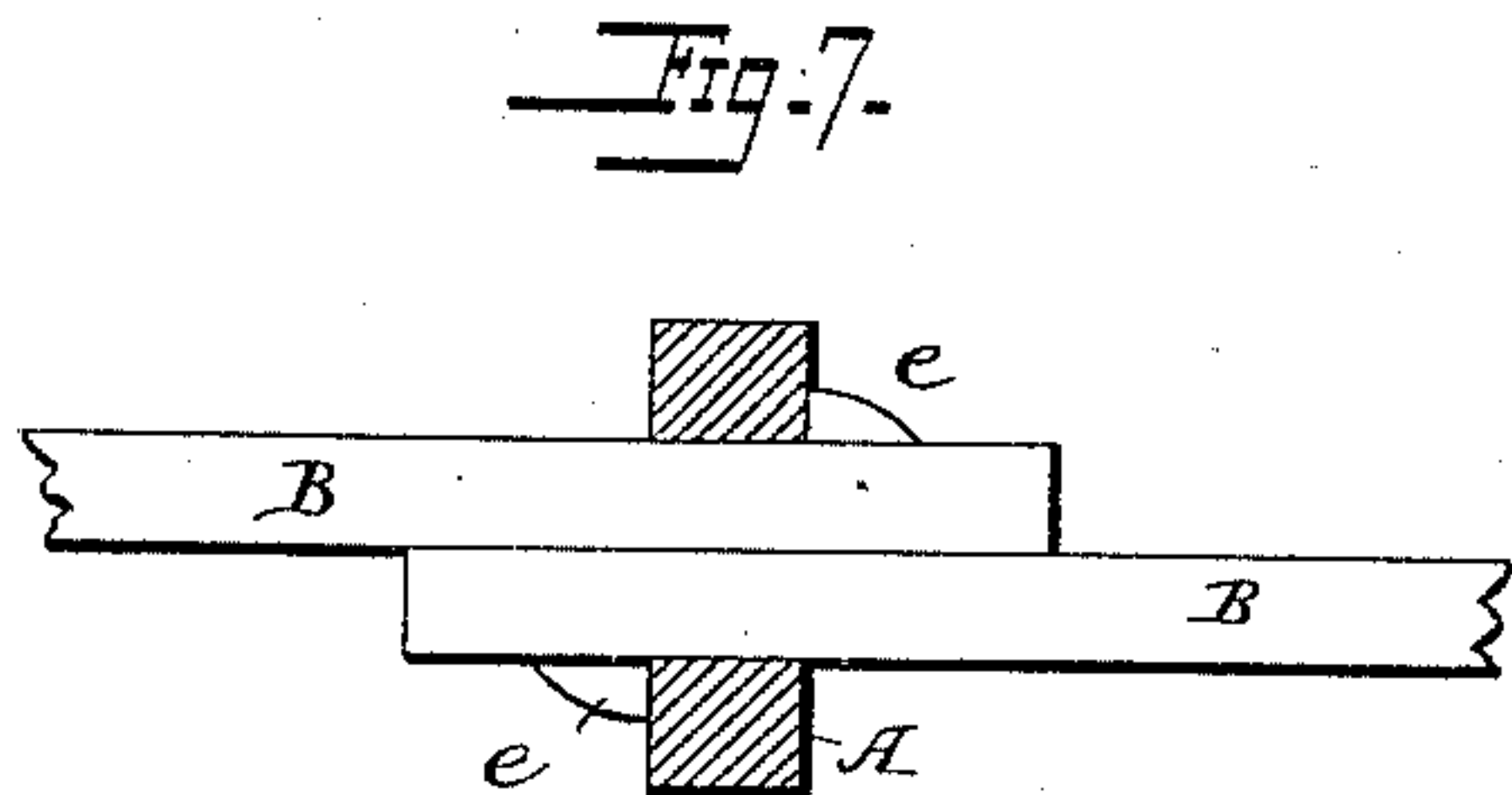
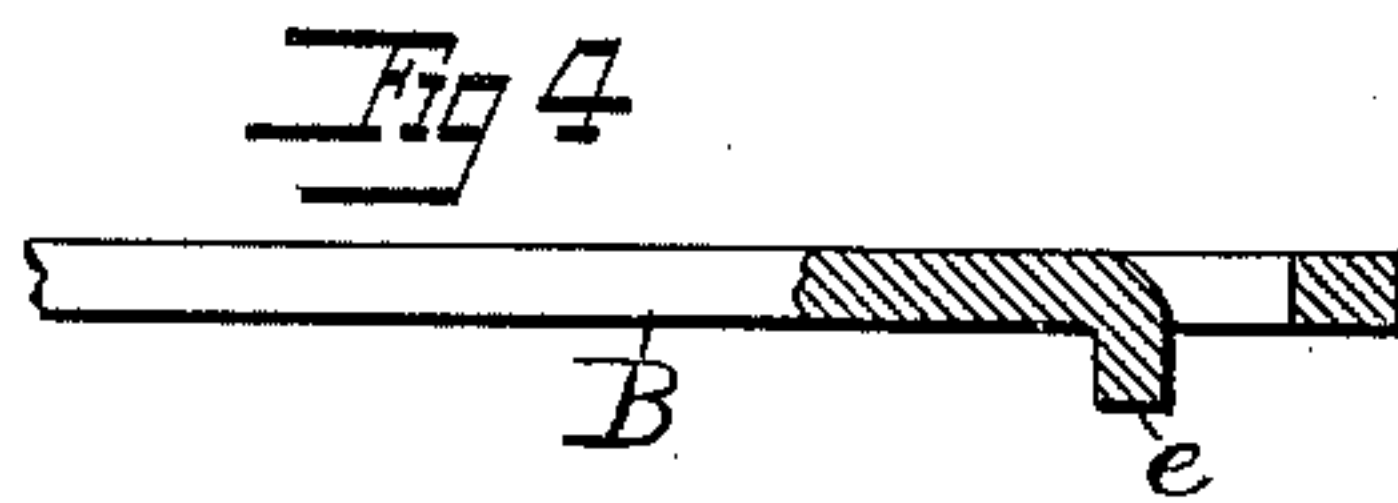
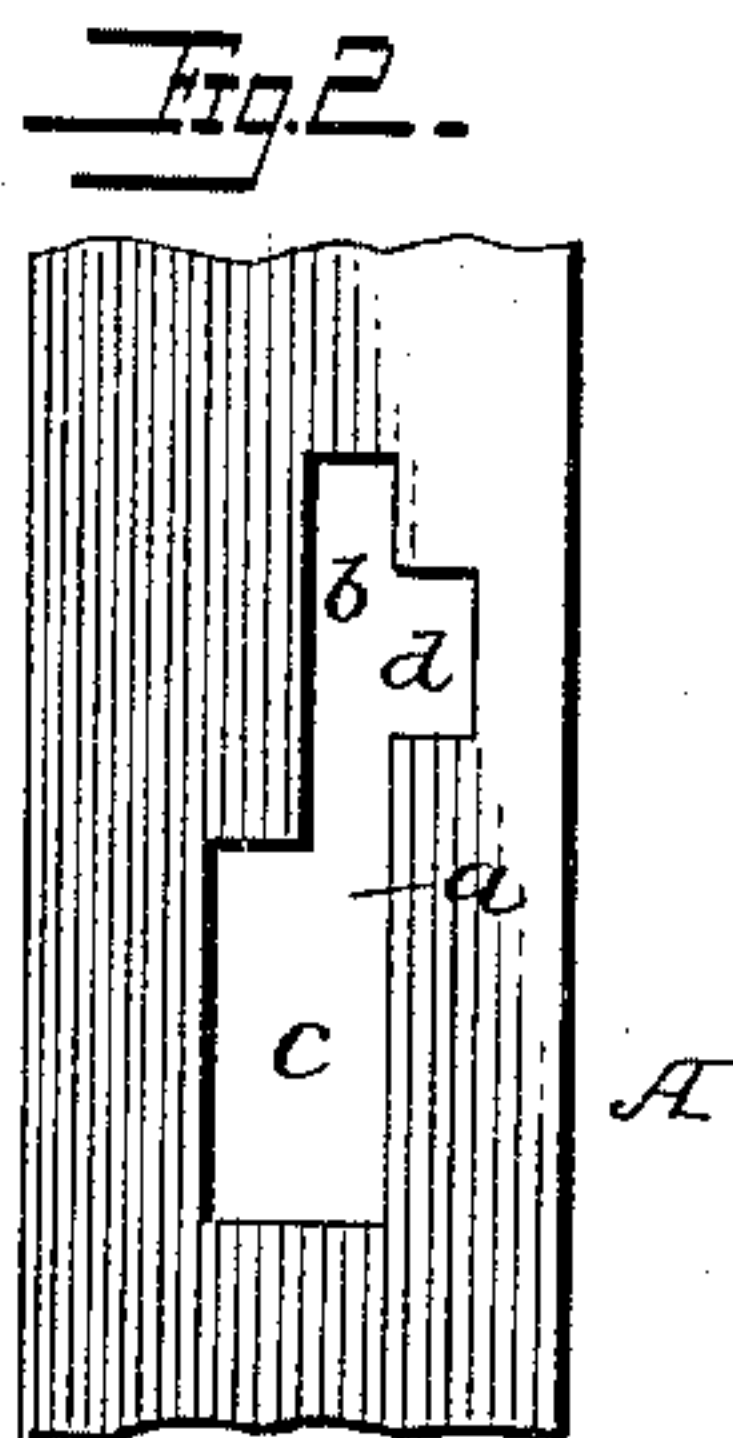
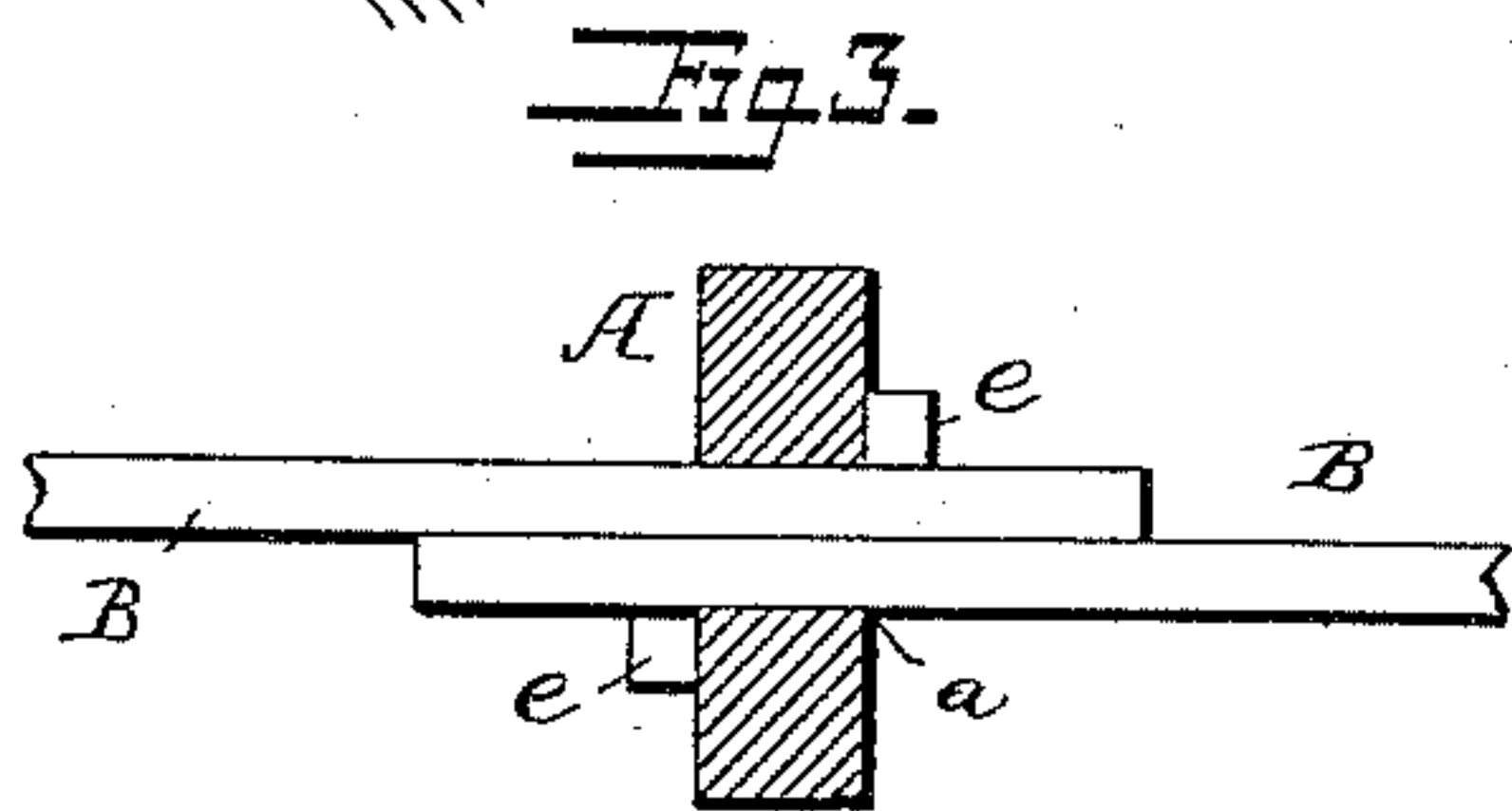
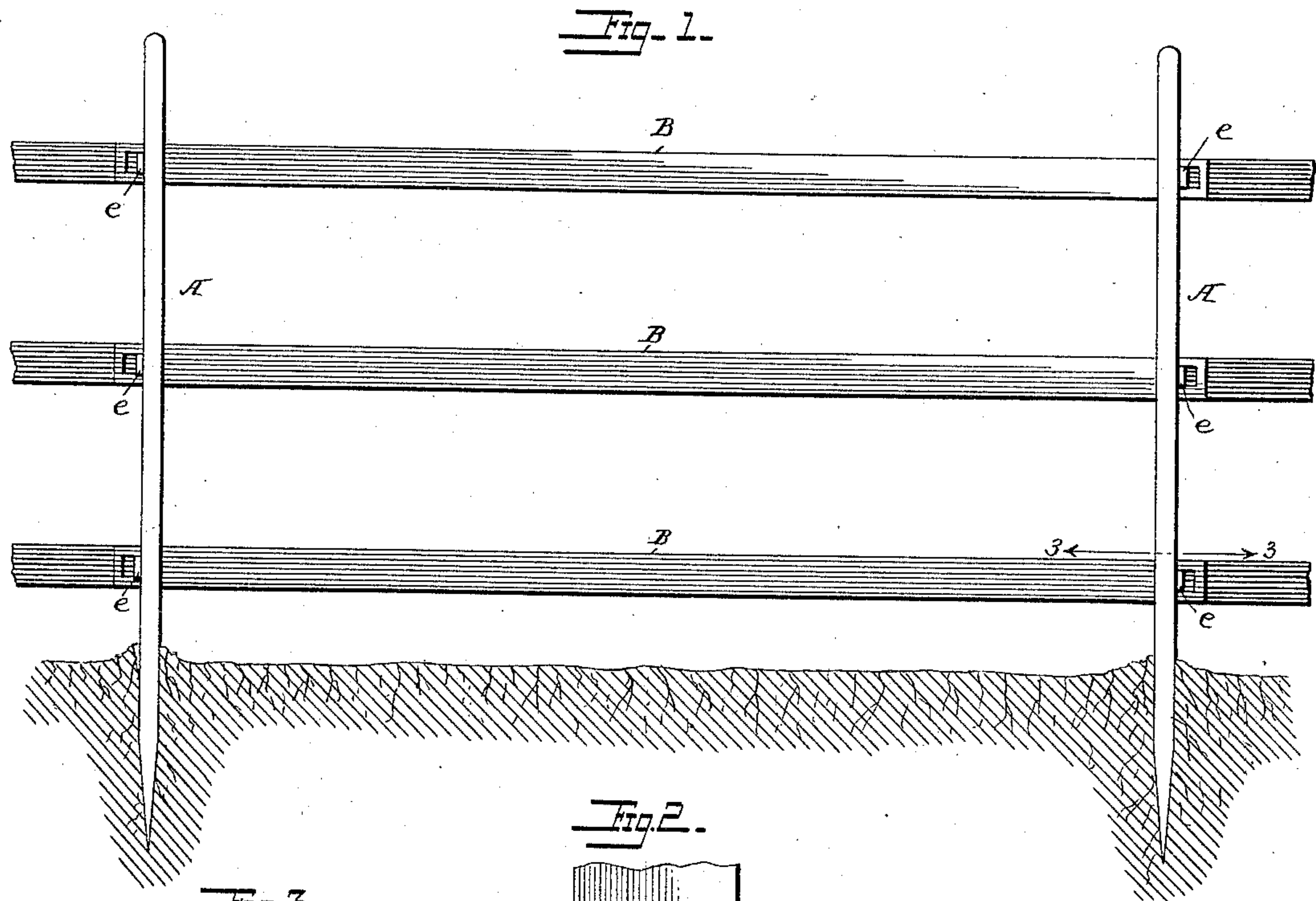


(No Model.)

L. BARNES.
FENCE.

No. 445,531.

Patented Feb. 3, 1891.



WITNESSES

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FENCE.

SPECIFICATION forming part of Letters Patent No. 445,531, dated February 3, 1891.

Application filed April 15, 1890. Serial No. 348,046. (No model.)

To all whom it may concern:

Be it known that I, LEWIS BARNES, a citizen of the United States, residing at Belvidere, in the county of Warren and State of New Jersey, have invented certain new and useful Improvements in Fences, of which the following is a specification.

My invention is an improvement in fences of the character set forth in Letters Patent No. 324,517, granted to me August 18, 1885; and my invention consists in the novel construction hereinafter fully described, and illustrated in the accompanying drawings, whereby the efficiency of such fences is increased and the liability to their accidental dismemberment diminished without the use of locking-keys.

In the drawings, Figure 1 is a side view of a portion of a fence embodying my improvements. Fig. 2 is an enlarged face view of part of one of the posts thereof detached. Fig. 3 is an enlarged sectional plan taken on the line 3 3, Fig. 1. Fig. 4 is an edge view, partly in section, of a portion of one of the rails; and Figs. 5, 6, and 7 are enlarged detail views of a modification.

The fence is composed, as usual, of posts A A, set or driven into the ground at suitable intervals, and rails B B B, supported and detachably secured in openings *a* in the posts. These openings are preferably of a length equal to twice the width of a rail, and consist each, as clearly shown in Fig. 2, of a contracted upper part *b* and a widened or laterally-extended lower portion *c*, one side wall of the two parts of the opening being in line, and thereby giving to the opening an approximate L shape.

The portion *b* of the opening is just wide enough to permit the ready entrance therein of the end of one of the rails B, and one of its side walls is provided with one or more notches or slots *d* for the purpose of permitting the passage of lateral bearing shoulders or lugs on one side of the rail, while the lower or enlarged part *c* of the opening is adapted to receive and retain the overlapping ends of two meeting rails of adjacent panels of the fence when said rails are properly and finally adjusted to position.

The rails B may be made either of metal or wood; but I prefer to construct them of comparatively thin and narrow strips of wrought-iron, and at or near each end of each rail I form one or more bearing shoulders or lugs *e*, extending at right angles to the sides of the rail and preferably punched or struck up from the body portion thereof, as illustrated in Fig. 4. These lugs *e* may, however, be differently constructed, as by turning over the ends of the rails, as will be understood, or by parts secured to the rails, as in the modification shown in Figs. 6 and 7, in which the rails are represented as made of wood and the bearing-lugs formed by separate blocks suitably shaped and firmly secured in place by nails or otherwise.

In the construction illustrated in said Figs. 6 and 7 it will be seen that there are two lugs or shoulders *e* at each end of the rail instead of one only, as shown in the other views, and where this form of rail is used the contracted upper portion *b* of the openings in the posts will of course be provided with a corresponding number of slots *d*, as in Fig. 5.

In putting the rails in place, the posts being up, the end of a rail is first inserted into the lower enlarged part *c* of one of the openings *a*, and is then moved sidewise as far as possible into the laterally-extended portion of the opening, when the bearing lug or lugs *e* will be in position to engage with one of the side faces of the post, as shown in Fig. 3. The opening *a* being now practically of a uniform width throughout its length, owing to the position of the rail just described, the end of the next rail in order is passed through the upper portion *b* of the opening, the rail being so placed that the lug or lugs thereon will register with and freely enter the notches or slots *d*. After the lugs have passed to the opposite side of the post the rail is depressed until it occupies a position parallel with the first rail in the lower wide part of the opening, when the parts will be detachably locked together, as will be apparent, and as shown in said Fig. 3. This operation is of course repeated until the entire fence is up.

It will be observed that the rails of every alternate panel of the fence are positively

locked against vertical movement by their position in the lateral extensions of the openings *a*, while at the same time they are secured against longitudinal movement by the side lugs. It will also be noticed that it is necessary to elevate the other rails which are in line with the parts *b* of the openings until the lugs thereon register with the notches *d* before the latter rails can be moved lengthwise to disengage them from the posts. It follows, therefore, from this construction that the liability to the accidental disarrangement of the fence by cattle or otherwise is reduced to a minimum without the use of the keys ordinarily employed to lock the rails in place.

Without limiting myself to the precise construction shown, I claim—

1. In a separable fence, a post provided with a vertical opening having a lateral slot, the lower portion of the opening being ex-

panded on the side opposite the slot, substantially as described.

2. In a separable fence, the combination, with the posts having elongated openings therein widened at the lower end and provided with one or more slots in one side wall of the upper contracted end, of rails having side bearings, substantially as described.

3. In a separable fence, the combination, with the posts having approximately L-shaped openings and one or more slots in the outer side wall of said openings near the upper end, of rails provided with lateral bearings-lugs, substantially as described.

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

LEWIS BARNES.

Witnesses:

ALBERT GOLDSCHMIDT,
C. F. ROBERTSON.