

No. 700,442.

Patented May 20, 1902.

S. ROBINSON.

ADJUSTABLE FORMER BLOCK FOR FORMING PAPER BOXES.

(Application filed Jan. 4, 1902.)

(No Model.)

Fig. 1.

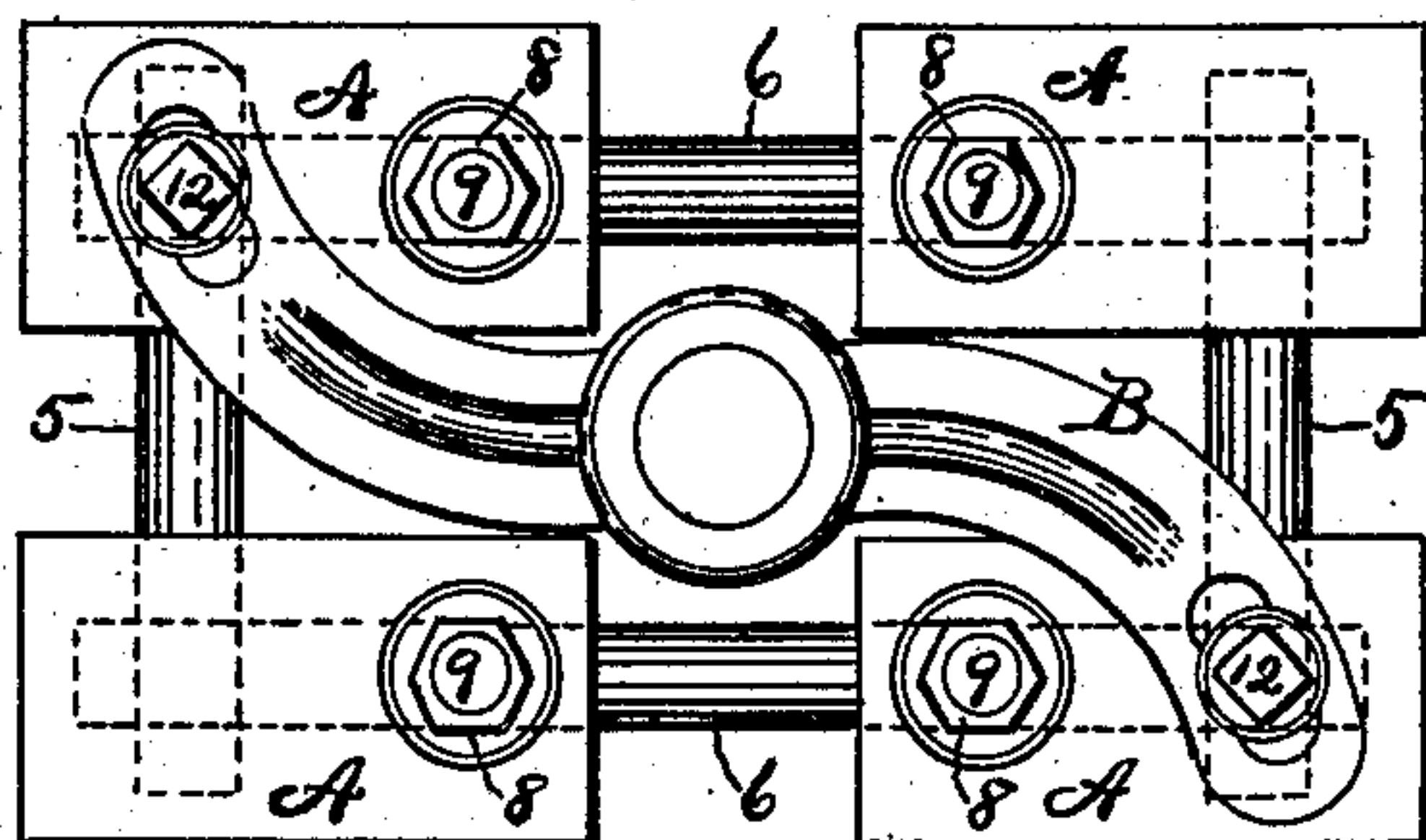


Fig. 2.

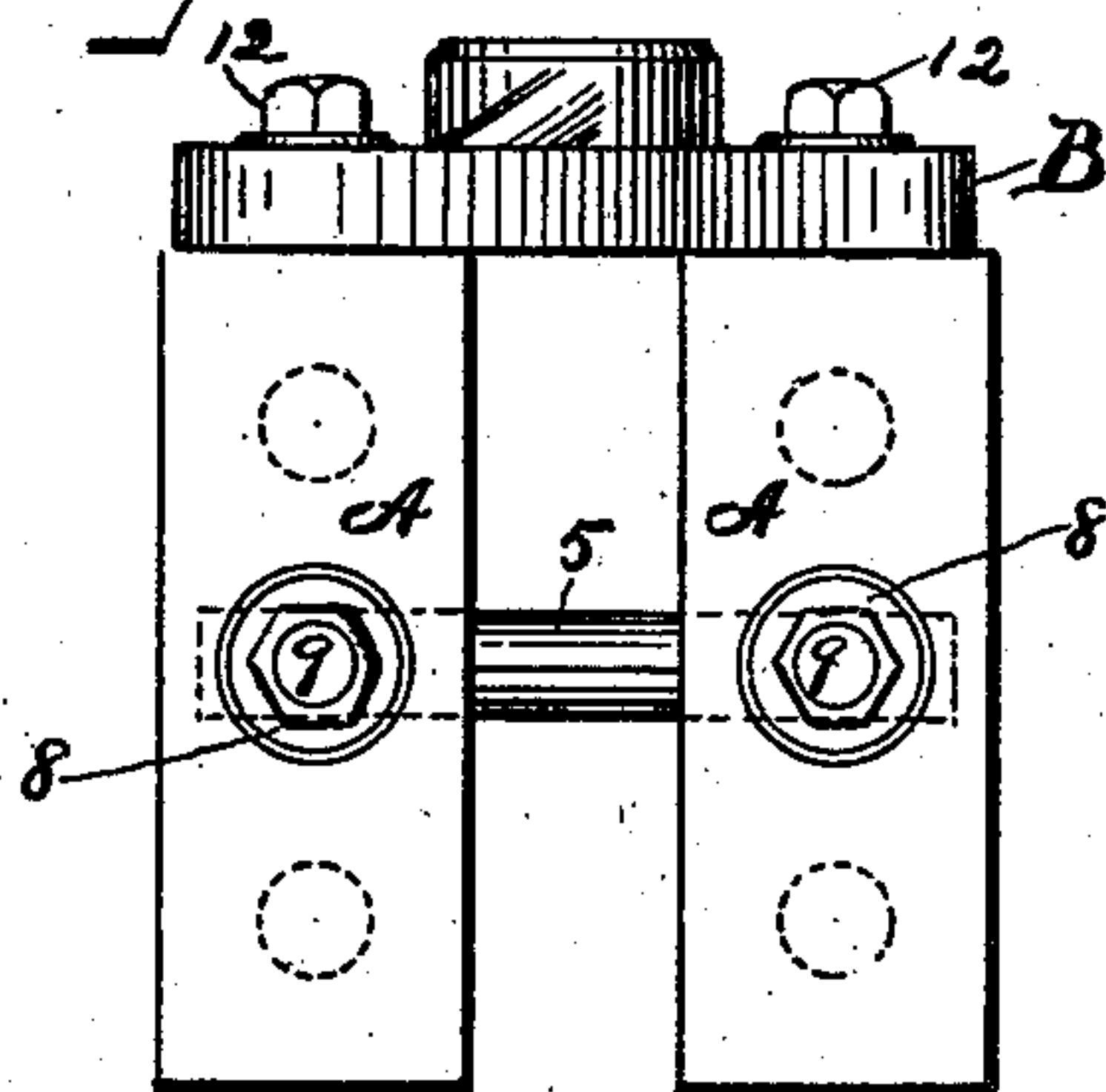


Fig. 3.

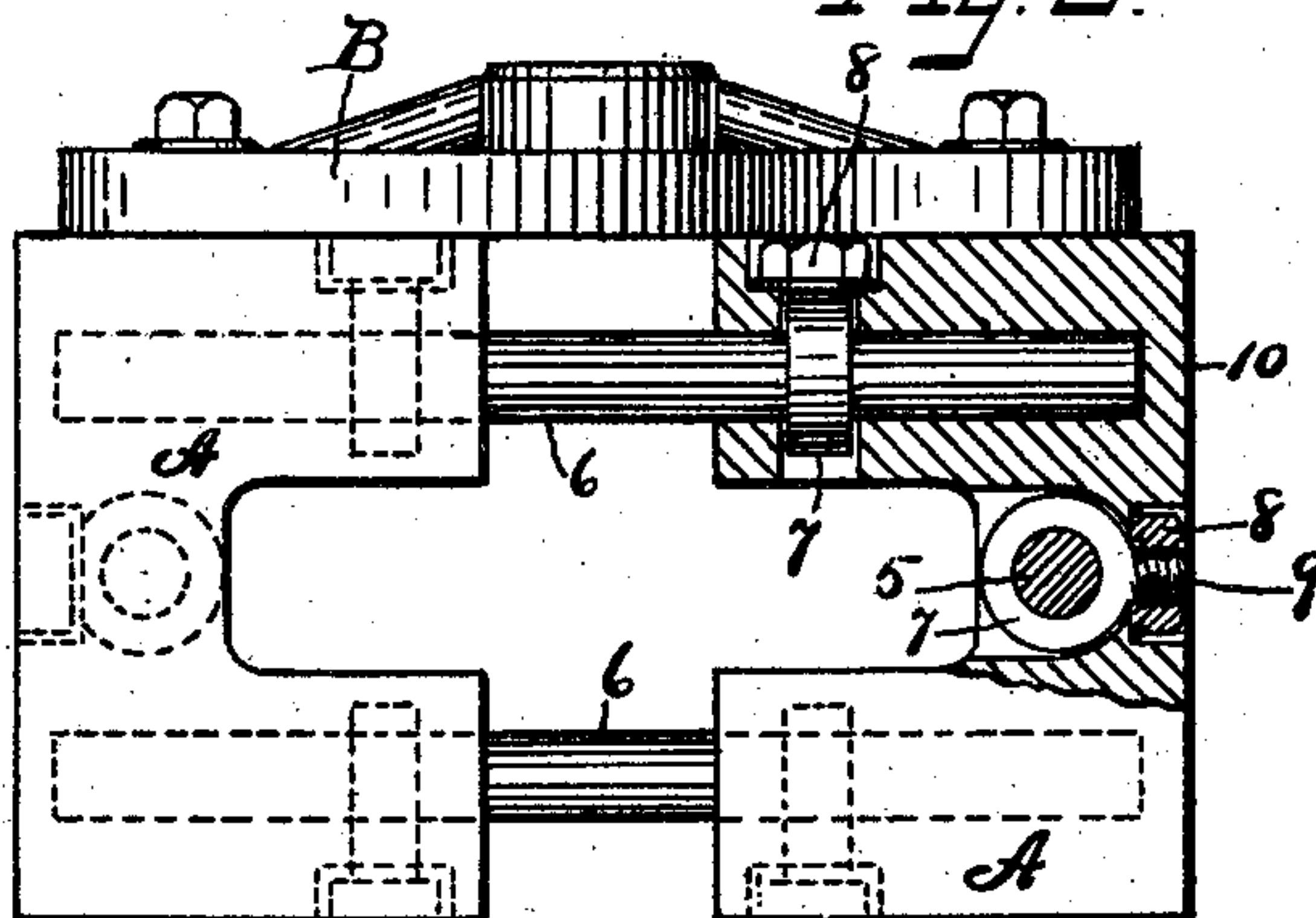
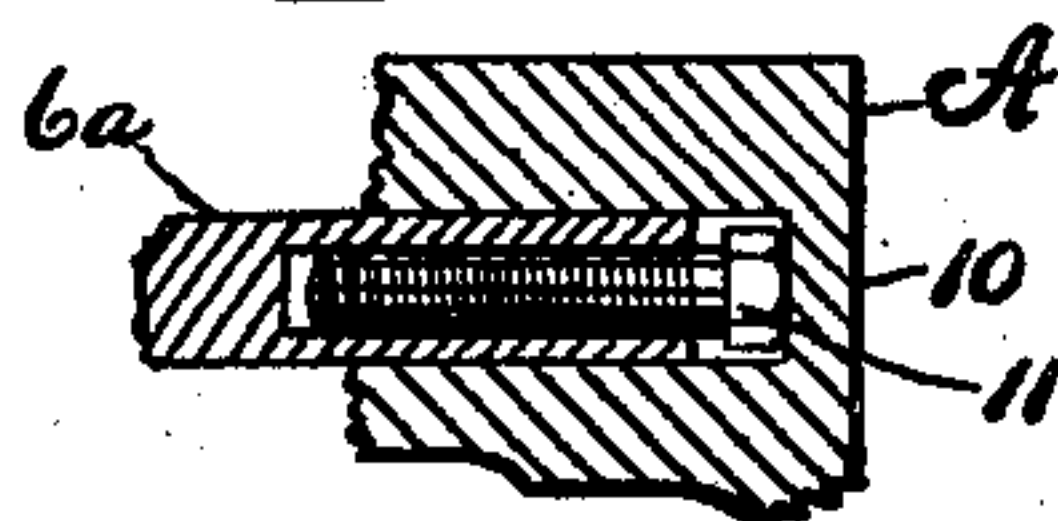


Fig. 4.



Witnesses.

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# UNITED STATES PATENT OFFICE.

SQUIRE ROBINSON, OF SPRINGFIELD, MASSACHUSETTS.

## ADJUSTABLE FORMER-BLOCK FOR FORMING PAPER BOXES.

SPECIFICATION forming part of Letters Patent No. 700,442, dated May 20, 1902.

Application filed January 4, 1902. Serial No. 88,419. (No model.)

*To all whom it may concern:*

Be it known that I, SQUIRE ROBINSON, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented certain new and useful Improvements in Adjustable Former-Blocks for Forming Paper Boxes, of which the following is a specification.

My invention relates to improvements in adjustable former-blocks upon which to fold paper boxes in forming them; and the objects of my improvement are simplicity and economy in construction and convenience and efficiency in use.

In the accompanying drawings, Figure 1 is a plan view of my former-block. Fig. 2 is an end view of the same. Fig. 3 is a side elevation of the same with a portion thereof in section, and Fig. 4 is a detached sectional view of a portion of one part of the block, together with a modified form of adjusting-rod substituted for the adjusting-rods of the other figures.

I employ four blocks A of a height equal to the depth of the deepest box to be formed thereon, and I adjustably connect the said blocks together by means of the adjusting-rods 5 6 and clamping-yokes 7. There are two of the cross-rods 5 for adjusting the width of the complete block and four of the longitudinal rods 6 for adjusting the length of the complete block, the position of the said rods 6 being indicated by the four broken circles in Fig. 2. These blocks A are cored out to receive the several yokes 7 and counterbored or recessed to receive the nuts 8 on the threaded shanks 9 of the said yokes. The nuts when thus set in a counterbored recess may be operated by an ordinary thimble-wrench. The body or ring of the yoke is provided with a hole that substantially fits the rods, but loosely enough so that the rods may readily slide through the said yokes. The blocks are provided with rod-sockets in the line of the yoke-recesses to receive the several rods; but I prefer to leave a solid wall 10, Fig. 3, at the outer end of each hole or socket for an abutment against which the ends of the rods may strike to limit the contraction of the complete block. As shown in the drawings, the complete block is contracted as far as it can

be with the particular length of rods shown, but could be further contracted by the employment of shorter rods and to such extent that the confronting inner faces of the four blocks may bear against each other. They may be pulled farther apart to any extent desired within the range of the rods and yokes and then securely locked together by tightening up the nuts of the several yokes, so as to bind the rods firmly within the said yokes and the rod-sockets. It is believed that the yokes will lock the blocks so firmly together that they will not slip under the pressure of folding the box up against the former. In so doing the greatest pressure comes on the ends of the former, and hence I employ four longitudinal rods, the same being sufficient when fastened with the yokes shown to prevent slipping. If desired, however, rods may be employed of such a length as to bottom on the solid wall 10. In order to avoid making a special length of rod to thus bottom for each particular use, I employ the modified form of rod 6<sup>a</sup>, (shown in Fig. 4,) the same being bored and threaded at the end to receive the adjusting-screw 11, the head of which may bottom on the wall 10 and serve to positively limit the contraction of the former even if the yokes are not screwed up very hard. The block in Fig. 4 is the same as in the other figures of the drawings.

The four blocks A may be attached to any suitable slide in any proper or ordinary manner. I provide a head or platen B for connecting the former to its slide, the said head extending diagonally of the former, with slotted ends and secured by bolts 12 to two corner-blocks, as shown.

I am aware that an adjustable former consisting of four blocks, spacing mechanism, and a diagonally-extended head for securing the same to a slide is old, and I hereby disclaim the same.

By my improvement no part of the spacing or adjusting mechanism except the rods comes on the confronting inner faces of the four blocks, and hence the said inner faces may be brought closely together. The rods, with sockets and yokes, make a very rigid and secure fastening, which will not be liable to slip, and the former may be absolutely positive by



using the adjustable rod or rods of the proper length to bottom, as hereinbefore described.

I claim as my invention—

5 1. An extensible and contractile former-block, consisting of the combination of the four blocks having rod-sockets and yoke-receiving recesses in the line of the said sockets, with the adjusting-rods and yokes, substantially as described.

10 2. An extensible and contractile former-block, consisting of the combination of the four blocks having yoke-receiving recesses and rod-sockets provided with the solid wall 10 at the end, with the adjusting-rods ar-

ranged to bottom on the said wall 10, and 15 yokes on the said rods for tightening the same, substantially as described.

3. The combination of the four blocks having rod-sockets provided with the solid wall 10 at the end, with the adjusting-rods inter- 20 nally threaded, the adjusting-screw fitted in the end of the said rod and means for securing the said rods in their sockets, substantially as described.

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Witnesses:

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