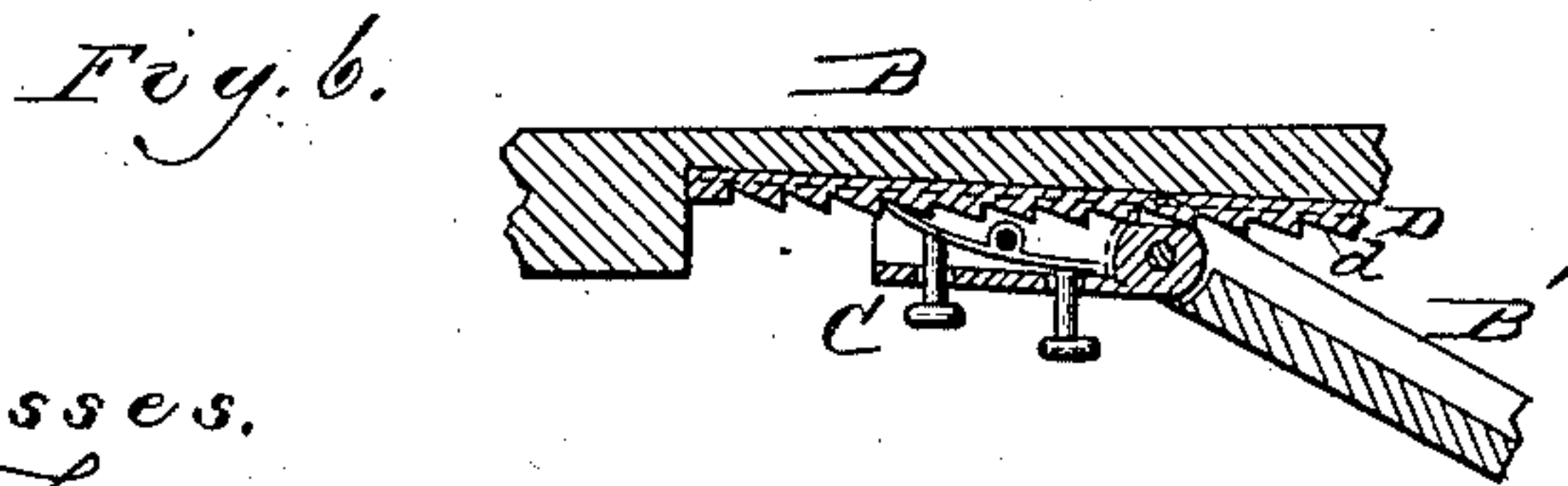
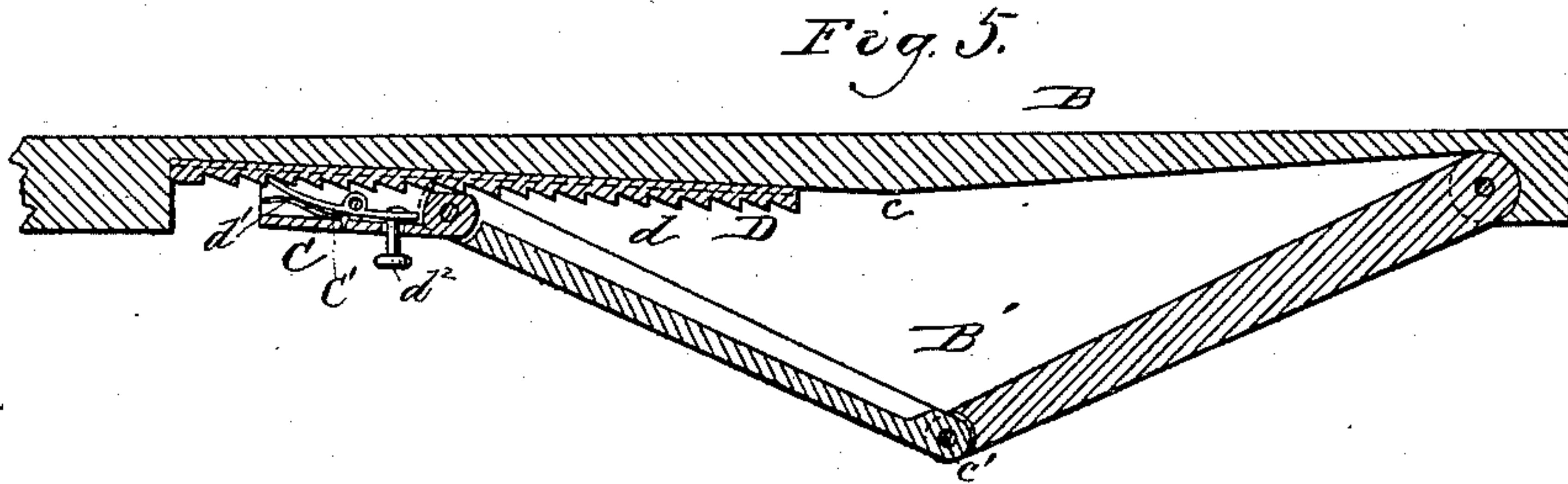
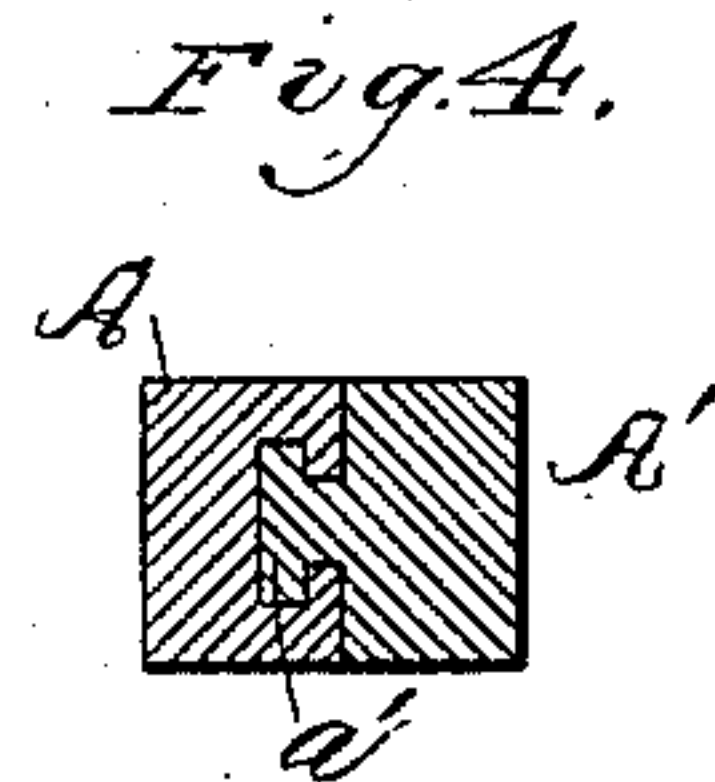
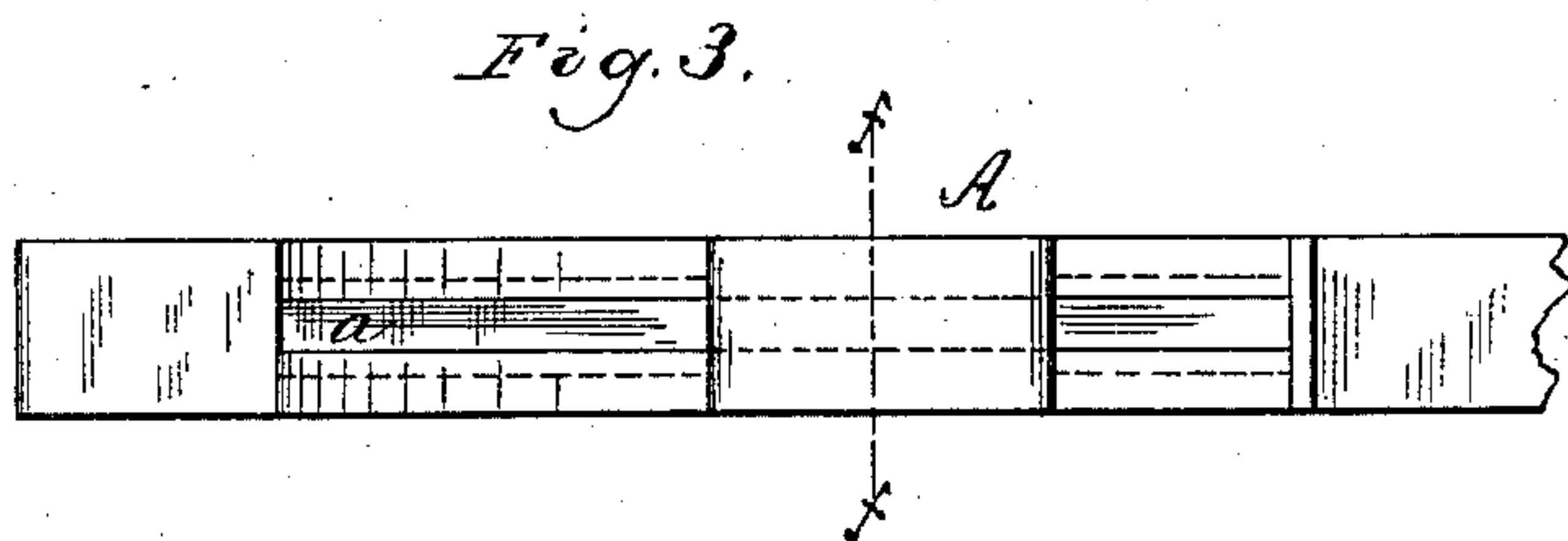
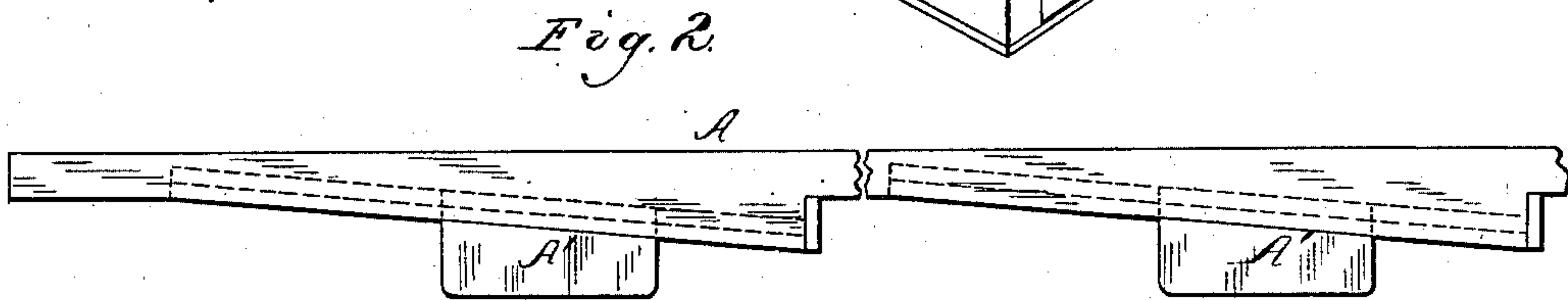
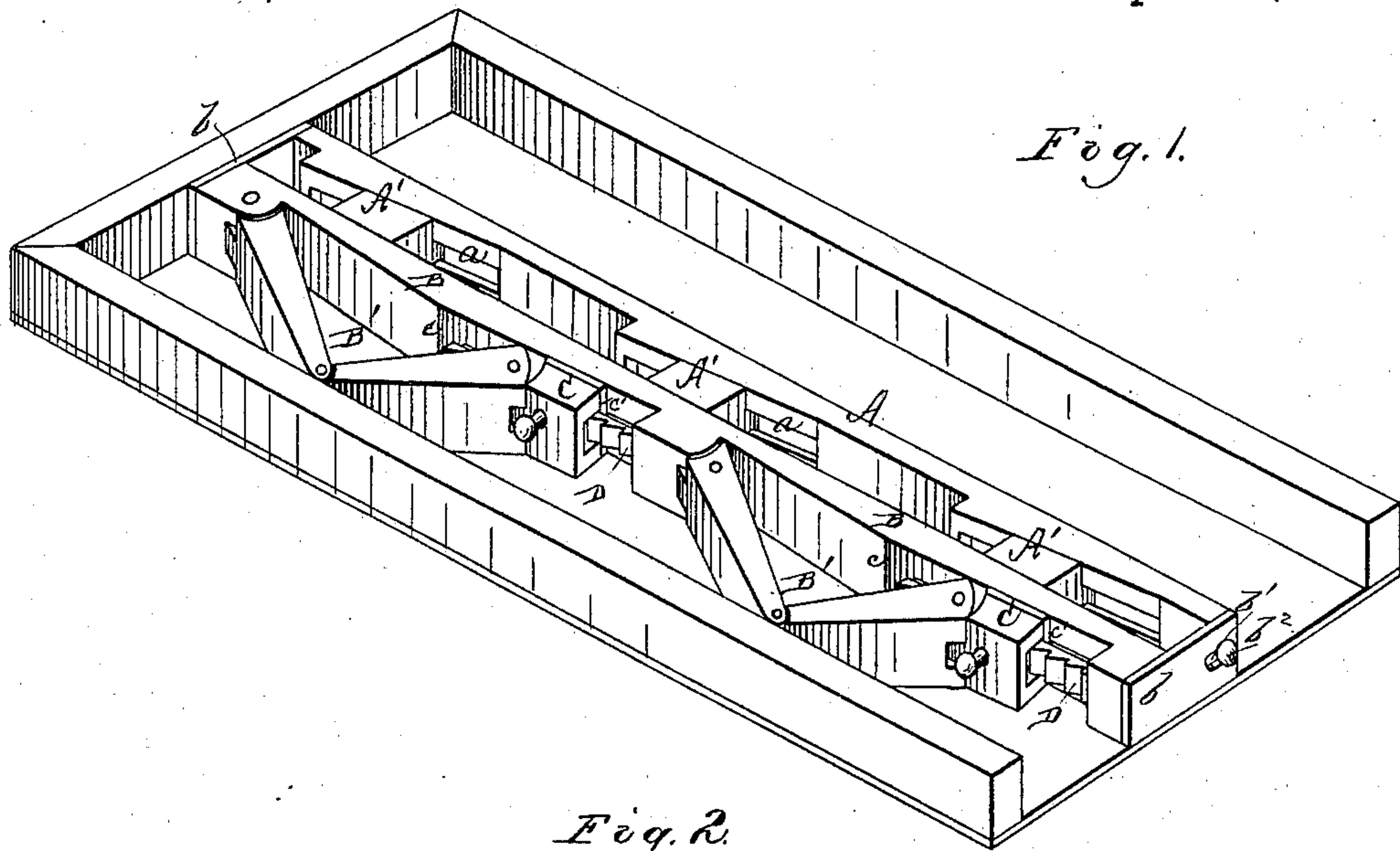


(No Model.)

C. A. DIRR.
TYPE LOCKING DEVICE.

No. 306,006.

Patented Sept. 30, 1884.



Witnesses.
Henry Frankfort
H. C. McArthur

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UNITED STATES PATENT OFFICE.

CYRUS A. DIRR, OF CHICAGO, ILLINOIS.

TYPE-LOCKING DEVICE.

SPECIFICATION forming part of Letters Patent No. 306,006, dated September 30, 1884.

Application filed December 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, CYRUS A. DIRR, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Type-Locking Devices, of which the following is a specification.

This invention relates to an improvement in adjustable side-sticks for locking type in a galley or chase; and it consists in a side-stick provided with two or more inclines upon its face, which are grooved in combination with a second bar provided with adjustable hinged or jointed braces removably attached to the first, substantially as will be hereinafter more specifically described and claimed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the accompanying drawings, in which—

Figure 1 is a perspective view of my device applied to a galley. Fig. 2 is a view of the side-stick detached from the other parts. Figs. 3 and 4 are detail views of parts of the same; and Figs. 5 and 6 are detail sectional views of portions of the hinged braces and their ratchet-slides.

A represents a side-stick formed with a series of inclines upon its face, each of which is formed with a flanged groove, *a*, and provided with a quoin, *A'*, having a T-headed tongue, *a'*, sliding in the groove *a*, as shown in Figs. 1 and 2.

B represents a second bar, arranged parallel with the part A, to which it is secured by metal strips *b b* at the ends, secured rigidly to the piece B, but loosely, by means of a slot, *b'*, and headed pin or screw *b²* to the part A, as fully shown in Fig. 1. The face of the bar B is provided with hinged or jointed braces *B'*, having one end hinged to the bar and the other to a slide, C. It will be seen that each of these braces *B'* lies, when closed, in a recess of the bar, so as to be flush with the outer face of the same. The face of this recess is inclined from each end to a point, *c*, in the center, which, when closed, is directly behind the joint in the brace *B'*, and holds it in such position that its hinge-pivot *c'* will not be in a direct line between the pivots at each end of the brace, and will therefore enable the latter to

be extended by a simple push from the free end without necessitating its being started from the center, as would otherwise be the case.

Upon one of the inclines in the recessed portion of the bar B is secured a metal bar, D, formed with ratchet-teeth *d d*, and the slide C is provided with flanges *c'*, claspings the edges of this metal ratchet-plate and sliding freely thereon. It is obvious that instead of making this a separate plate the ratchet-teeth may be formed with the bar B, if so desired.

Within the slide C is hinged a pawl, *C'*, adapted, by means of a spring, *d'*, to engage with the teeth *d*, and the rear end of this pawl is furnished with a pin, *d²*, projecting through the slide C, and by bearing upon which the pawl may be released from engagement with the ratchet, as will be clearly seen in Fig. 5. A modification of this pawl is shown in Fig. 6, in which the spring is omitted, and the pawl provided with two push-pins—one upon either side of its pivoted point—by means of which it is engaged or disengaged with the teeth.

The operation of this device is as follows: The type having been set up and one or more columns arranged in proper position upon the galley, the device just described is placed with the back of its bar or side-stick A against the type, as seen in Fig. 1, where a vacant space is left to be filled with type. The hinged braces *B'* are then drawn out till they reach the side of the galley, and the quoins being pushed up their inclines the type is held in place for taking a proof. This device thus saves great delay in handling the numerous side-sticks, quoins, and wedges now used, the whole being secured together and handled with one motion, and it will fit any size of galley or quantity of type.

In locking up type in forms for printing, either for job or newspaper work, the part A is easily detached from the other by removing the screw *b²*, and used separately in the same manner as the ordinary devices for this purpose are used, but is more easily handled and adjusted.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device for locking type in a galley or chase, a side-stick having a series of in-

clines formed with grooves and a series of quoins secured to but free to slide upon said inclines, in combination with a bar loosely secured to the side-stick by slotted connections
5 and provided with jointed braces adapted to be drawn out to fill the space between the galley or chase frame and the type, substantially as shown and described.

2. In a device for locking type in a galley
10 or chase, a bar provided with braces formed in two parts, the pieces being jointed or hinged together at their adjacent ends and adapted to be folded close upon the bar or drawn out to form a V-shaped filling-piece at will, sub-
15 stantially as herein shown and described.

3. In a device for locking type in a galley or chase, a bar having its face recessed, in combination with suitable jointed braces having one end hinged in the recess and the other
20 provided with means, substantially as de-

scribed, for sliding upon and engaging with ratchet-teeth in said recess at any desired point, substantially as and for the purpose set forth.

4. In a device for locking type in a galley 25 or chase, the side-stick A, having grooved inclines, and the quoins A', in combination with the bar B, loosely and detachably secured to the bar A by the slotted strips *b b*, the jointed braces B' B', slide C, pawl C', and ratchet- 30 teeth *d d*, with which the pawl engages, all constructed and arranged to operate substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

CYRUS A. DIRR.

Witnesses:

W. C. MCARTHUR,
FRANK JOHNSON.