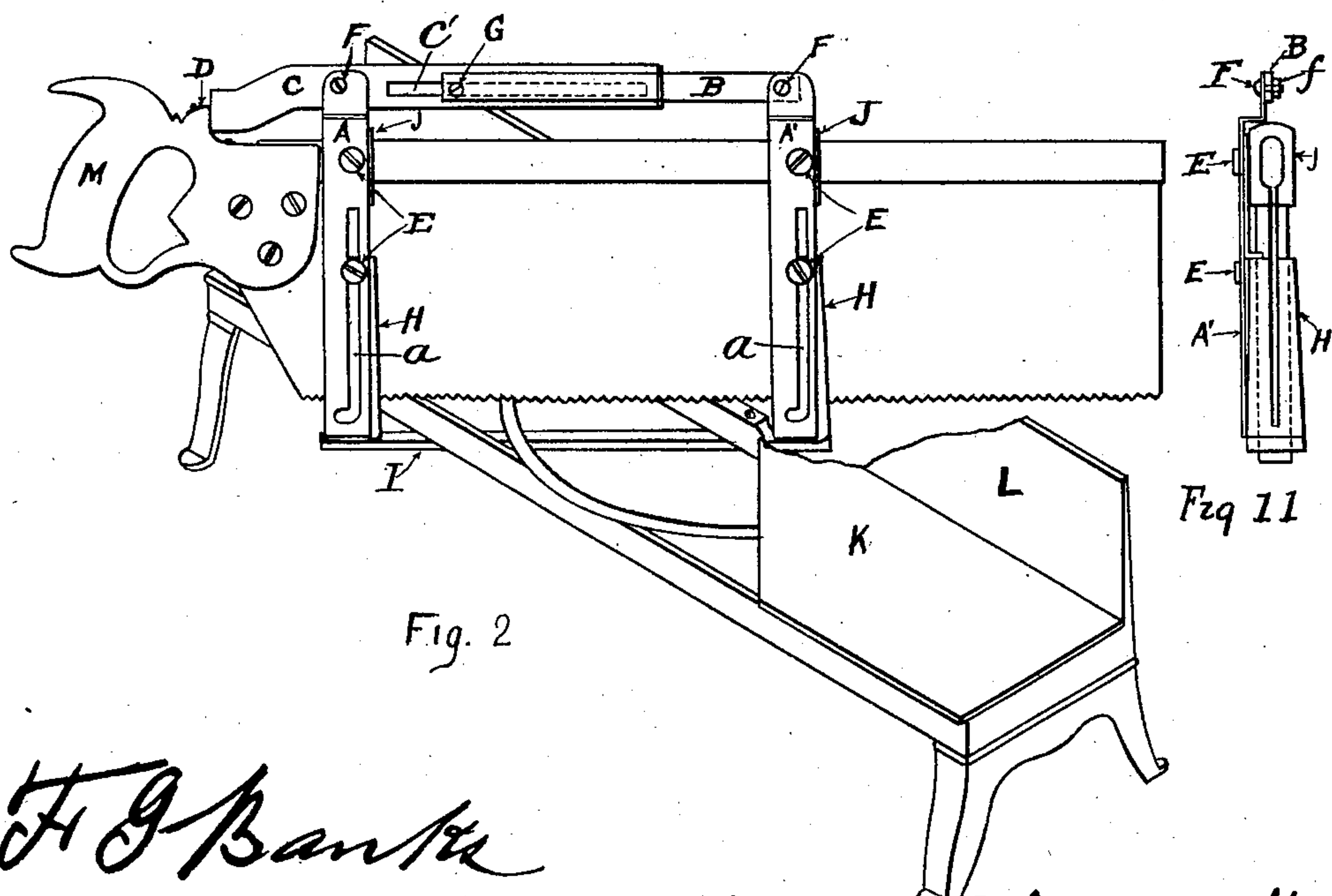
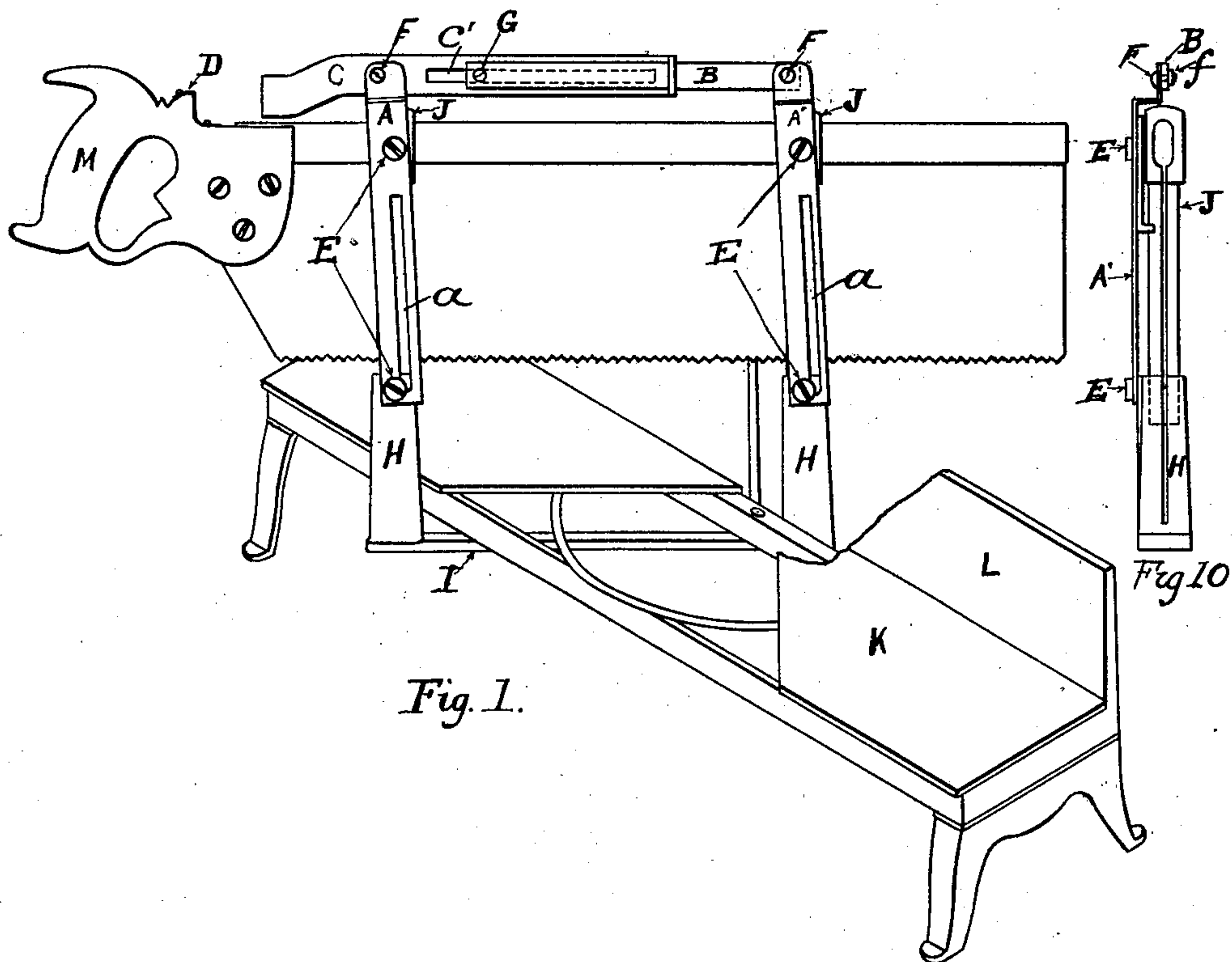


J. L. NUNAMAKER.
MITER BOX.
APPLICATION FILED DEC. 3, 1909.

998,199.

Patented July 18, 1911.

2 SHEETS—SHEET 1.



H. G. Barker
J. A. Pampless

James L. Nunamaker

J. L. NUNAMAKER.
MITER BOX.
APPLICATION FILED DEC. 3, 1909.

998,199.

Patented July 18, 1911.

2 SHEETS—SHEET 2.

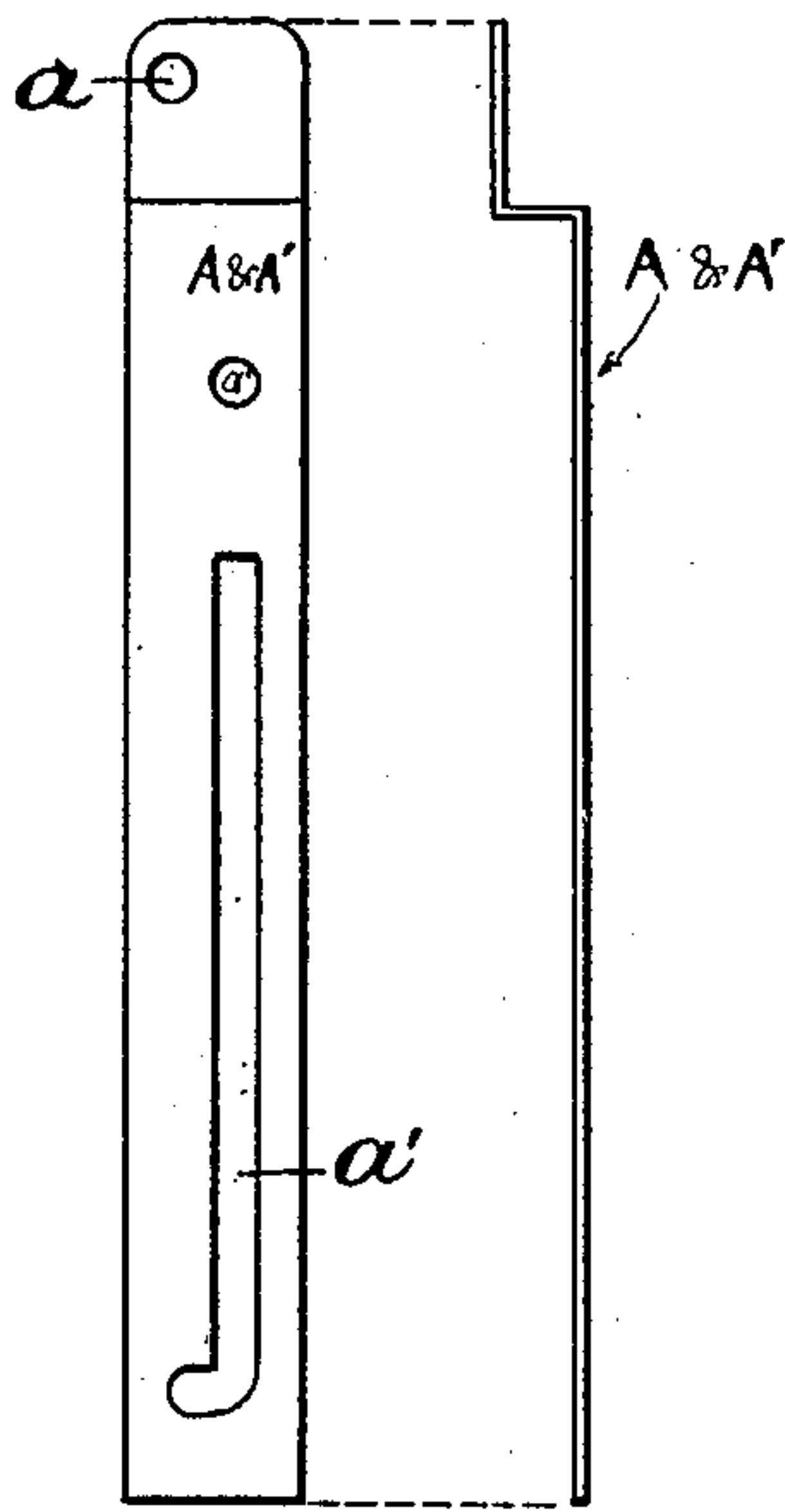


Fig. 3

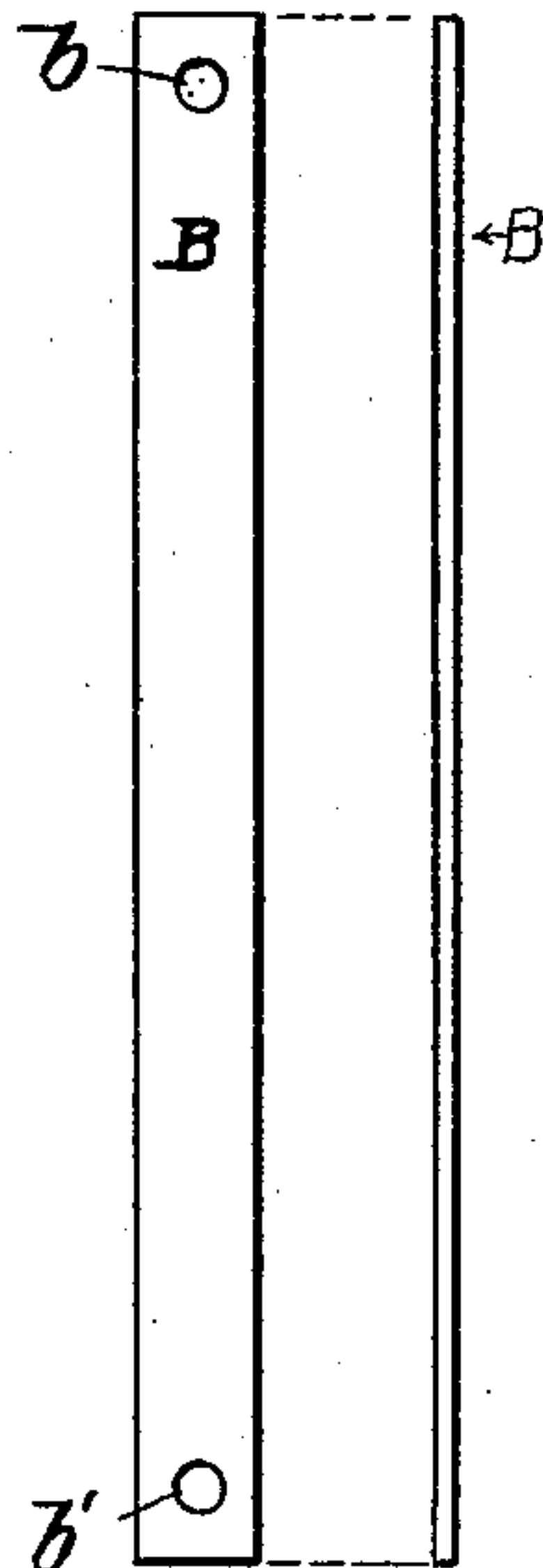


Fig. 4

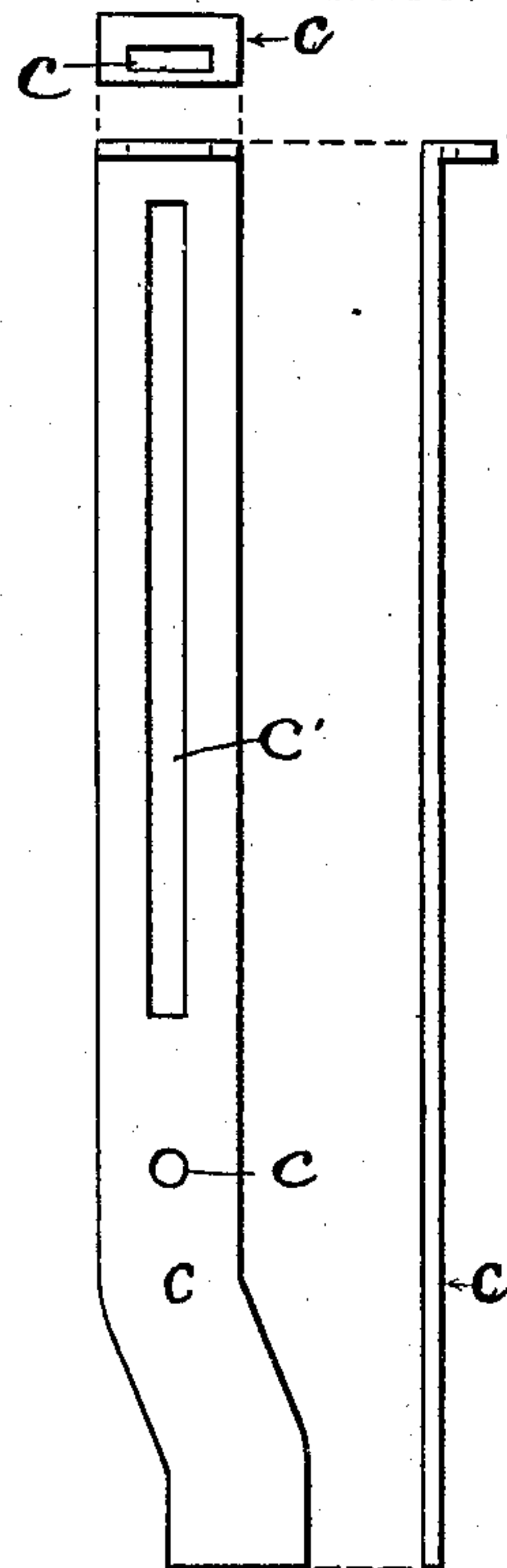


Fig. 5

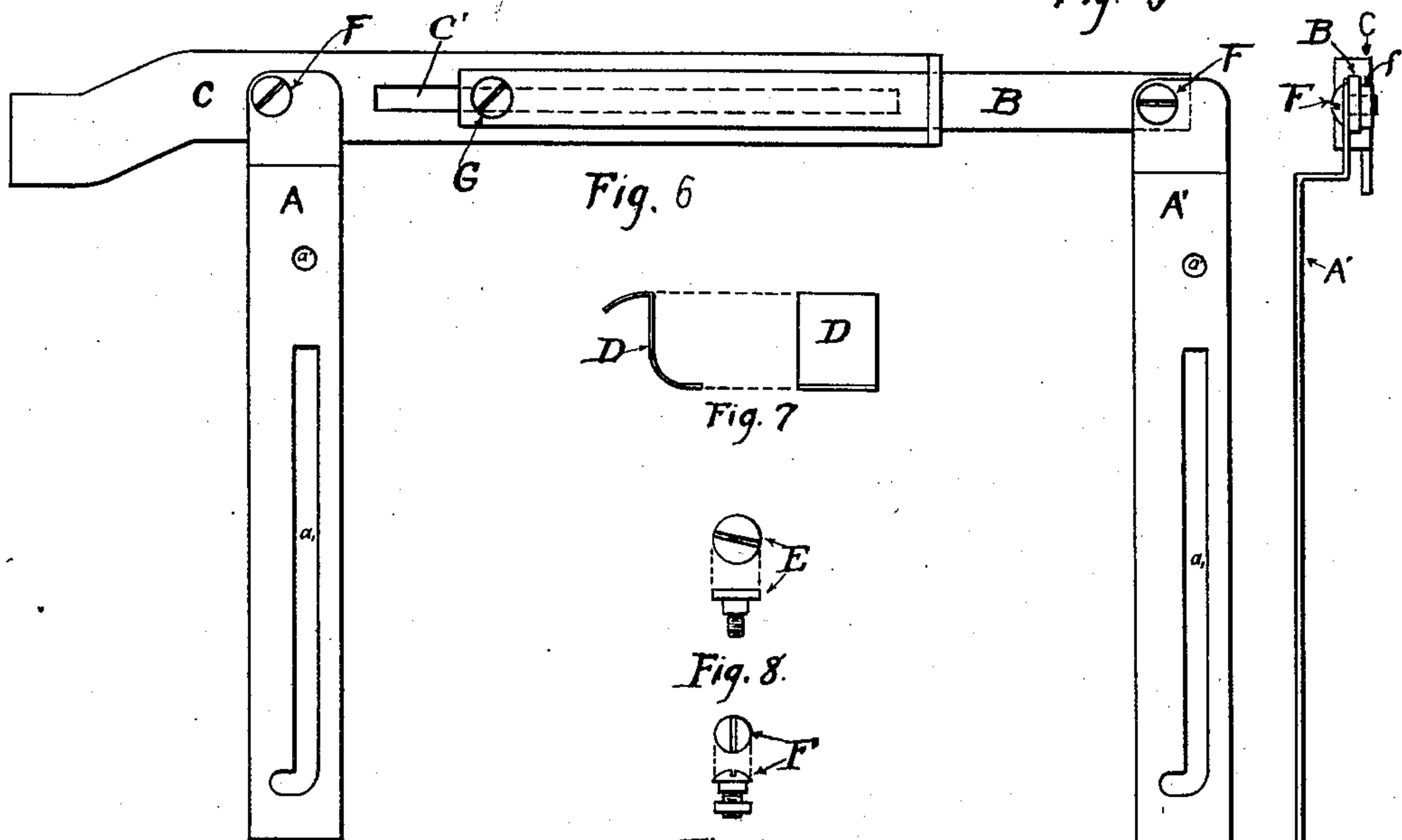


Fig. 6

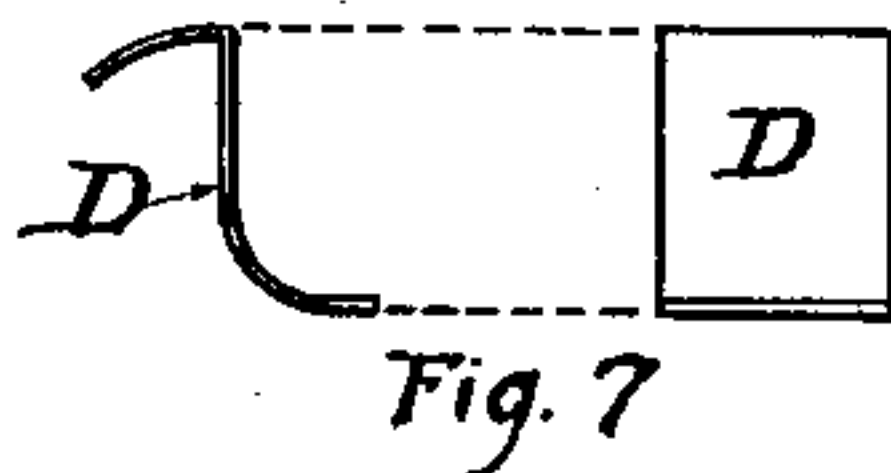


Fig. 7

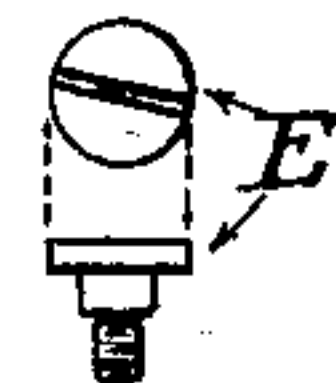


Fig. 8

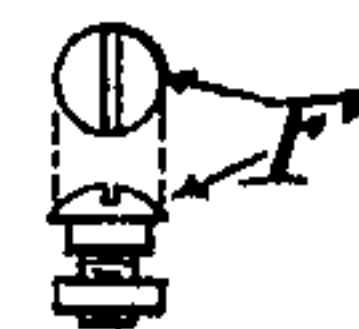


Fig. 9

Fig. 12

F. G. Barker
J. L. Nunamaker

James L. Nunamaker

UNITED STATES PATENT OFFICE.

JAMES L. NUNAMAKER, OF AMES, IOWA, ASSIGNOR OF ONE-HALF TO DAVIS J. BULLOCK, OF AMES, IOWA.

MITER-BOX.

998,199.

Specification of Letters Patent.

Patented July 18, 1911.

Application filed December 3, 1909. Serial No. 531,284.

To all whom it may concern:

Be it known that I, JAMES L. NUNAMAKER, a citizen of the United States, residing at Ames, in the county of Story and the State of Iowa, have invented an Automatic Saw-Releasing Device, of which the following is a specification.

My invention relates to an improvement in miter-boxes, and has for its principal object to provide an improved means for supporting a saw at different angles and in its highest position when not in use.

Another object of the invention is to provide a support of the character described, in which means are provided for automatically releasing the said support upon the forward movement of the saw, whereby the latter may immediately drop to its working position.

A still further object of the invention is to provide a support of the character described which is adjustable to suit the spread in the swing-bar of the miter-box to which the releasing device is attached.

With these and other objects in view, the invention consists in the construction and novel combination of parts, hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the claim hereto appended, it being understood that various changes in the form, proportion, size, and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings:—Figure 1 is a perspective view of a miter-box, showing the saw-supporting means applied thereto held in its highest position. Fig. 2 is a perspective view of the miter-box, showing the saw-support at its lowermost or operative position. Figs. 3, 4 and 5 are each a view of the separate parts of the releasing device. Fig. 6 is a side elevation of the releasing device in assembled relation. Fig. 7 is a view of the reinforcing strip, which is applied to the handle of a saw. Figs. 8 and 9 are each a view of the screw bolts employed in attaching different parts of the releasing device together. Fig. 10 is an end view of the saw-support, showing the same in its highest position. Fig. 11 is an end view of the saw-support, showing the same in its lower-

most position, and Fig. 12 is an end view of the releasing device.

Like reference numerals designate corresponding parts in all the figures of the drawing.

Referring to the drawing, the invention comprises a miter-box, consisting of a suitable work-support K, and a guide L. Pivotaly mounted to the said work-support is a horizontally swinging bar I, the ends of which project beyond the respective sides of the support K. Secured to the said projecting ends of the member I are socket members H—H. Saw-guides J are respectively arranged in each of the socket members H and are adapted to reciprocate in a vertical manner. Each of these saw-guides consists of opposed legs J^1 and J^2 which are connected at their upper ends by a head J^3 having an enlarged central opening J^4 which communicates with the space between the said legs. The back R of the saw S is adapted to be supported within the enlarged opening J^4 , and the saw-blade is arranged between the legs J^1 and J^2 , said saw being adapted to be given a longitudinal sliding motion thereon. Pivotaly secured to each of the heads J^3 is a support A, which is preferably formed of a strip of sheet metal and has its entire end provided with an elongated slot a , which terminates at its lower end in an off-set portion a' . Each support is pivotaly secured in position by means of a screw E—E, which is adapted to pass through an opening a^2 formed in the upper end thereof. Another screw E is secured to the socket member H and within the slot a . The upper end of each of the supports is preferably bent inwardly above the head J^3 of the saw-guide and thence upwardly to form a supporting end a^3 , in which is formed a hold a^4 — a^4 .

The invention further comprises a releasing means which consists of a bar C that is pivoted to the forward support A by means of a screw F which passes through a small opening c' formed therein, the front end c^2 of said bar extending forwardly and downwardly toward the end of the saw. This bar C is further provided with an elongated slot c^3 , in its rear end. The rear end of the said bar is bent at right-angles to form a foot-piece c^4 which is provided with an elongated vertical opening c^5 . A second

bar B is pivotally secured at its rear end by means of a screw bolt F to the rear support A and passes through the elongated vertical opening c^5 of the bar C, and has its front end provided with a pin or screw G which rides in the elongated slot c^3 . By means of this pin or screw G, the relative length of the two bars B and C can be regulated. The saw S is obviously provided with a handle M and said handle M is provided with a horn or abutment m . Secured to this horn m is an abutting strip D, which is formed of sheet metal or the like.

From the foregoing, it will be readily apparent that when it is desired to insert a block of wood, preparatory to the sawing thereof, the supports A—A are elevated, and the lower ends thereof are swung on their pivot E until the off-set portion a' of the elongated slot a engages the lower screw E. In this position the weight of the saw will, of course, be on the said lowermost screws E, and as a result, the saw will be held at a sufficient height to enable the operator to insert a piece of wood thereunder. After this has been accomplished, by reason of the forward movement of the saw in its guide-members J—J, the reinforcing strip D secured to the horn m of the handle, will abut the forward end c^2 of the bar C. As a result of the forward movement imparted to the bar C and consequently the bar B, the supporting members A—A will be swung on

their pivots E—E, and thereby the lower end of each support will be disengaged from the off-set portion a' of the elongated slots $a—a$. Thus it will be seen that the saw will then automatically lower itself to operative engagement with the work.

What I claim is:—

The combination with a miter box, of sockets carried thereby, guides for supporting a saw respectively mounted within the sockets for vertical reciprocatory movements, supporting means for normally holding the said guides in an elevated position, a bar pivoted to the forward supporting bar and having its forward end projecting in advance of the said supporting bar and the rear end thereof being bent at right angles and provided with an elongated vertical slot, a bar pivotally connected at one end to the rear supporting bar and having its rear end arranged within the elongated vertical slot of the first mentioned bar, and means for adjustably connecting both of said bars, said projecting end being disposed in the path of movement of the saw and adapted to be engaged thereby upon movement thereof in one direction and thereby automatically release the said supporting bars.

JAMES L. NUNAMAKER.

Witnesses:

F. G. BANKS,
J. A. CAMPBELL.