

(No Model.)

2 Sheets—Sheet 1.

E. D. TUCKER.
PRINTING PLATE HOLDER.

No. 551,457.

Patented Dec. 17, 1895.

Fig. 3.

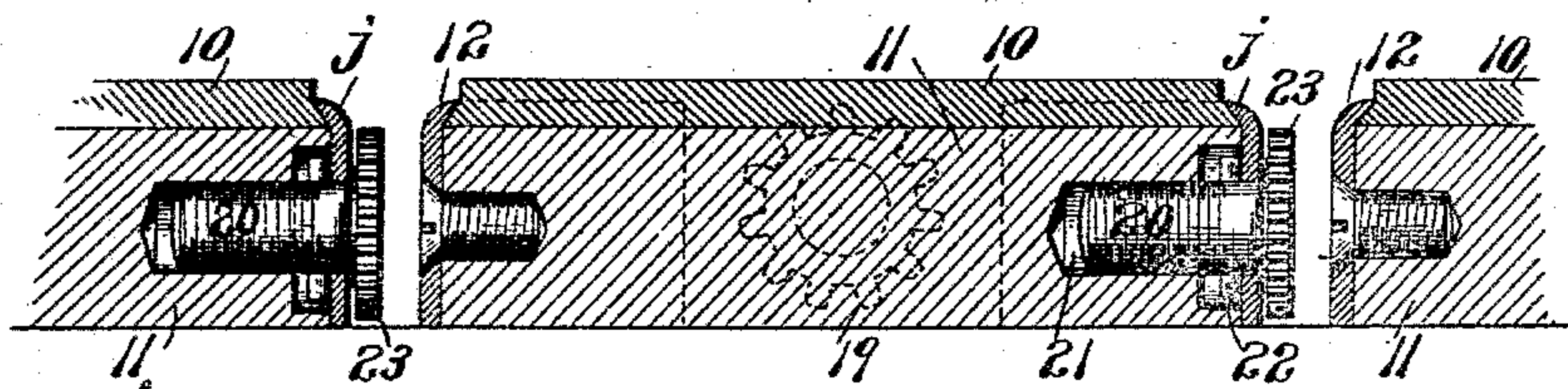


Fig. 2.

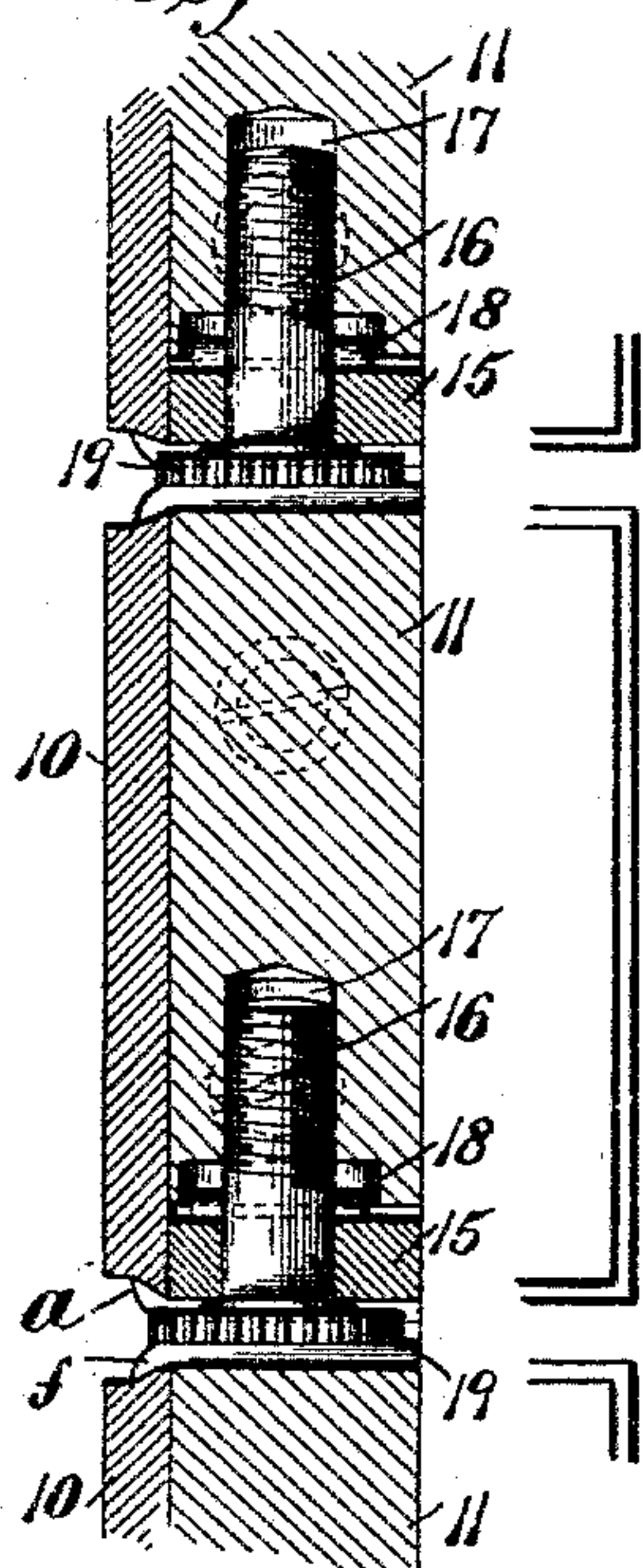


Fig. 1.

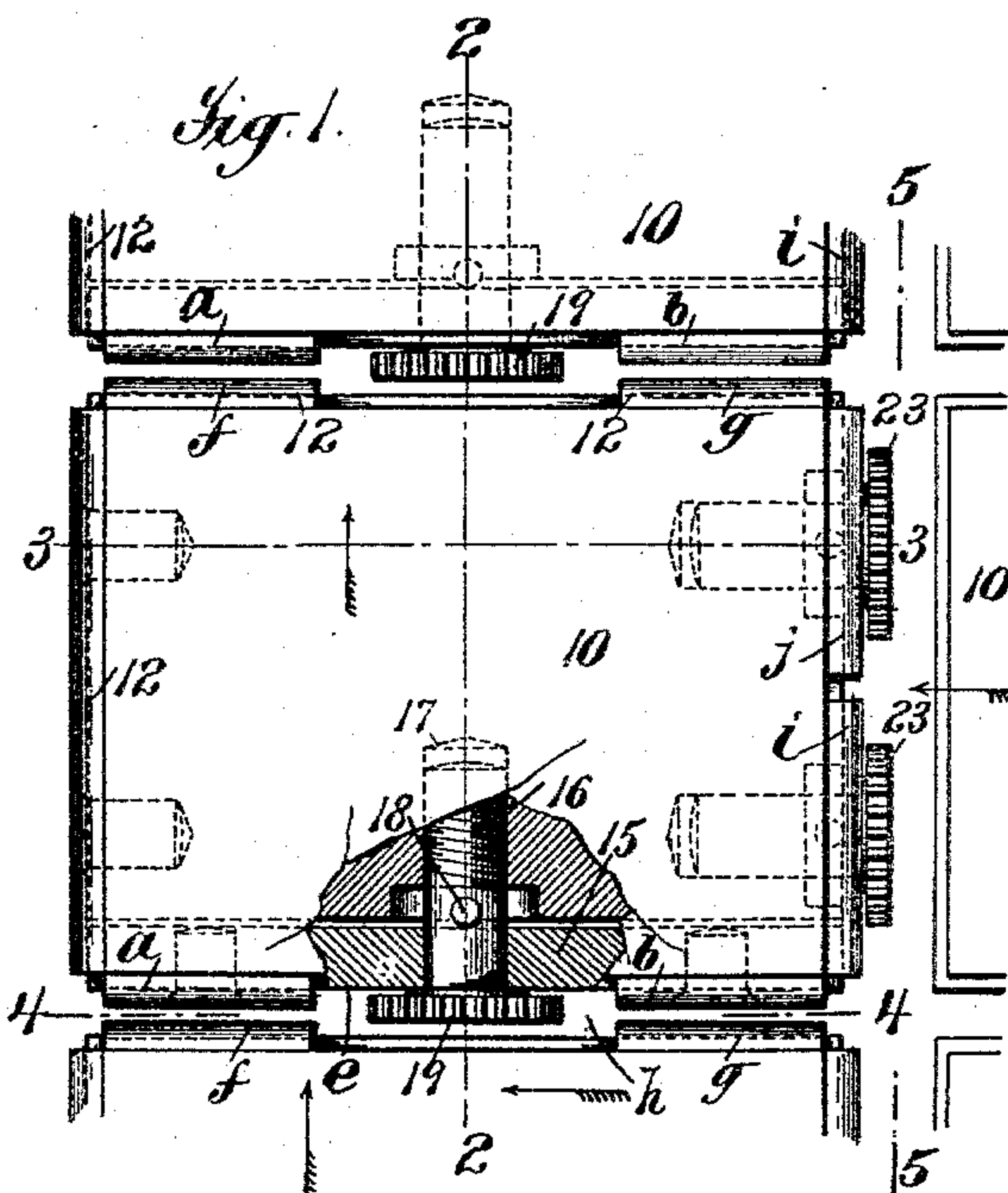


Fig. 5.

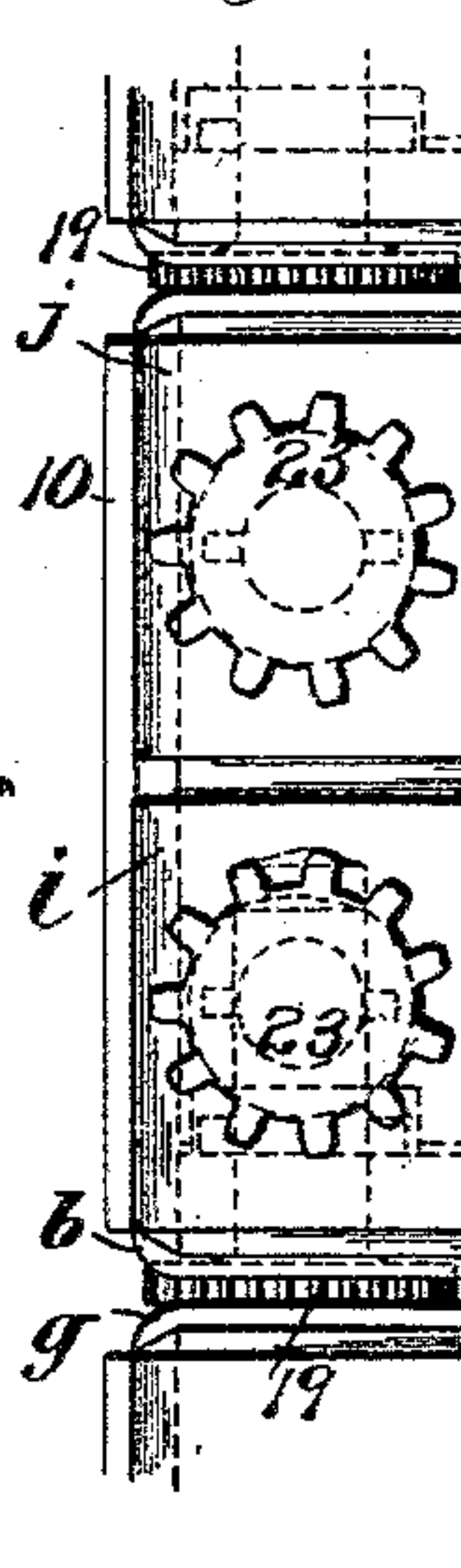
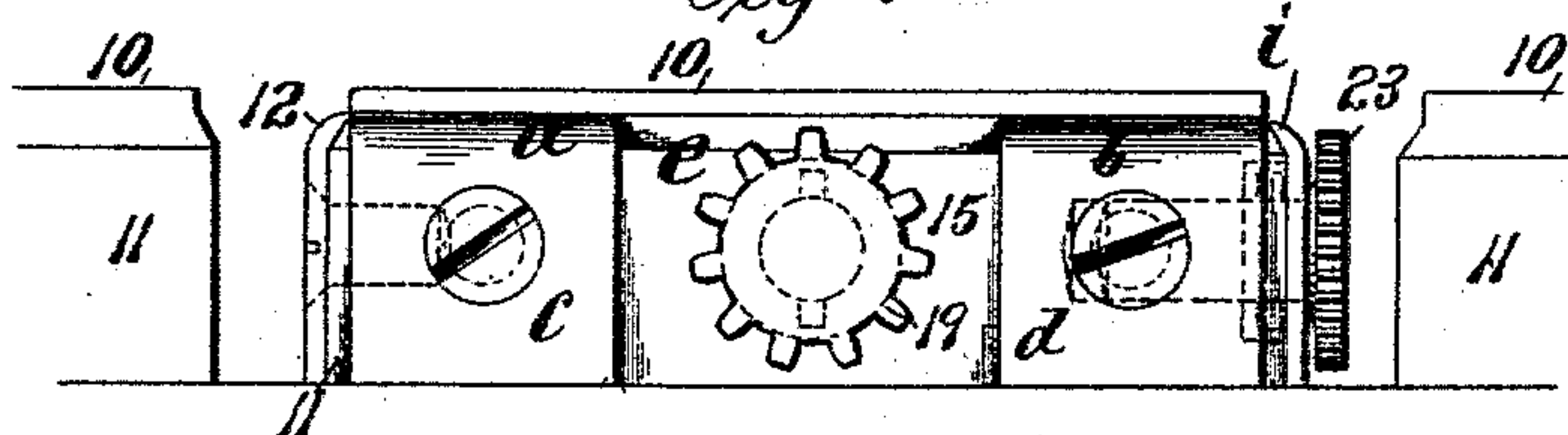


Fig. 4.



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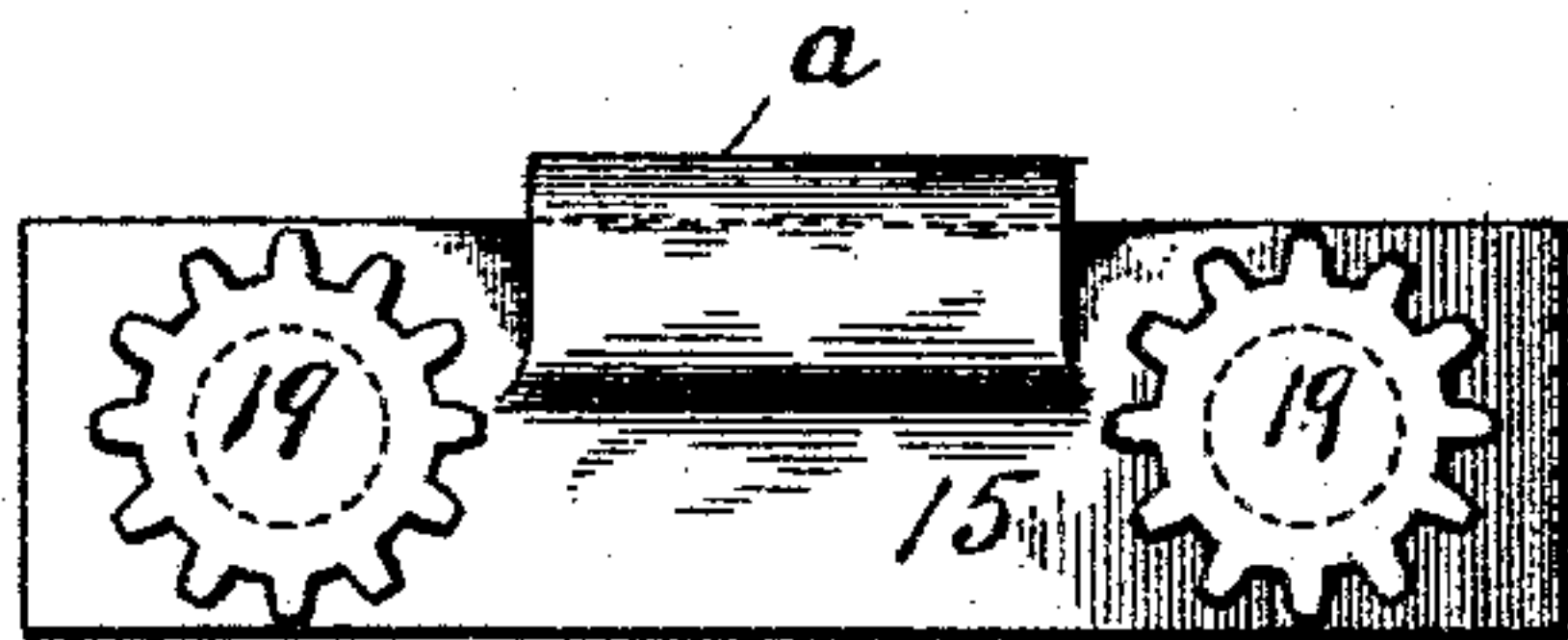
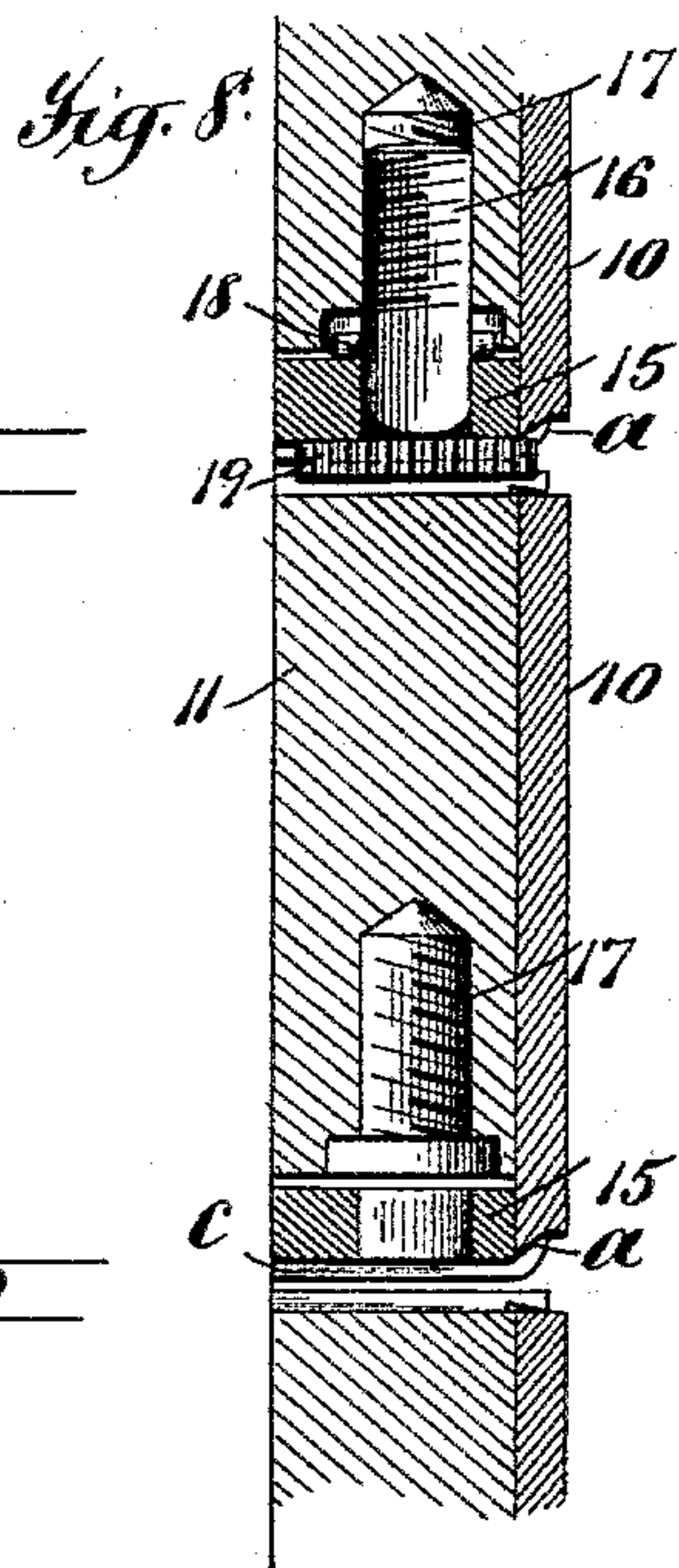
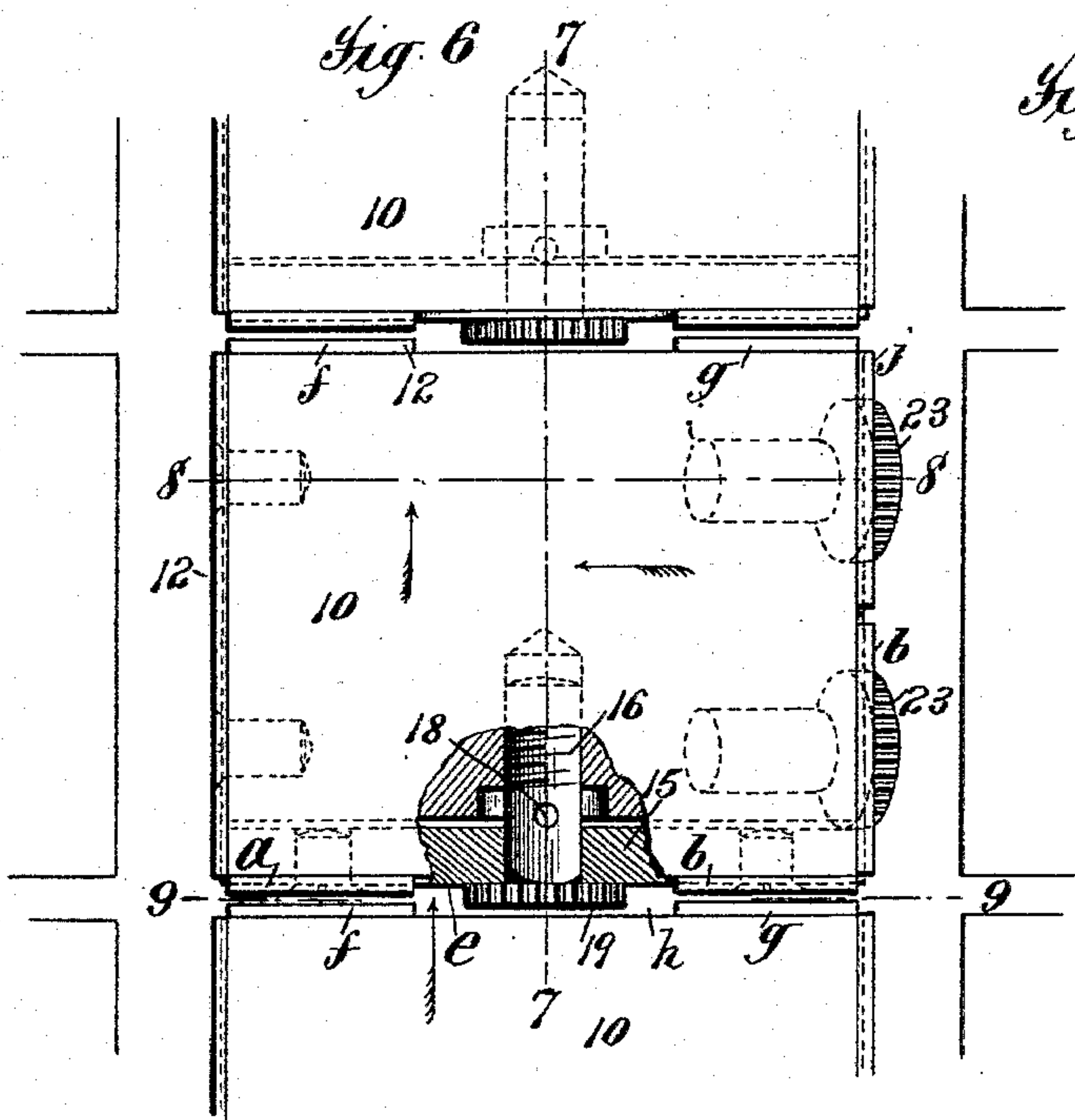
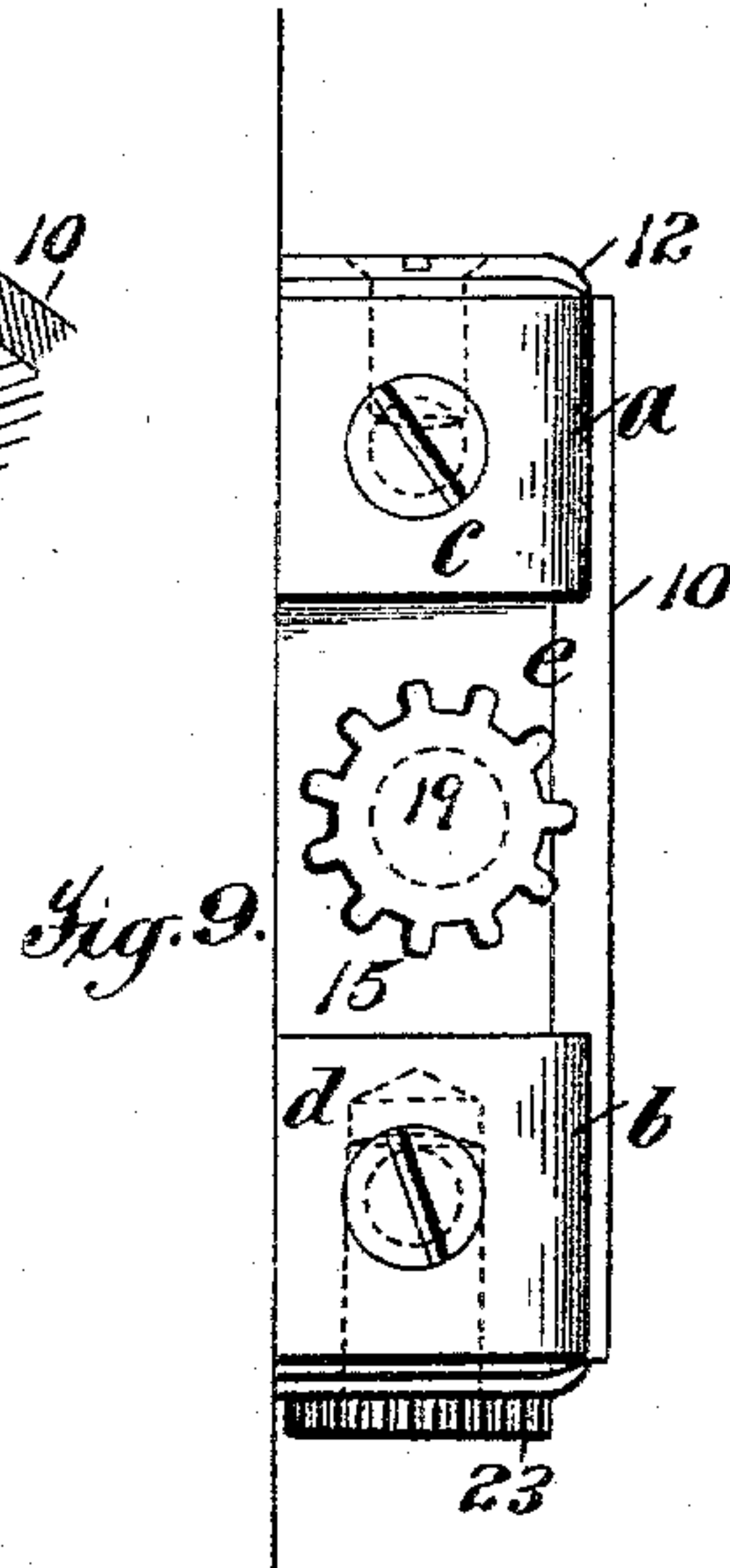
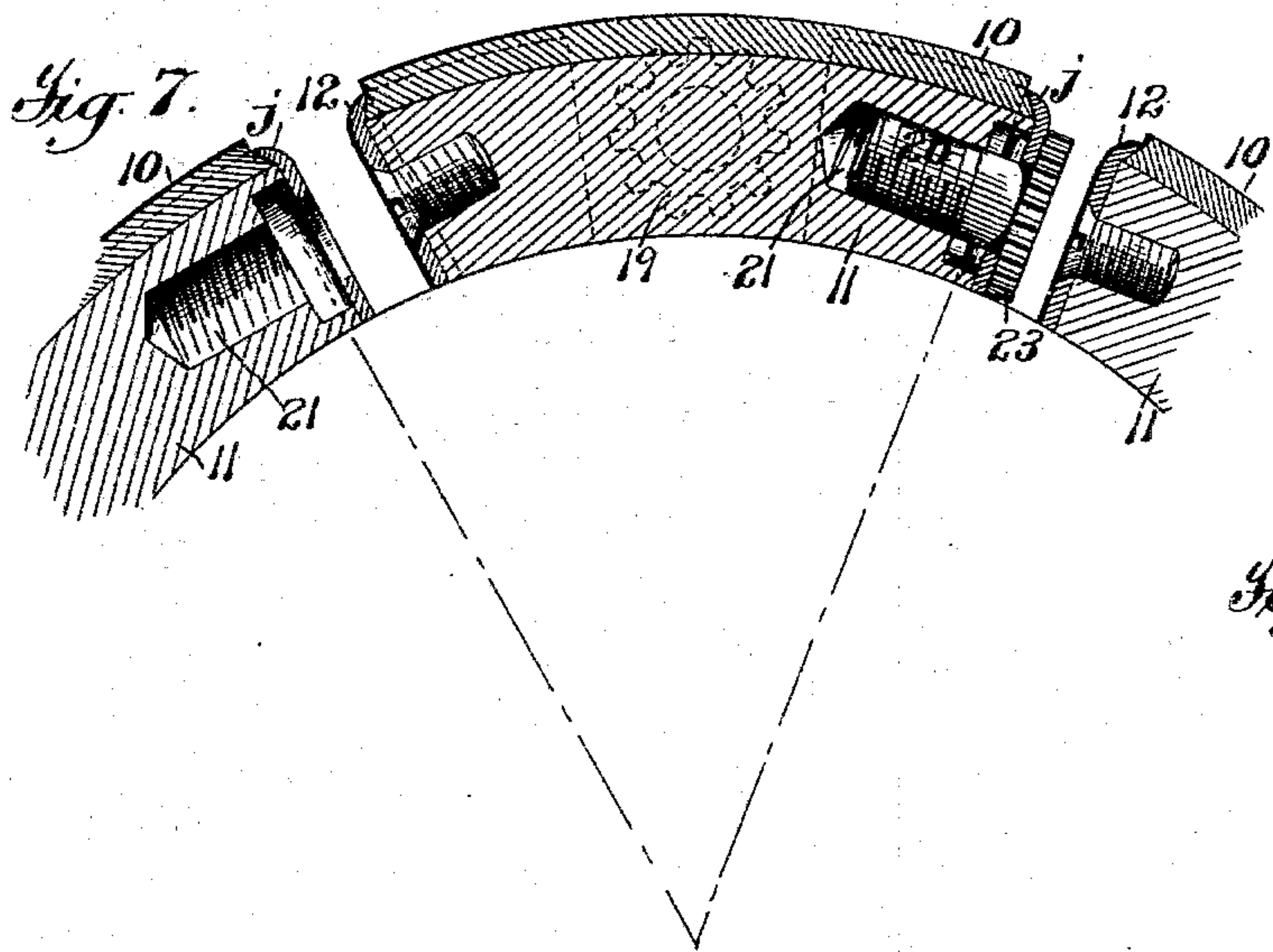


Fig. 10.
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UNITED STATES PATENT OFFICE.

EDWIN D. TUCKER, OF NEW YORK, N. Y., ASSIGNOR TO ROBERT HOE, THEODORE H. MEAD, AND CHARLES W. CARPENTER, OF SAME PLACE.

PRINTING-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 551,457, dated December 17, 1895.

Application filed May 31, 1895. Serial No. 551,084. (No model.)

To all whom it may concern:

Be it known that I, EDWIN D. TUCKER, a citizen of the United States, residing at New York, county of New York, and State of New York, have invented certain new and useful Improvements in Printing-Plate Holders, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

10 This invention relates to plate-holders for stereotype or other printing plates, and aims to provide a plate-holder which shall occupy a minimum of space between the plates, and shall yet be strong and efficient and convenient to use; and the invention aims further to provide a plate-holder which will allow of such slight adjustment of the plates on the block or blocks as may be necessary, as for the purpose of causing the impression from the plates to register with previous impressions.

25 The invention consists, therefore, of various constructions and combinations of parts, as will be hereinafter specifically pointed out in the claims, and for a full understanding of which a detailed description will now be given of a construction embodying the same in a preferred form and illustrated in the accompanying drawings, in which—

30 Figure 1 is a plan view showing a block provided with a construction embodying the invention and having a plate secured thereto and indicating adjacent blocks. Fig. 2 is a section on line 2 of Fig. 1. Fig. 3 is a section on line 3 of Fig. 1. Fig. 4 is a view taken on line 4 of Fig. 1. Fig. 5 is a view taken on line 5 of Fig. 1. Figs. 6, 7, 8 and 9 are views corresponding to Figs. 1, 2, 3 and 4 respectively, the blocks, however, being mounted on a cylindrical surface. Fig. 10 is a detail showing a modification.

45 In the drawings 10 represents stereotype or other printing plates mounted on blocks 11 and having their edges beveled as usual, and being held on two adjoining sides by stationary clips 12. On one of its remaining sides each block is provided with a device constructed as follows: A plate or bar 15 extending preferably entirely across one side of the block, the block being cut away to receive said plate or bar, carries clips *a b*, which may

be formed integral with the plate or secured thereto in any suitable manner, as by being carried by plates *c d* secured to the plate or bar 15, between which clips there is left a recess or space *e* to permit of operating, as by the insertion of a suitable instrument, a screw 16 by which the plate is held to and adjusted toward and away from the block and the head of which lies against the plate or bar 15 between the clips. The screw 16 passes loosely through the plate or bar 15 and screws into a threaded recess 17 in the block, and is provided inside the plate 15 with a shoulder 18, which is preferably a pin, as shown, passing through the screw, and which may be removed to allow of ready removal of the parts, and is provided on its outer end with a head 19 which is preferably cut to form a pinion, as shown. Thus by turning the screw 16 one way or the other the plate or bar 15 carrying the clips *a* and *b* will be advanced or retracted. It will be seen that this construction provides a very strong and conveniently-operated clamping device which occupies but very little space between the blocks, the head 19 of the adjusting-screw lying close against the plate 15 between the clips and extending little, if any, farther out from the plate than the clips, and the space *e* between the clips permitting the head 19 to be conveniently turned, as by a rack, such as is usually employed for the purpose, or any other suitable instrument.

55 The opposing face of the adjoining block is preferably provided with two stationary clips *f g* placed at or near either end, leaving between them a space *h* corresponding to the space *e*, instead of a continuous stationary clip. With this arrangement, even when the head 19 of the adjusting-screw extends farther out from the face of the plate or bar 15 than the clips *a* and *b*, the blocks may be placed almost as near together as when only stationary clips are used, a space being required between them equal only to the space required for the necessary movement of the movable clips.

60 In the drawings the plate or bar 15 is shown as extending the full length and depth of one side of the block; but it will be understood that the plate or bar may be made of any other suitable proportionate size or form to

serve as a support for the clips *a b*, as it may be proportionately either shorter or narrower, or both, the block being then correspondingly recessed to receive the plate and allow of its proper adjustment, as will be readily understood.

It will also be understood that various other changes in the construction shown may be made without departing from the invention—as, for example, other means for advancing and retracting the plate or bar 15 may be employed; but the means shown is preferred and forms in connection with other features part of the invention.

While the drawings show two clips with the space *e* between them, it will be understood that the plate or bar may be provided with any desired number, one or more, of clips alternating with spaces *e*.

Fig. 10 shows a plate provided with two adjusting-screws and a single clip between the screws, this being considered an equivalent construction in most respects to that shown in the other views, as the heads of the adjusting-screws can lie close against the plate or bar and can be conveniently reached for adjusting the plate or bar. The remaining side of the block may also be provided with similarly-mounted adjustable clips, and will preferably be so when it is desired to economize space to the same extent on both sides of the block; but it frequently happens that it is not necessary to economize space to the same extent in one direction of the block as in the other, as when it is not necessary that the plates be mounted so closely together in one direction as in the other. This is so, for example, in printing playing-cards, the margins left at the ends of the cards being wider than those left at the sides thereof. In such cases the remaining side of the block may be provided with any suitable form of movable clip—such, for example, as those shown in the drawings; and I prefer to provide on such remaining side of the block two such adjustable clips *i j*, thus providing a convenient arrangement for adjusting to a slight extent the position of the plate on the block, such as may be necessary for causing the impression to be taken therefrom to register with previous impressions, such adjustment being readily made by inserting suitable paper or other wedges or slips between the plate and the stationary clips, the clips *i j* on being then screwed down accommodating themselves to the position of the plate. The plate or bar 15 is preferably a little loose on the screw 16, so that it may also accommodate itself to the position of the plate.

As shown, the clips *i j* are carried by plates which are loosely mounted on longitudinally-moving screws 20 screwing into threaded holes 21 in the block, said screws being provided on the inside of the plates carrying the clips with shoulders 22, which are preferably pins passing through the screws, as shown, and on the outside of said plates with heads

23, which are preferably cut to form pinions, as shown.

It will be understood that the invention may be employed and will be found useful not only where it is desired to secure plates to separate blocks placed close together, as shown in the drawings, but also in other cases where it is desired to economize space, and any such application of the principle of the invention is to be considered as within the scope of the claims.

What is claimed is—

1. In a plate holder, the combination of a plate or bar, means for advancing and retracting the plate or bar, and one or more clips carried by the plate or bar, said clips not extending the entire length of the plate or bar but leaving one or more spaces to permit of operating the means for advancing and retracting the plate or bar, substantially as described.

2. In a plate holder, the combination of a plate or bar, one or more screws for advancing and retracting the plate or bar, and one or more clips carried by the plate or bar, said clips not extending the entire length of the plate or bar but leaving one or more spaces to permit of turning said screw or screws, substantially as described.

3. In a plate holder, one or more clips *a, b* carried by a common support and alternating with one or more spaces *e*, substantially as described.

4. The combination of a plate or bar, clips *a, b* carried by the plate or bar and leaving a space *e* between them, and an adjusting screw for said plate or bar the head of which lies against the plate or bar between the clips, substantially as described.

5. The combination with a block, of a plate or bar extending entirely across one end of the block, clips *a, b* carried by the plate or bar and leaving a space *e* between them, and an adjusting screw for said plate or bar the head of which lies against the plate or bar between the clips, substantially as described.

6. The combination of a plate or bar, clips *a, b* carried by plates *c, d* secured to the plate or bar so as to leave a space *e* between the clips, and an adjusting screw for said plate or bar the head of which lies between the clips and their plates, substantially as described.

7. The combination of a plate or bar, clips *a, b* carried by said plate or bar and leaving a space *e* between them, and a longitudinally moving screw which passes loosely through the plate or bar and carries the plate or bar in its longitudinal movement, the head of the screw lying between the clips, substantially as described.

8. The combination of a plate or bar, clips *a, b* carried by the plate or bar and leaving a space *e* between them, a screw 16 passing loosely through the plate or bar between the clips and having a shoulder inside the plate or bar, and a pinion on said screw outside the plate or bar, substantially as described.

9. The combination with two adjacent blocks, of a plate or bar lying between said blocks, clips *a, b* carried by the plate or bar and leaving a space *e* between them, an adjusting screw for moving said plate or bar toward and away from one of said blocks, the head of which screw lies between the clips *a, b*, and stationary clips *f, g* secured to the other of said blocks and leaving between them a space *h* corresponding to the space *e*, substantially as described.

10. The combination with a block, of stationary clips adapted to engage two adjoining sides of a plate, clips *a, b* carried by a plate

or bar and adapted to engage one of the remaining sides of the plate, an adjusting screw for said plate or bar the head of which lies between said clips *a, b*, and independently adjustable clips *i, j* adapted to engage the remaining side of the plate, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

EDWIN D. TUCKER.

Witnesses:

W. SPALCKHAVER,
A. L. KENT.