

F. H. CRUMP.
 LOOSE LEAF BINDER POST.
 APPLICATION FILED AUG. 14, 1909.

944,179.

Patented Dec. 21, 1909.

Fig. 1.

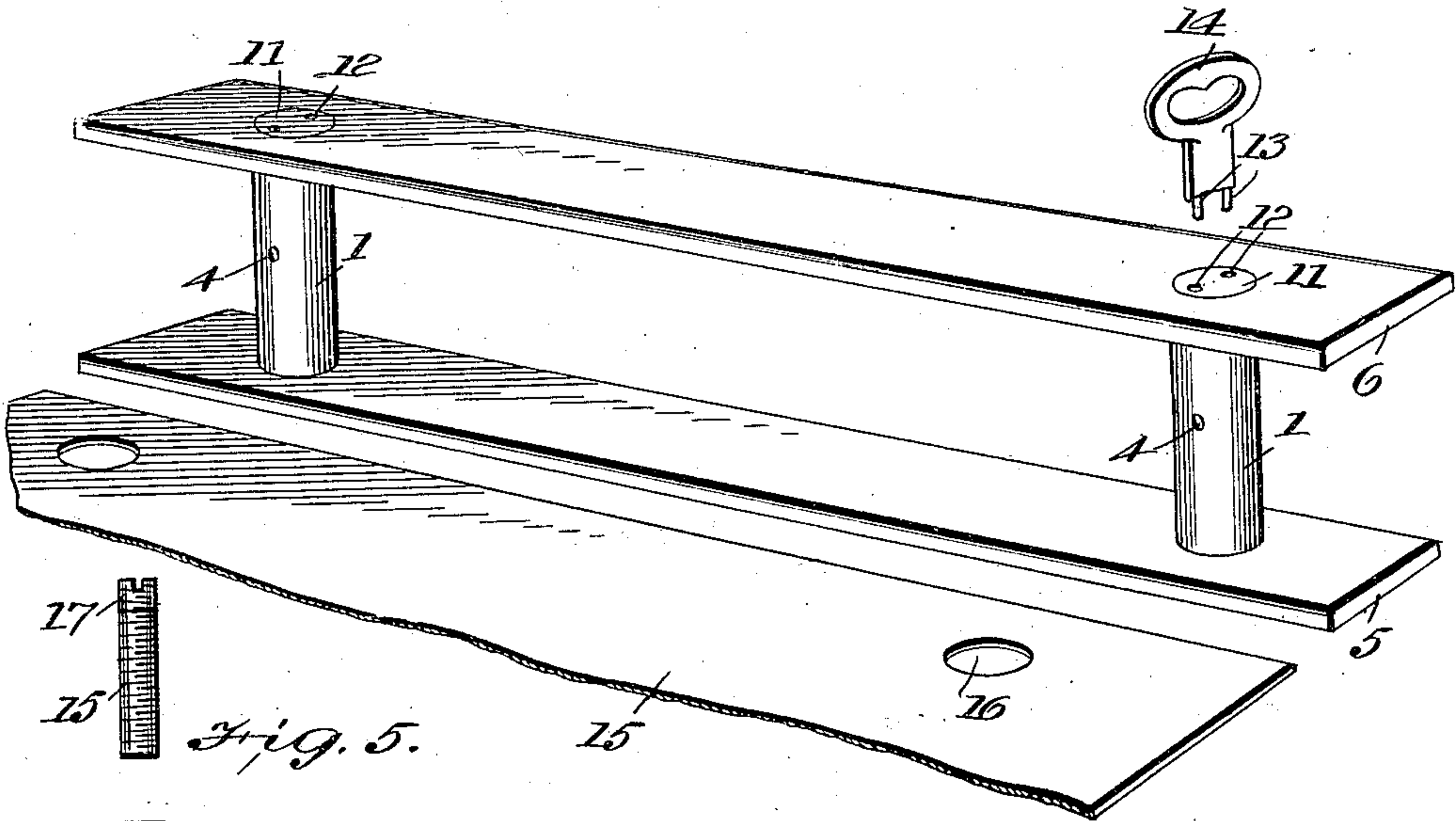


Fig. 5.

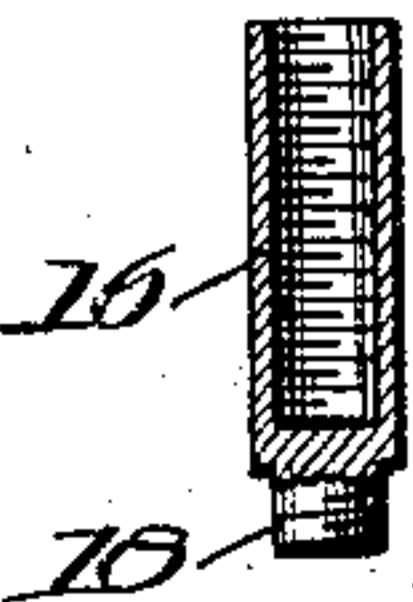


Fig. 2.

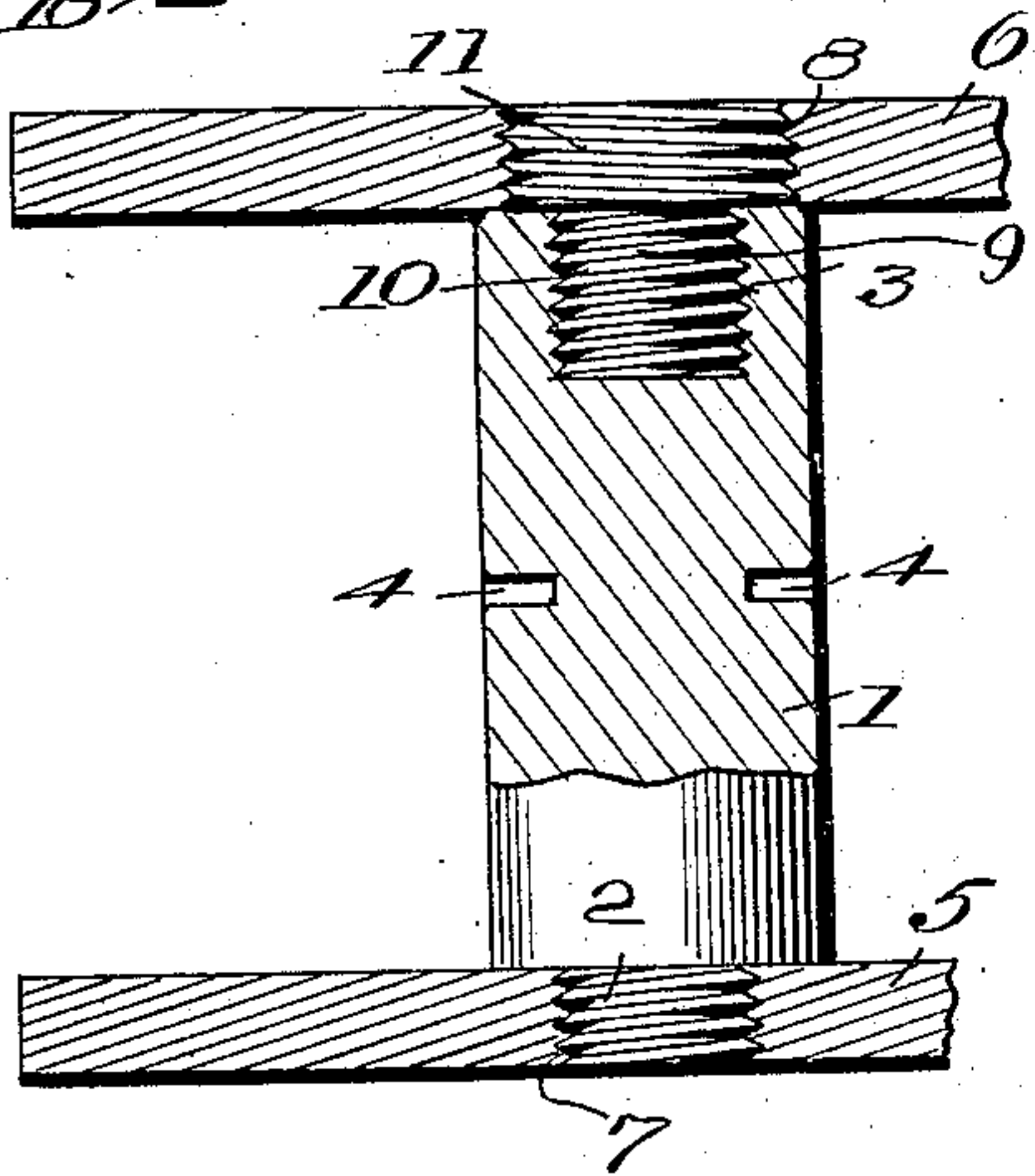


Fig. 3.

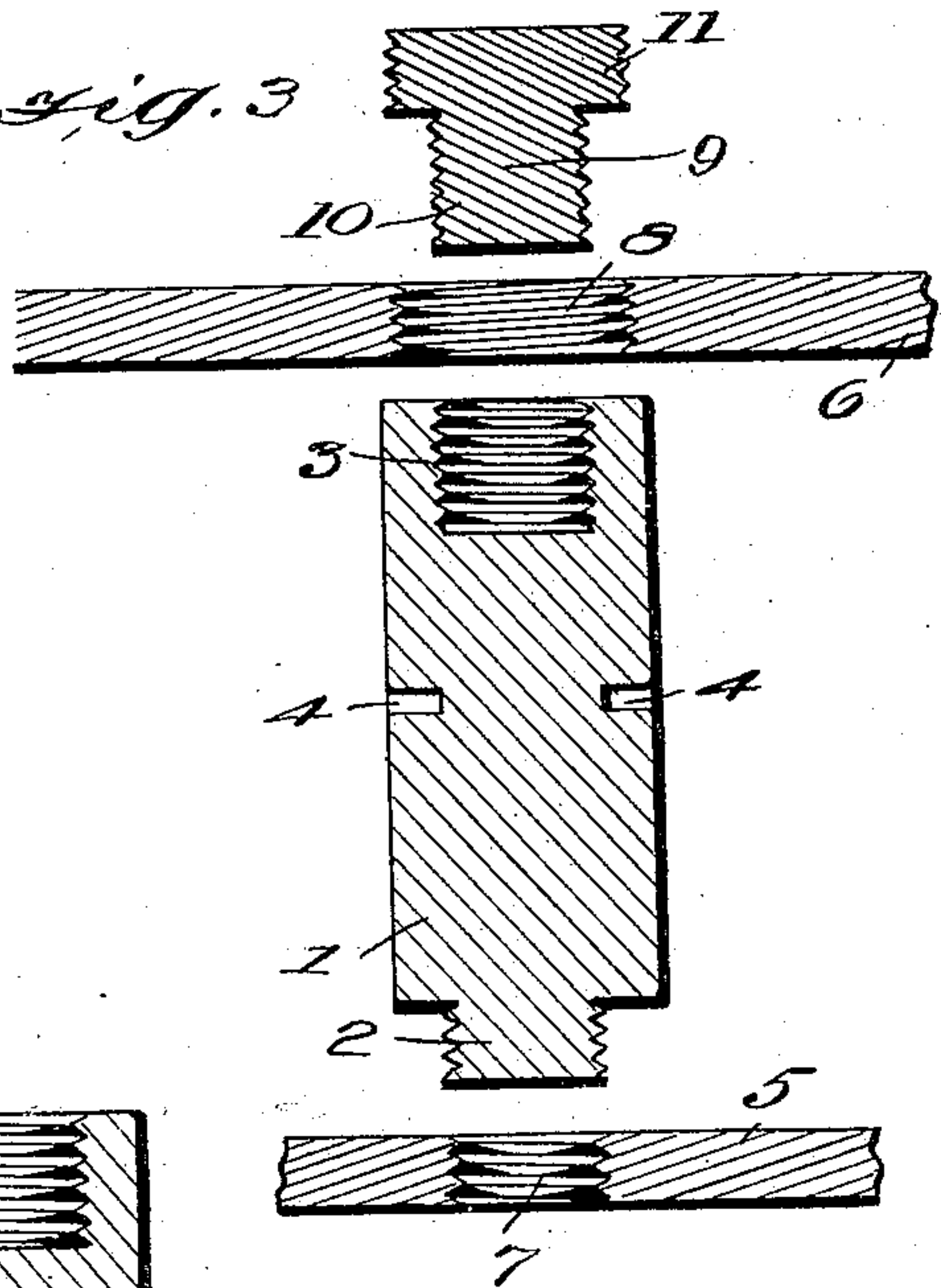
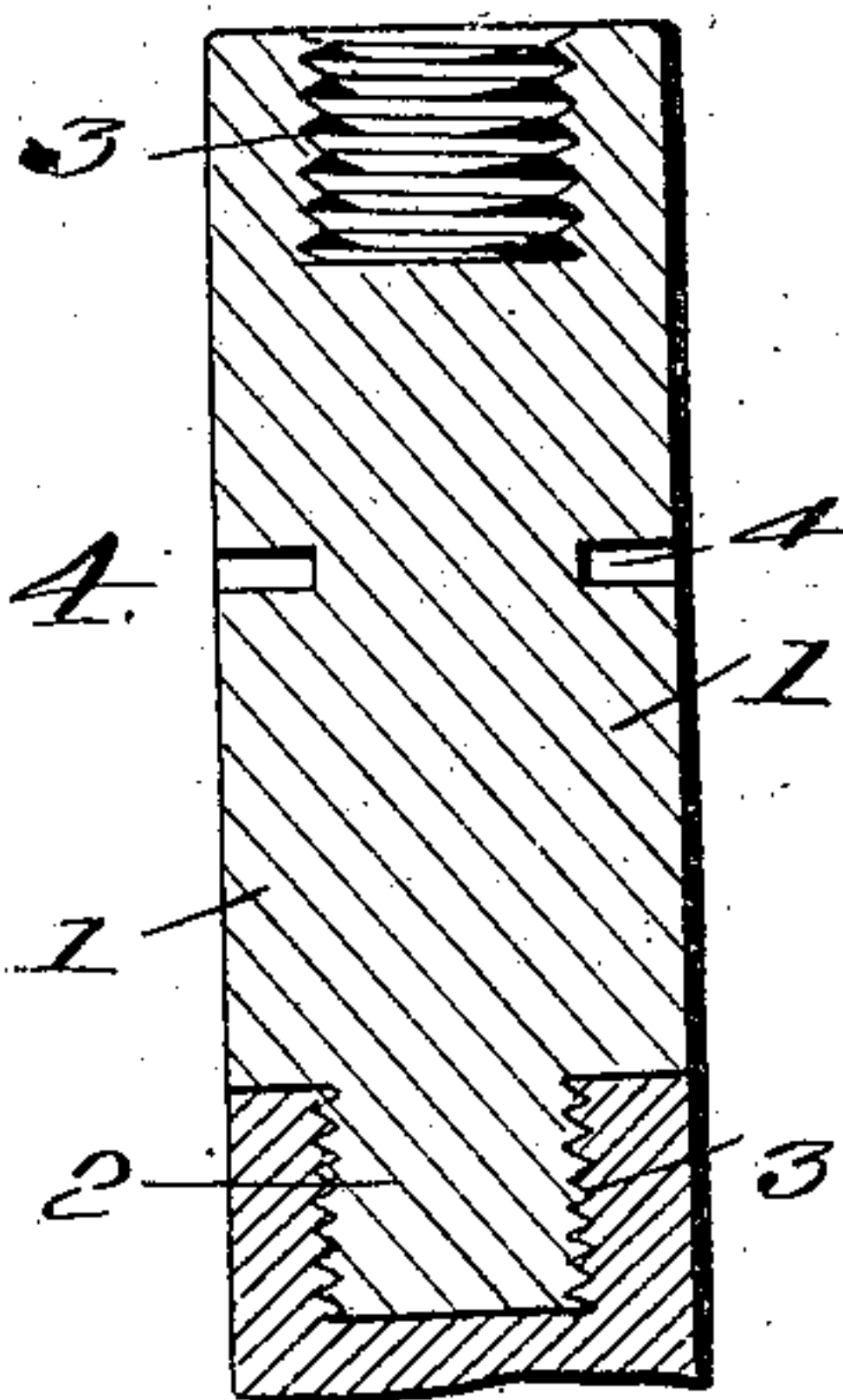


Fig. 4.



WITNESSES
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LOOSE-LEAF-BINDER POST.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK H. CRUMP, a citizen of the United States, and a resident of Los Angeles, in the county of Los Angeles and State of California, have invented certain new and useful Improvements in Loose-Leaf-Binder Posts, of which the following is a specification.

My invention is an improvement in loose leaf binder posts and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

The object of my invention is to provide binder posts of the ordinary construction, with a head which will so engage the top binder plate as not to protrude through it.

A further object is to so construct the head of the bolt that the bolt (male and female) will remain together when the top cover has been removed.

A further object is to provide a head which will hold the two covers at fixed distances apart.

A further object is to provide a binder post for use with a round hole sheet, which will not come off the post though held loosely between the covers.

Referring to the drawings forming a part hereof Figure 1 is a perspective view of the improvement, Fig. 2 is a longitudinal section of the post, in place, Fig. 3 is a similar view with the post detached. Fig. 4 is a similar view of the post. Fig. 5 is a view of a modified form of post.

The embodiment of the invention shown in the drawings consists of a body 1, which is substantially cylindrical in shape, and is provided at one end with a threaded lug 2, and at the other with a longitudinal internally threaded recess 3. At approximately its center, the post is provided with diametrically opposite apertures 4, for engagement by a spanner, or like instrument, to turn the post, to engage and disengage it from the binder plates. The binder plates 5 and 6, are arranged at each end of the post, and the plate 5 is provided with a threaded opening 7 for engagement by the lug 2, while the plate 6 is provided with a threaded opening 8, which registers with the recess 3 when the parts are in proper position. A screw or post head is provided for securing the plate to the post, the said screw consisting of a threaded stem 10, which is adapted to pass through the opening 8, and engage the recess 3, and a head

11, which is cylindrical and externally threaded as shown in Figs. 2 and 3.

It will be evident from the description, that by introducing the bits 13 of the key 14 into the apertures 12, and turning the head, it may be engaged or disengaged from the plate and post, and when screwed home the outer face thereof will be flush with the outer face of the plate.

In the use of the device, the posts are inserted in the openings of the plate 5, and tightened, which may be done by means of a pin engaging the openings 4. The heads 9 are then partially inserted in the posts, after which the loose leaves 15, which are provided with openings 16 for the passage of the posts, are placed thereon. After the sheets are all inserted, the plate 6 is engaged with the heads, and the screws are turned, which draws the plate down, and turns the head home into the post. When in this position, the sheets or leaves are firmly held, and the binder plates present a smooth outer face.

In Fig. 5 is shown a modified form of post the male part being of the same diameter throughout, the body being left hand threaded and the head right hand threaded.

I claim:

1. A device of the class described, comprising upper and lower binder plates having spaced threaded openings, the openings of the upper plate being threaded in the opposite direction to the openings of the lower plate and registering therewith, binder posts each having a threaded lug for engaging the opening of the lower plate, and a longitudinally threaded recess in its upper end, the threads of said recess running in the same direction as the threads of the opening in the lower plate, and a post head having a threaded stem for engaging the recess and a threaded head for engaging the opening of the plate, said head having spaced apertures in its outer face, and the post having radial openings intermediate its ends.

2. A device of the class described, comprising upper and lower binder plates, and posts for connecting the plates, each of said posts having at one end a threaded stem and at the other a threaded longitudinal recess, and a head for the post comprising a threaded stem for engaging the recess and a threaded head, the plates having threaded openings for engagement by the lug and head respectively, the thread of the lug and

stem running in the same direction, and in the opposite direction to the thread of the head, said head and post having means whereby they may be rotated.

5 3. A device of the class described comprising upper and lower binder plates, and posts for connecting the plates, each of said posts having at one end a threaded stem, and at the other a threaded longitudinal recess, and a head for the post comprising a
10 threaded stem for engaging the recess and a threaded head, the plates having threaded openings for engagement by the lug and head respectively, the thread of the lug and
15 stem running in the same direction, and in the opposite direction to the thread of the head.

4. In a device of the class described, a binder post provided at one end with a
20 threaded stem and at the other with a threaded recess, a head comprising a threaded stem for engaging the recess, and a head threaded in the opposite direction from the lug and recess, and binding plates having openings
25 for engagement by the head and lug.

5. In a loose leaf binder, a post consisting of one part having a reduced externally right

hand threaded portion at one end for engagement with the right hand threaded openings of a bottom binder plate, and an internally right hand threaded portion at the other end for engagement with a part provided with a right hand externally threaded portion at one end, the other end being externally left hand threaded for engagement
35 with the left hand screw threaded openings of a top binder plate.

6. In a loose leaf binder, a post consisting of one part having a reduced externally right hand threaded portion at one end for engagement with the right hand threaded openings of a bottom binder plate, and an internally right hand threaded portion at the other end for engagement with a part provided with a right hand externally threaded
45 portion at one end, the other end being externally left hand threaded for engagement with the left hand screw threaded openings of a top binder plate, and provided with means for engagement with a tool.

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Witnesses:

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