

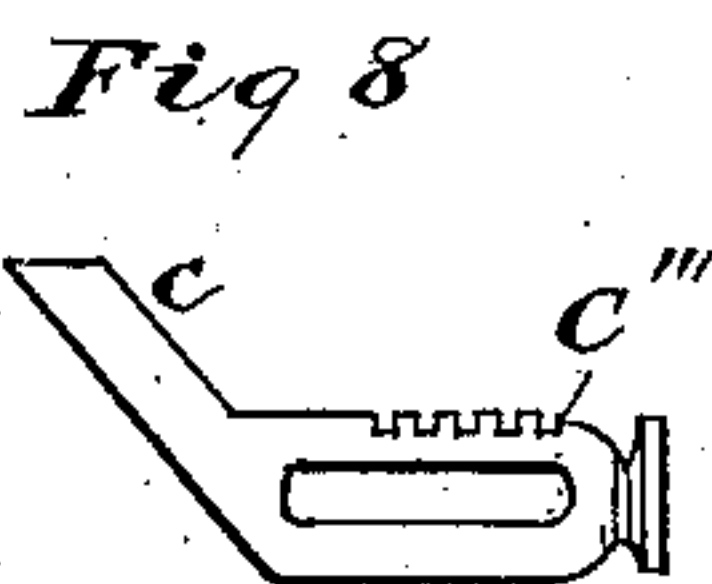
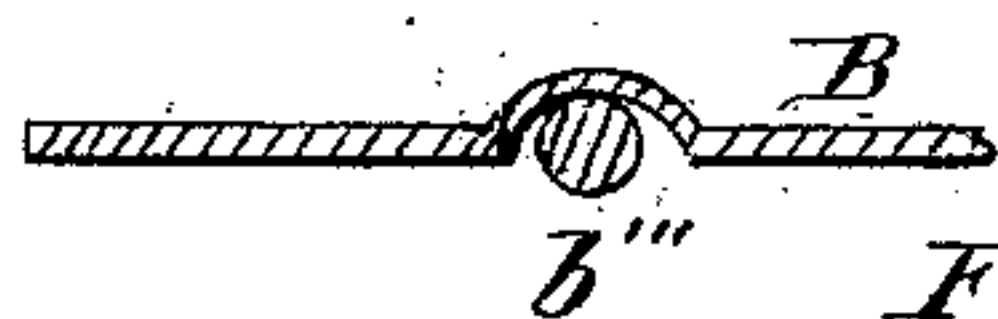
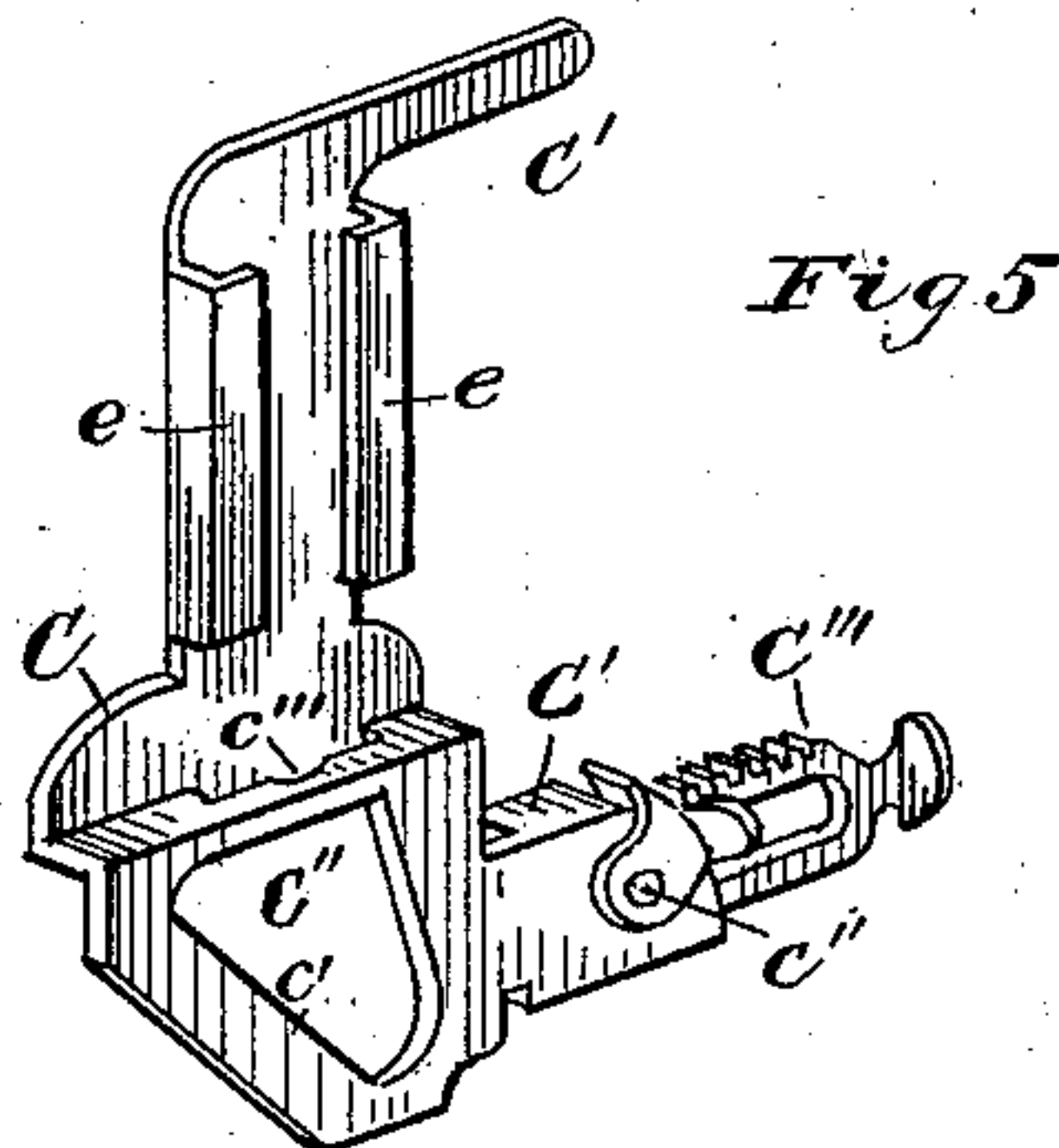
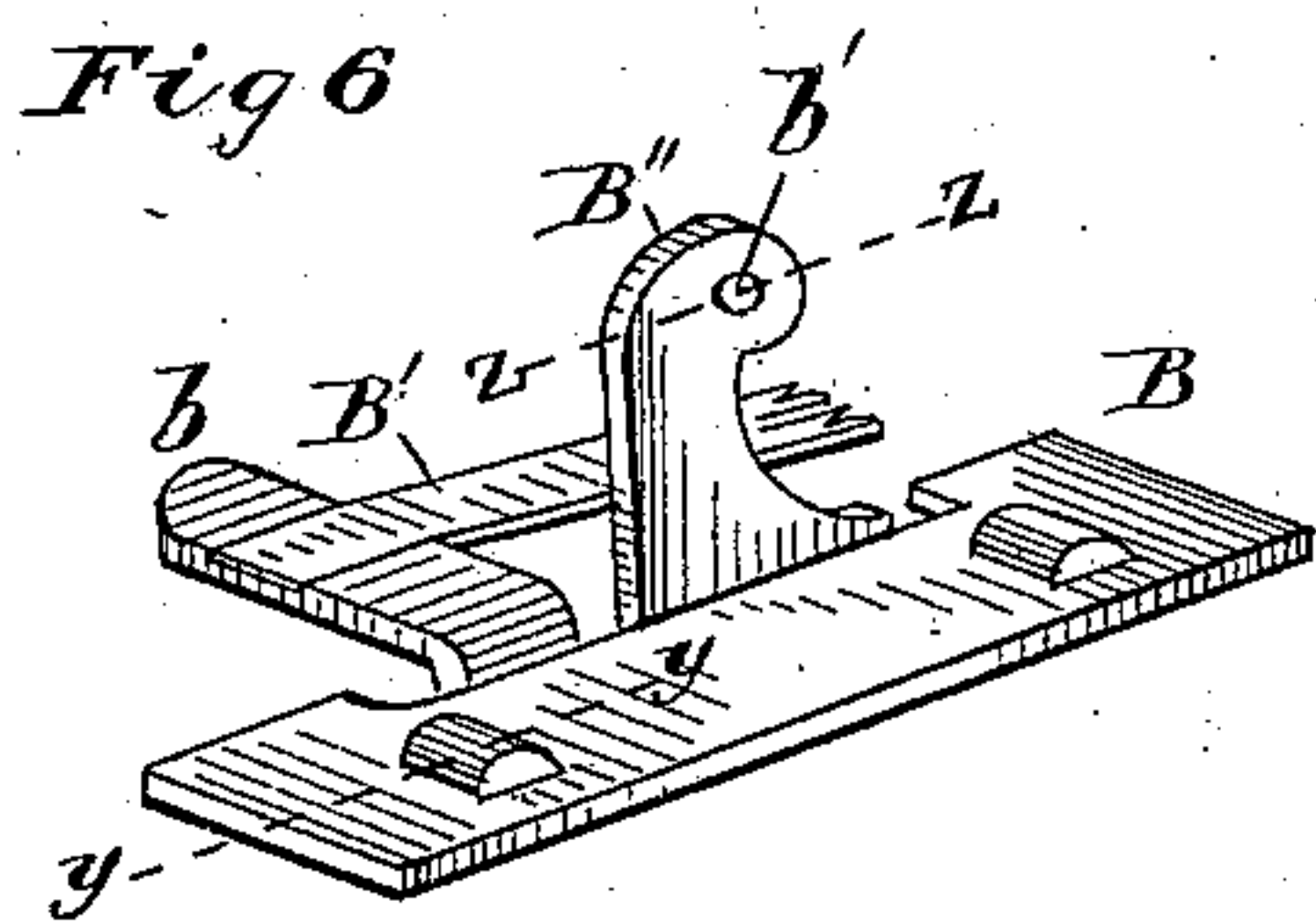
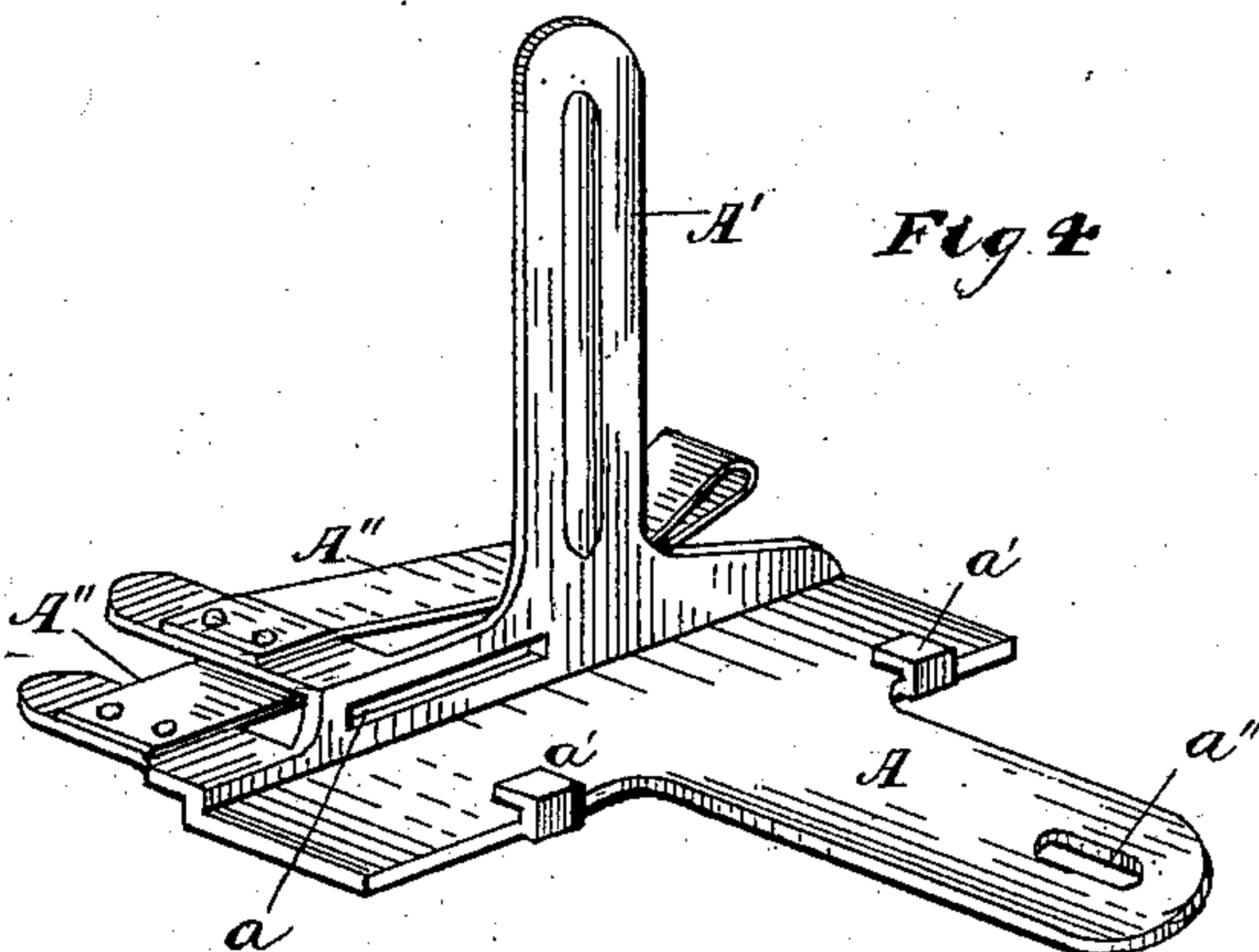
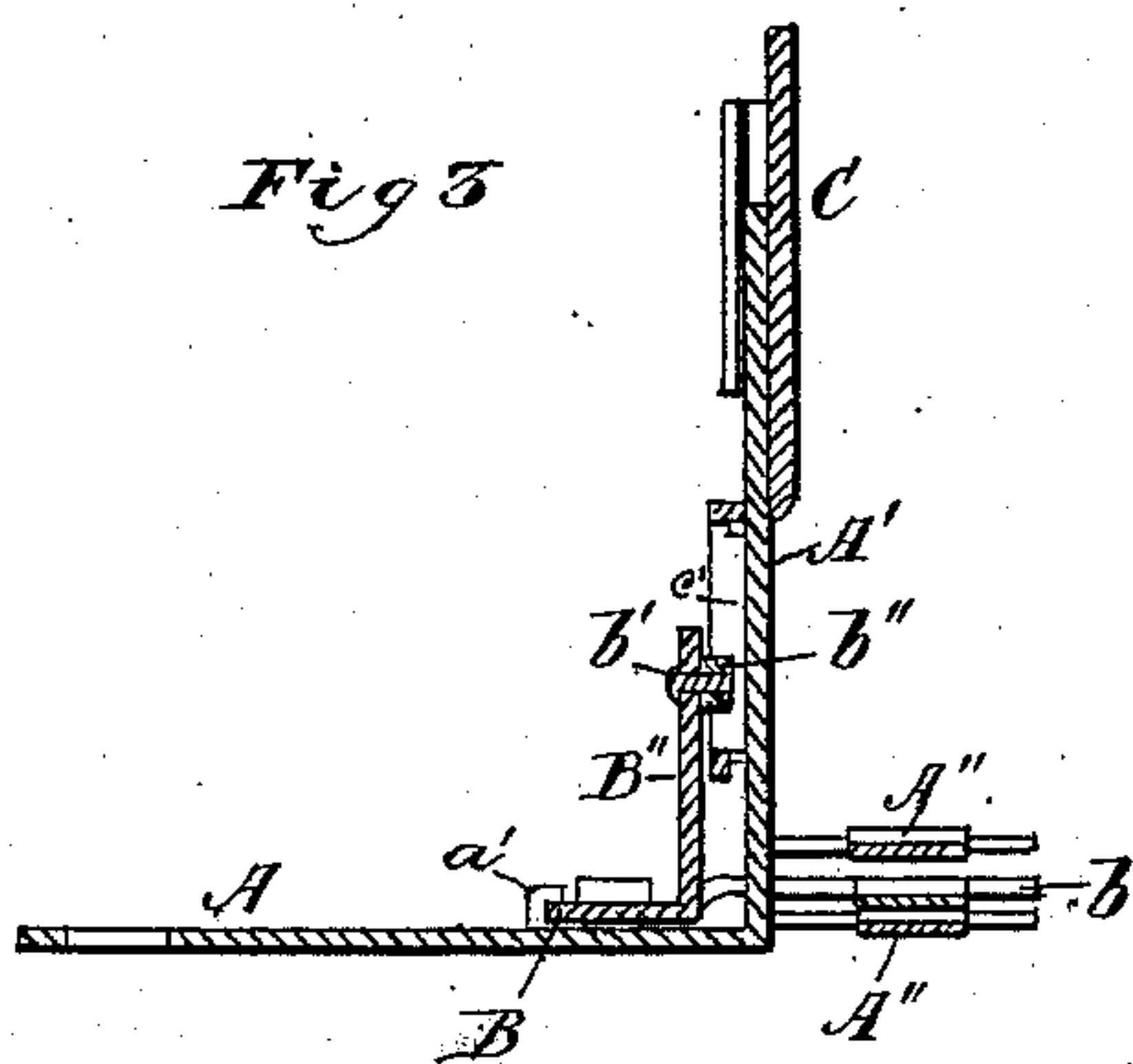
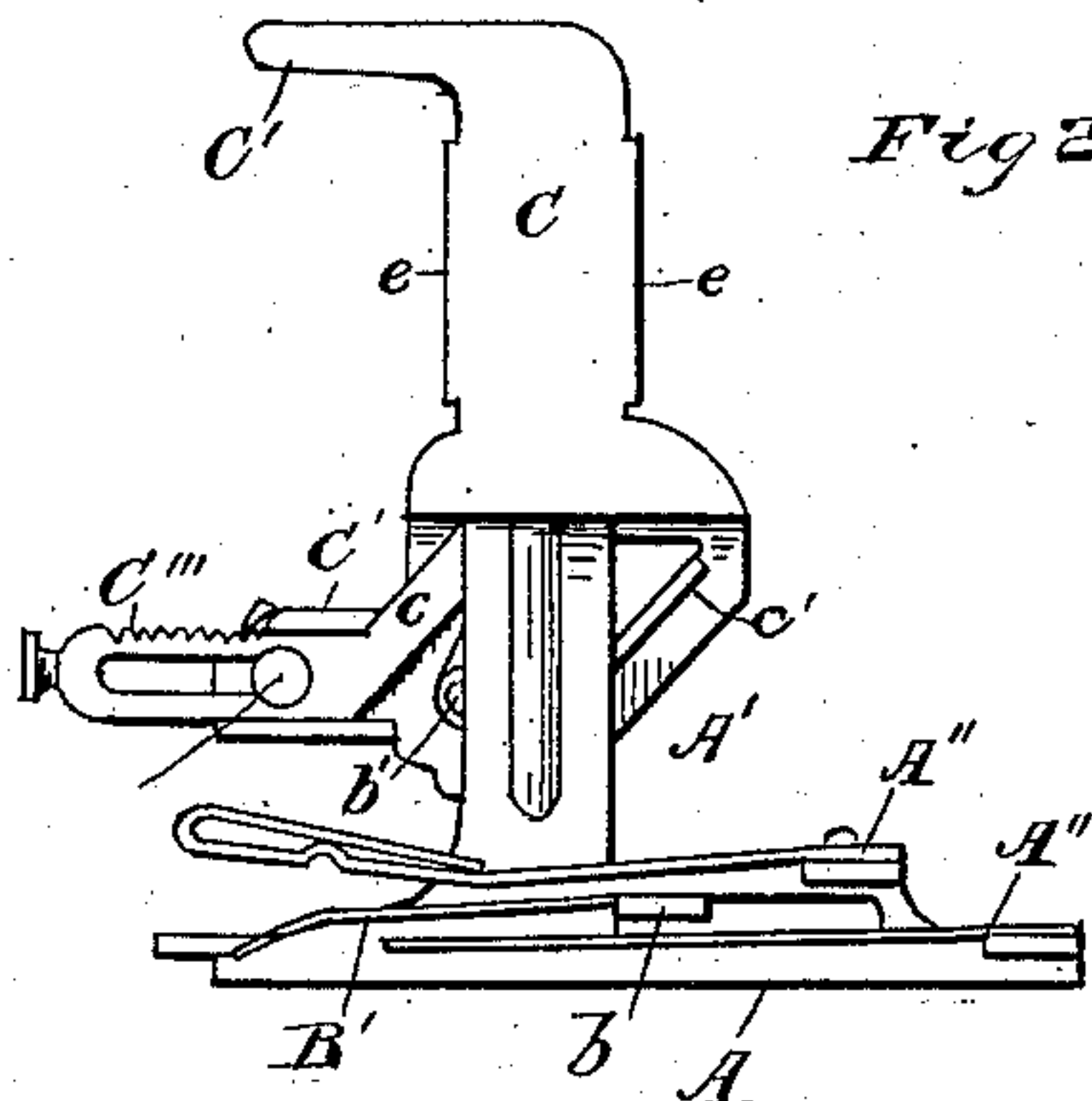
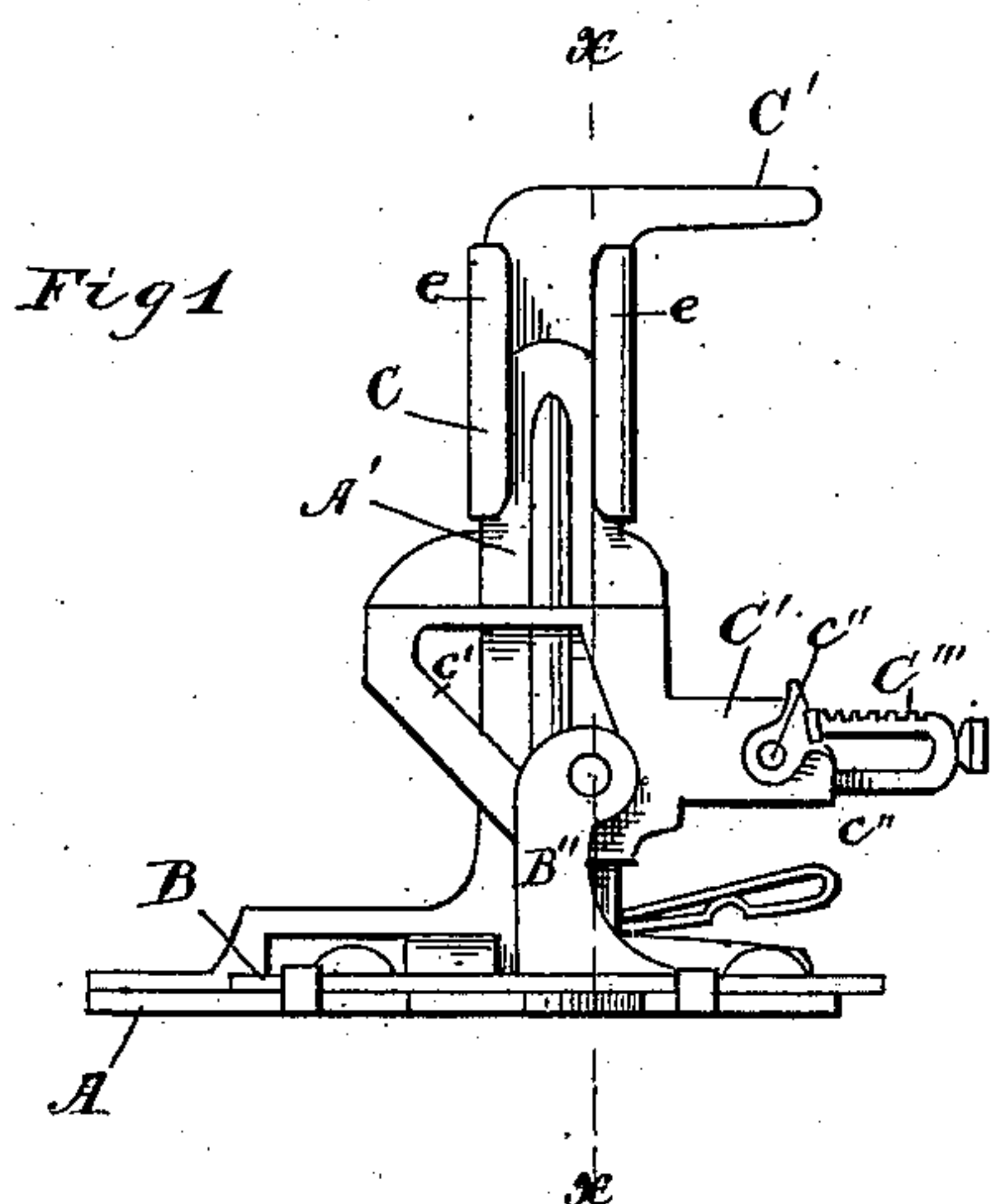
(No Model.)

A. McMULLEN.

RUFFLING ATTACHMENT FOR SEWING MACHINES.

No. 258,939.

Patented June 6, 1882.



Witnesses:

W. C. Corlies
Jno. H. Whipple

Fig 9 B'' b' b''

Inventor

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UNITED STATES PATENT OFFICE.

ALEXANDER McMULLEN, OF CHICAGO, ILLINOIS.

RUFFLING ATTACHMENT FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 258,939, dated June 6, 1882.

Application filed April 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER McMULLEN, of Chicago, in the State of Illinois, have invented certain new and useful Improvements in Ruffler Attachments for Sewing-Machines, of which the following is a specification.

The bed-plate of the horizontal carrier which operates the ruffler-blade is adapted to be secured to the sewing-machine and provided with an upright post or standard. The upright post supports a vertical slide arranged to be operated by the needle-bar of the sewing-machine. This slide is provided with an adjustable inclined slot or way, and in this slot or way a projecting pin or roller secured to an arm on the horizontal carrier operates, whereby the vertical motion of the upright slide is made to operate the horizontal carrier. One side of the inclined slot or way is supported on a notched bar arranged to be slid back and forth, and connected with a dog or pawl arranged to engage in the notches to hold the notched bar at different points of adjustment. By this means the inclined slot or way may be widened or narrowed to lessen or increase the movement of the horizontal carrier.

The accompanying drawings illustrate the invention.

Figure 1 is a side elevation of the attachment. Fig. 2 is a like view, showing the reverse side. Fig. 3 is a vertical section on line *xx* of Fig. 1. Fig. 4 is a perspective of the bed-plate, detached. Fig. 5 is a perspective of the vertical slide, detached. Fig. 6 is a like view of the horizontal carrier. Fig. 7 is a partial section on line *yy* of Fig. 6. Fig. 8 is a side view of a detached part. Fig. 9 is a section on line *zz* of Fig. 6.

A is the bed-plate, and A' the upright post thereof. The parts A'' are of the usual construction. The bed-plate with its upright post is best stamped out of a single piece of plate metal, as are also the other parts.

B is the horizontal carrier, which operates the ruffler-blade B' on arm *b*. This arm and blade are of the usual construction. The horizontal carrier is provided with an upright arm, B'', having a projecting pin, *b'*, and roller

b''. It also has anti-friction rollers *b'''*, placed in concave recesses on the under side.

C is the vertical slide. It is provided with arms C' and an opening, C''. A notched bar, C''', is secured to the lower of the arms C', so as to slide back and forth on the same. This notched bar supports one side, *c*, of the inclined slot, which is formed by this side and a flange, *c'*, projecting from opening C''. A dog or pawl, *c''*, is hinged to said lower arm C', so as to engage with the notches of the notched bar and hold it at any desired point of adjustment, thus fixing the width of the inclined slot.

The post A' is passed through an opening, *c'''*, in the vertical slide and under the flanges *c* of the same. This slide is thus secured to said post so as to be moved up and down thereon. The arm *b* of the horizontal carrier is then passed through an opening or slot, *a*, in a vertical portion of the bed-plate, so as to maintain the ruffling-blade between the parts A'' in the usual manner, the ruffling-blade being secured to said arm after it is so passed through said slot. The opposite edge of the horizontal carrier is secured between the bed-plate and the flanges *a'*, bent down over it so as to allow it to roll back and forth under them, being carried on the rollers *b'''*, resting on the bed-plate.

The bed-plate should have an opening, *a''*, through which a screw-bolt may be passed to secure the attachment to the sewing-machine, or be provided with other suitable means for this purpose. The attachment is located on the machine in the usual manner, and so that the projecting screw-head of the screw or the projecting part of the clamping device which secures the needle in the needle-bar shall project between the arms C' of the vertical slide, and operate upon them to move the slide up and down when in operation. The inclined way or slot between the parts *c c'* operates upon the projecting pin *b'* and its roller *b''*, to move the horizontal carrier back and forth on the rollers *b'''*, and so moves the ruffler-blade; and by widening the way the extent of the movement of the horizontal carrier is limited, and by narrowing the same it is increased. In this manner the ruffling is regulated.

What I claim is—

1. In a ruffler attachment, the horizontal carrier of the ruffler-blade provided with carriage-rollers b''' , as and for the purpose specified. 5
2. In a ruffler attachment, a vertical slide, C, having an inclined adjustable slot or way and arms C', substantially of the construction shown.
- 10 3. In a ruffler attachment, a notched sliding bar, C''', having the part c , in combination with dog c'' , as and for the purpose specified.
4. In a ruffler attachment, a vertical slide, C, operated by the needle-bar, and provided with an inclined slot or way, in combination 15 with the horizontal carrier of the ruffler-blade, having an arm and pin connecting with such inclined way or slot, substantially as and for the purpose specified.

ALEX. McMULLEN.

Witnesses:

JNO. H. WHIPPLE,

ELY EDWARD SNYDER.