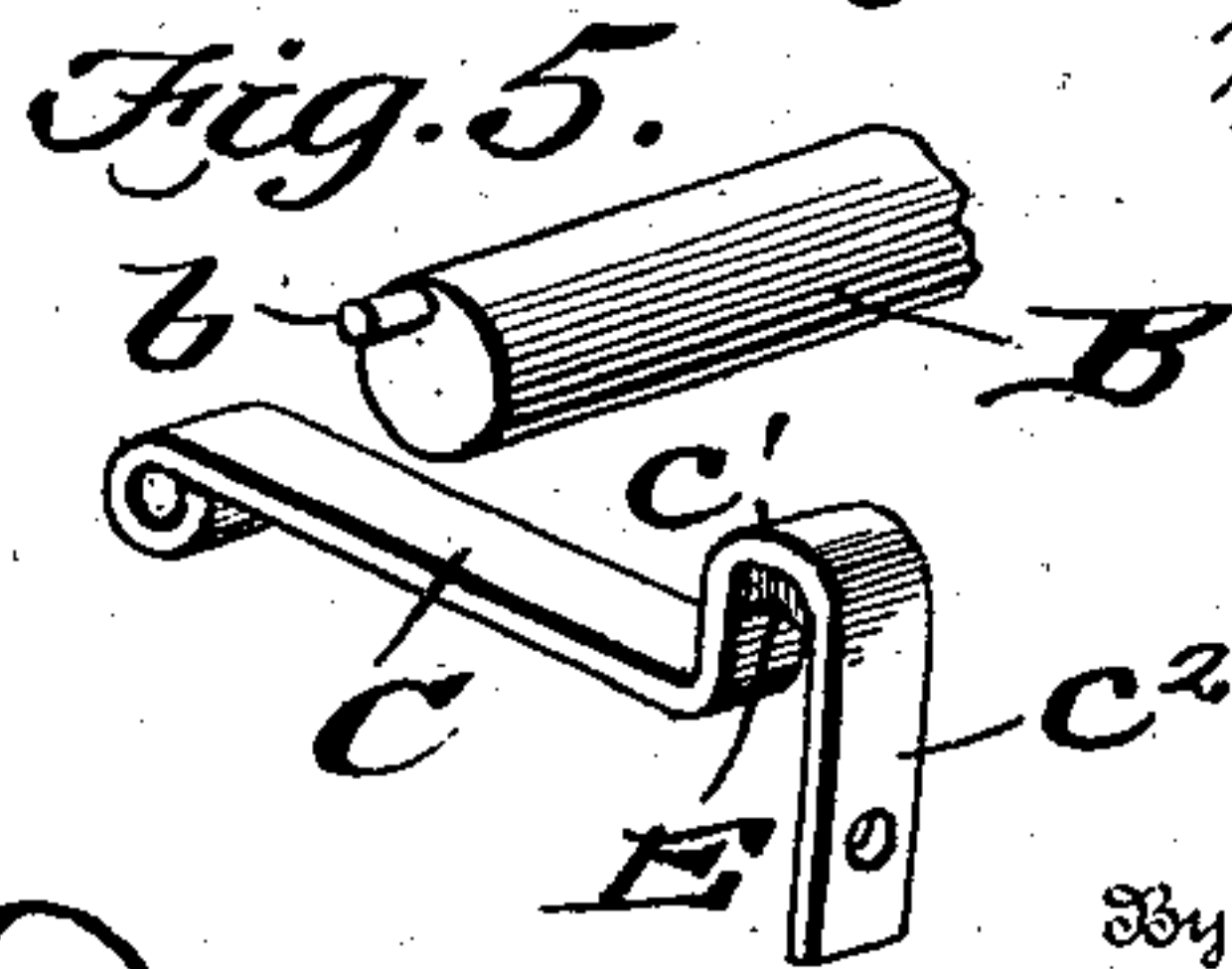
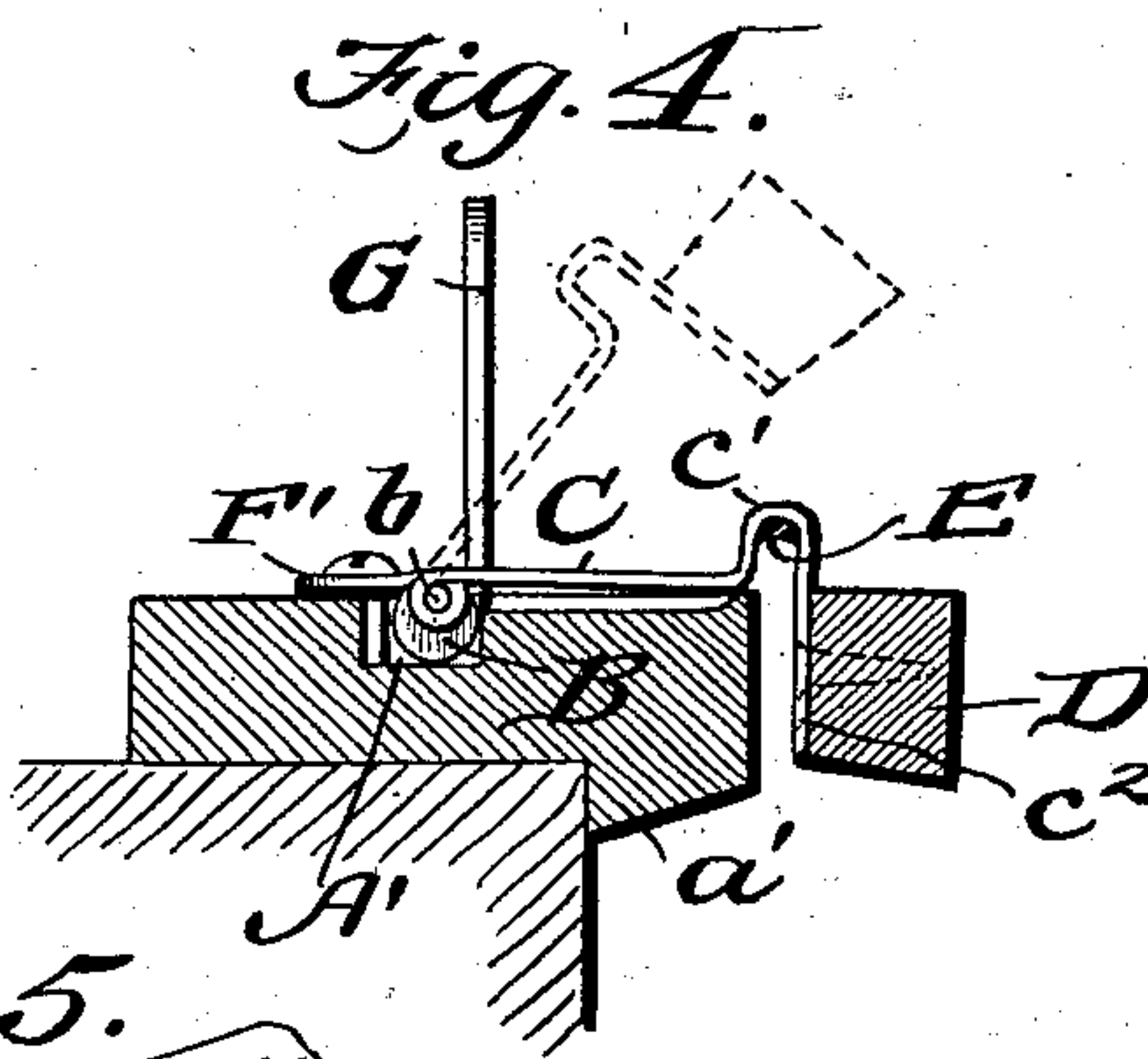
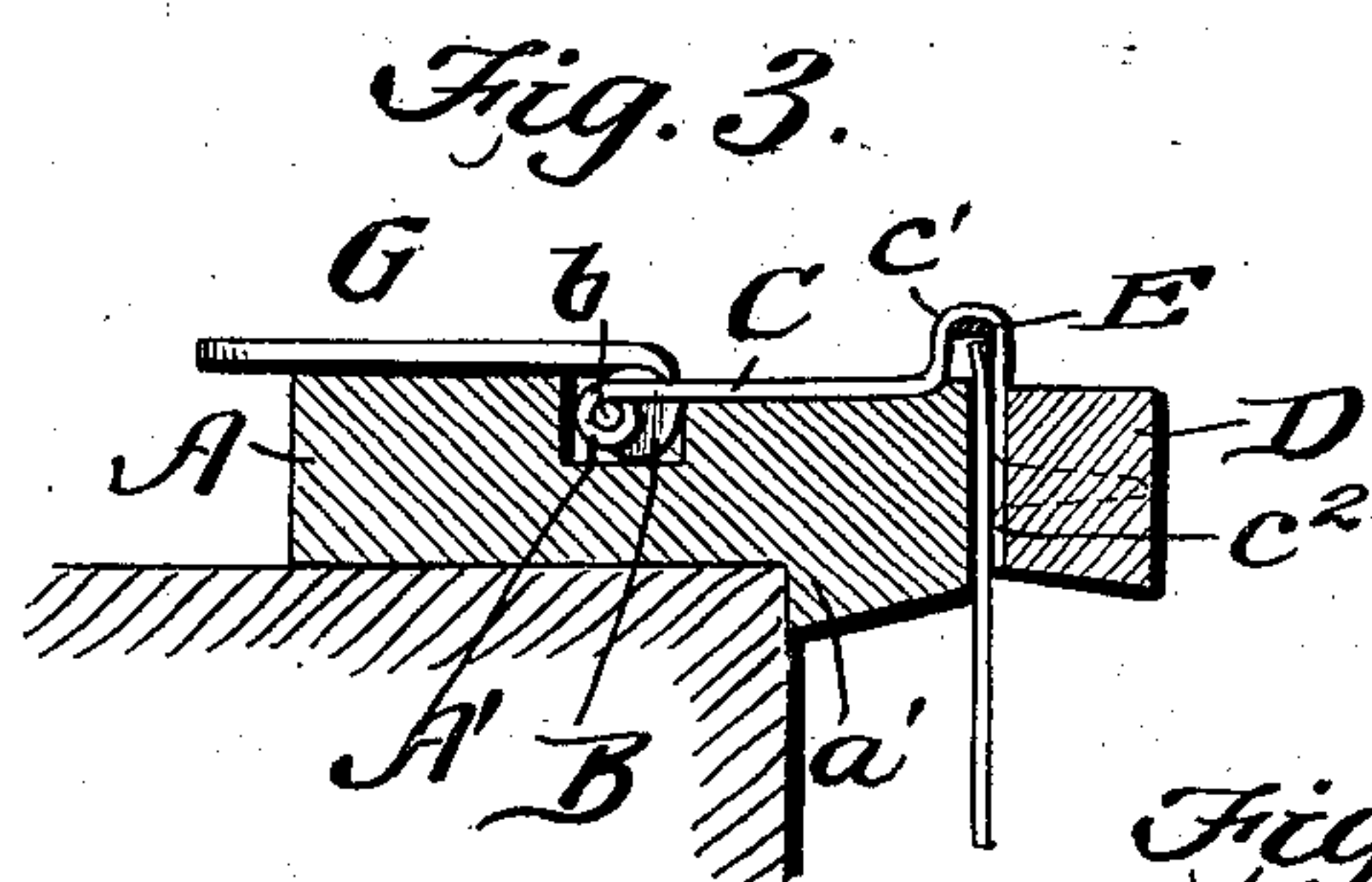
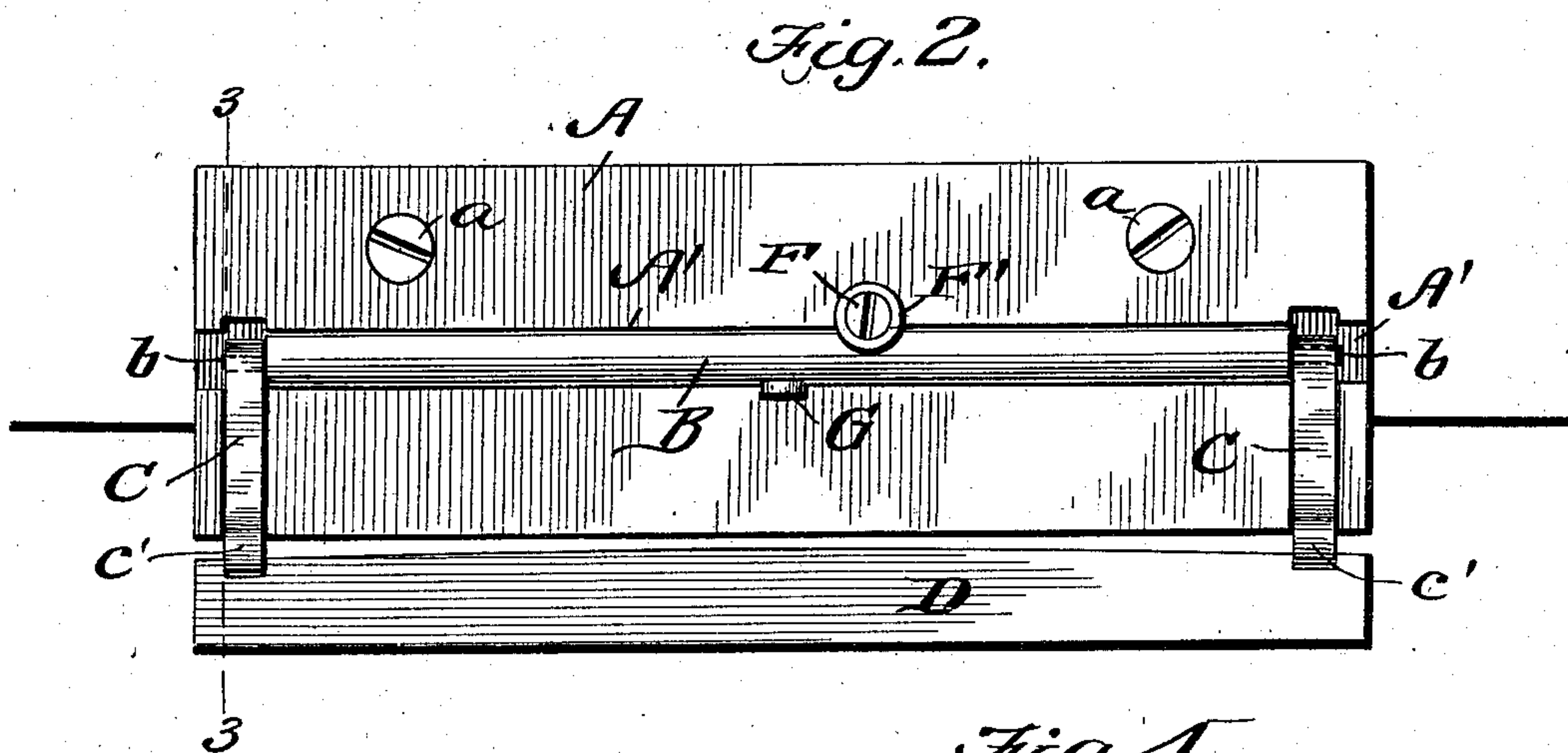
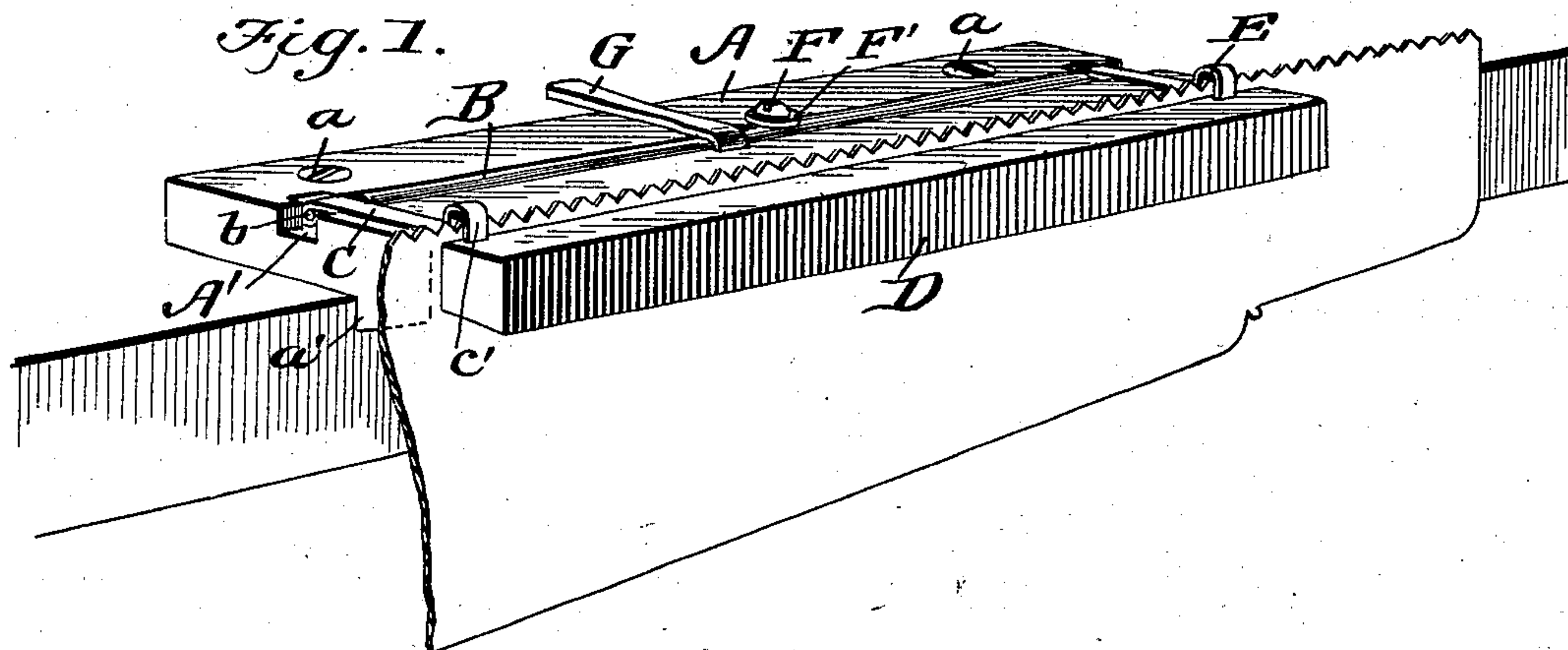


W. I. KIRK.

SAW CLAMP.

(Application filed Nov. 16, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

WILLIAM IRWIN KIRK, OF DUBOIS, PENNSYLVANIA.

SAW-CLAMP.

SPECIFICATION forming part of Letters Patent No. 701,897, dated June 10, 1902.

Application filed November 16, 1901. Serial No. 82,533. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM IRWIN KIRK, a citizen of the United States, residing at Dubois, in the county of Clearfield and State of Pennsylvania, have invented a new and useful Saw-Clamp, of which the following is a specification.

This invention is an improvement in saw-clamps, and relates particularly to the kind which are secured to a bench and in which the saw-blade is held while the teeth are being sharpened or otherwise operated upon.

The object of my invention is to provide a simple, inexpensive, and easily-operated device in which the saw-blade may be quickly and securely clamped for the purpose above specified.

With this object in view my invention consists in providing a fixed section to which is hinged a clamping-jaw that is connected by means of arms to a rotary shaft carried by or journaled within the fixed section and by which the clamping-jaw is operated.

My invention also consists in certain details of construction and novel combinations of parts, as will be fully described in the following specification and pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view showing the general application of my improvement. Fig. 2 is a plan view with the jaw open. Fig. 3 is a detail section about on the line 3 3 of Fig. 2, the clamping-jaw, however, being shown as clamping the saw-blade in place. Fig. 4 is a similar view with the jaw open, and Fig. 5 is a detail perspective view of one end of the shaft and an arm for connecting the shaft with a movable clamping-jaw.

In constructing a clamp in accordance with my invention I employ a flat-stationary section A, which is designed to be held to a bench by means of screws *a*. The front lower edge of this jaw is provided with a shoulder *a'*, that is designed to fit against the front of the bench and assists in holding the section steady. The upper surface of the jaw is provided with a longitudinal groove A', in which is held a shaft B, whose ends are provided with trunnions *b*, that are eccentrically arranged and upon which are adapted to be held the inner ends of arms C, to the outer ends of which is

held a movable clamping-jaw D. These arms C have their inner ends curved to form eyes in which the trunnions are adapted to fit, the outer ends of the arms terminating in arch-sections *c'*, the extreme ends being bent down and perforated, as shown at *c''*, and by which the said movable jaw is held to the arms, the apex of the arch being cushioned, as shown at E, against which the teeth of the saw contact and which prevents any injury thereto, as will be understood.

The shaft B is preferably held in position by means of a screw F, having a washer F' arranged thereon, which overlaps upon and prevents dislocation of the shaft, and to the said shaft is securely held, preferably by welding, a handle G, by which it is revolved.

In operation the handle is elevated to a vertical position, which throws the movable jaw outwardly, when it may be elevated, as shown in dotted lines in Fig. 4. The saw is then placed against the fixed section, the jaw D lowered, and the handle thrown back to a horizontal position, which revolves the shaft and by reason of the eccentrically-arranged trunnions draws the jaw D against the saw, thereby securely holding it to the clamp. By reference to Figs. 3 and 4 it will be seen that the trunnions are so arranged upon the shaft that when the handle is lowered the trunnions will be carried down past the horizontal center of the shaft, which avoids any possible danger of the jaw becoming loose.

In practice I prefer to arrange the inner or clamping face of the movable jaw on a slight curve, so that when the jaw is first drawn into contact with the saw the central portion thereof will engage the saw first, after which the ends are drawn in until practically the entire face is engaged.

It will thus be seen that I provide a very simple, cheap, and economical device by which a saw may be quickly and securely held while being sharpened.

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

1. A device of the kind described comprising a stationary section having a longitudinal recess arranged therein, a shaft revolvably positioned in the said recess, trunnions eccentrically arranged on the ends of the shaft,

arms connected to the said trunnions at their inner ends, a jaw connected to the outer ends of the arms and means whereby said shaft may be operated, substantially as shown and 5 described.

2. A device of the kind described, comprising a stationary section having a longitudinal slot arranged therein in its upper surface, and a shoulder upon its lower surface, a shaft 10 held in the slot and having trunnions arranged on the ends thereof, arms connected at their inner ends to the trunnions and hav-

ing their outer ends terminating in arched portions, the extreme ends being bent downwardly, a jaw connected to the said downwardly-bent portions, cushions arranged in the apex of the arched portions of the arms, and a handle secured to the said shaft, substantially as shown and for the purpose specified. 15

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