

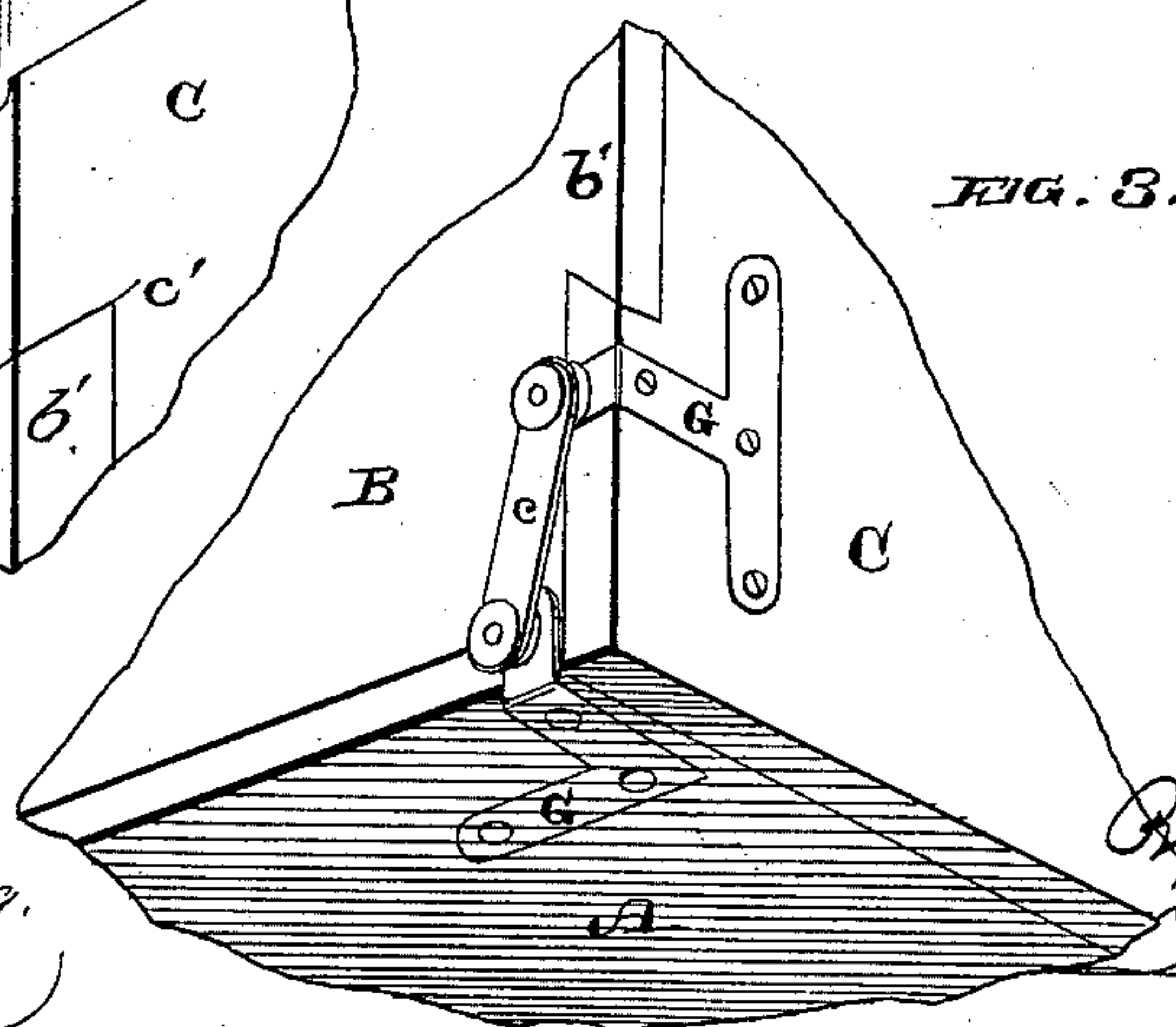
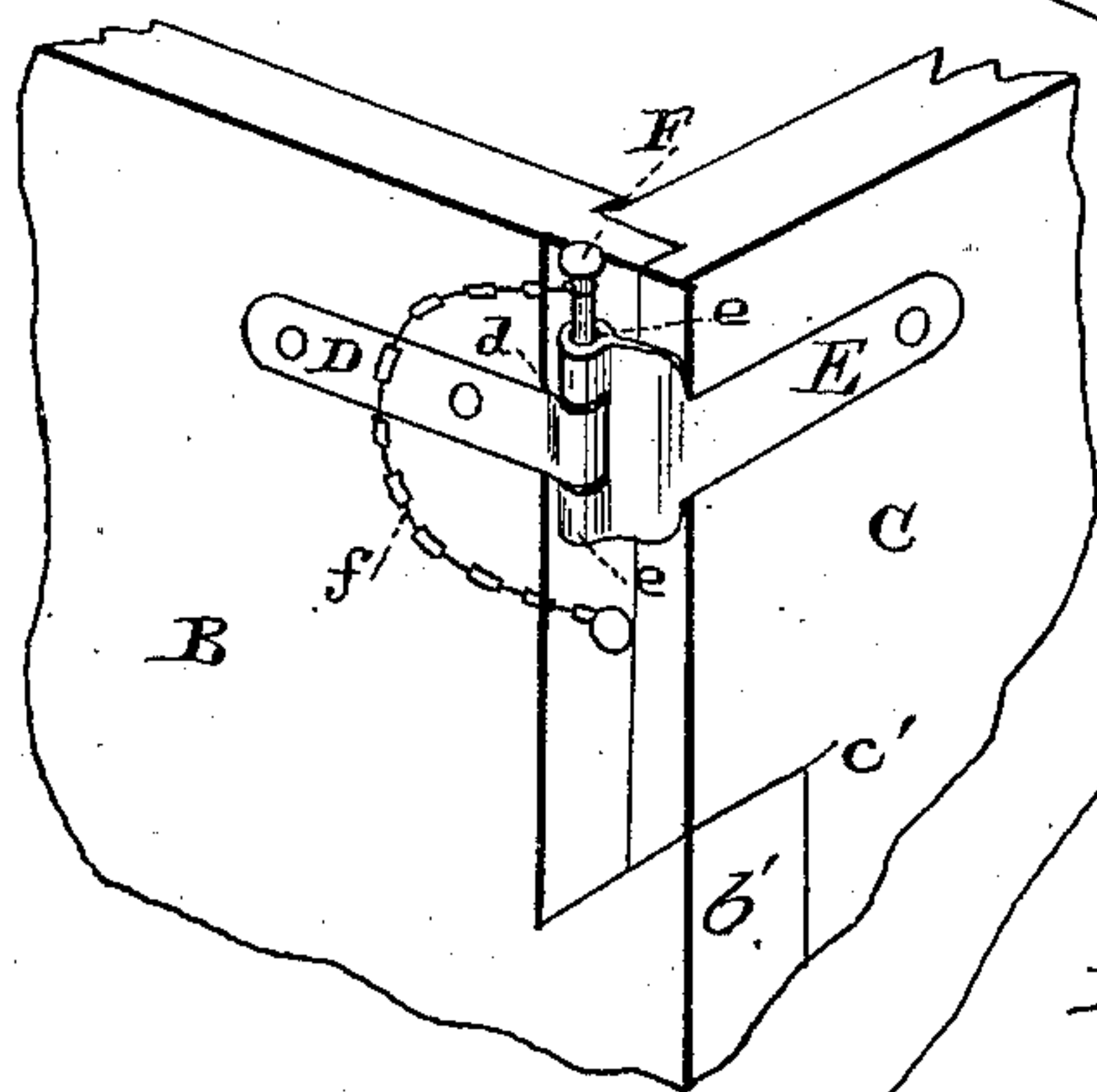
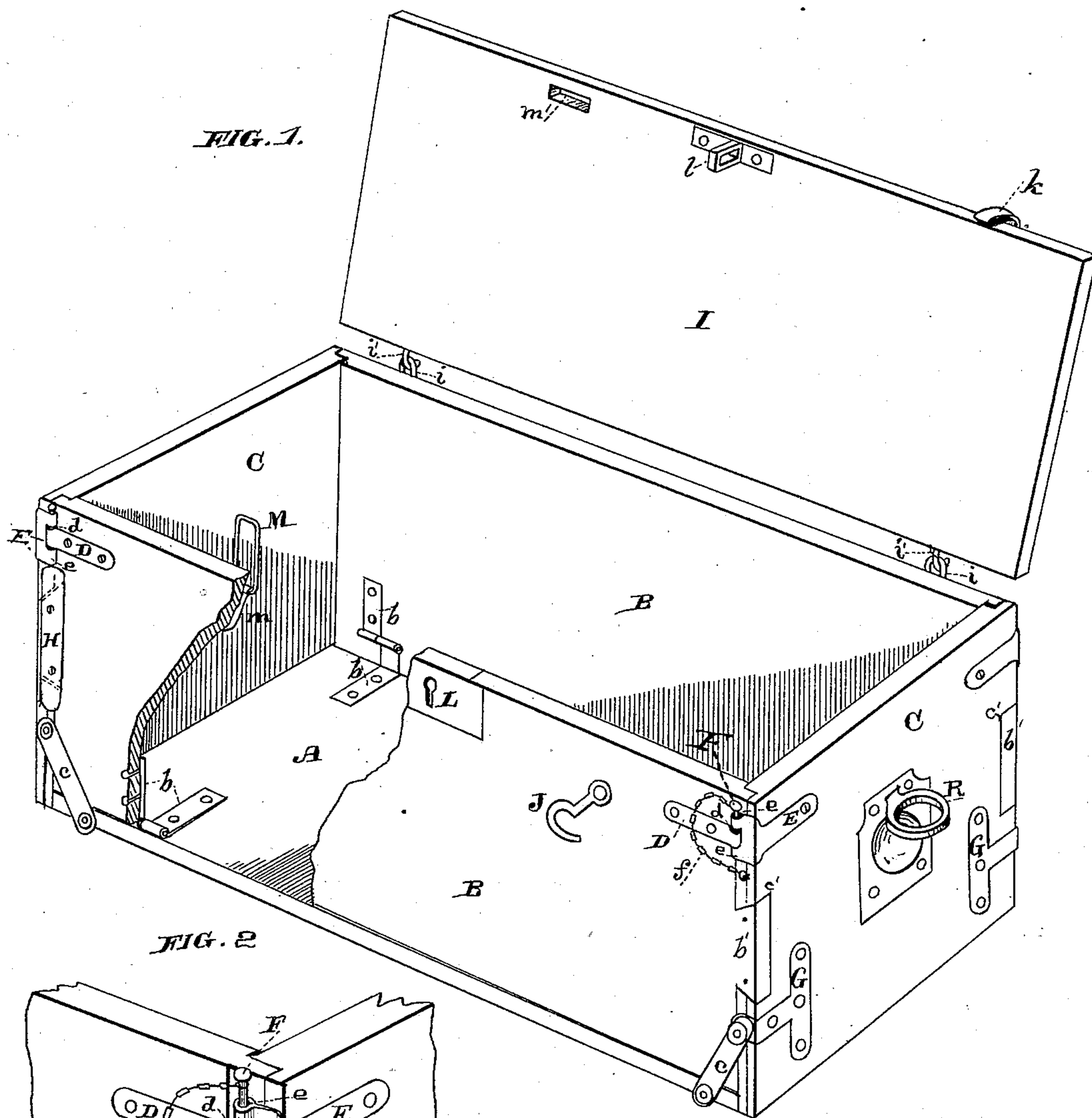
(No Model.)

2 Sheets—Sheet 1.

P. CANESSA.
FOLDING BOX.

No. 280,013..

Patented June 26, 1883.



Witnesses, (

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(No Model.)

2 Sheets—Sheet 2.

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FIG. 4.

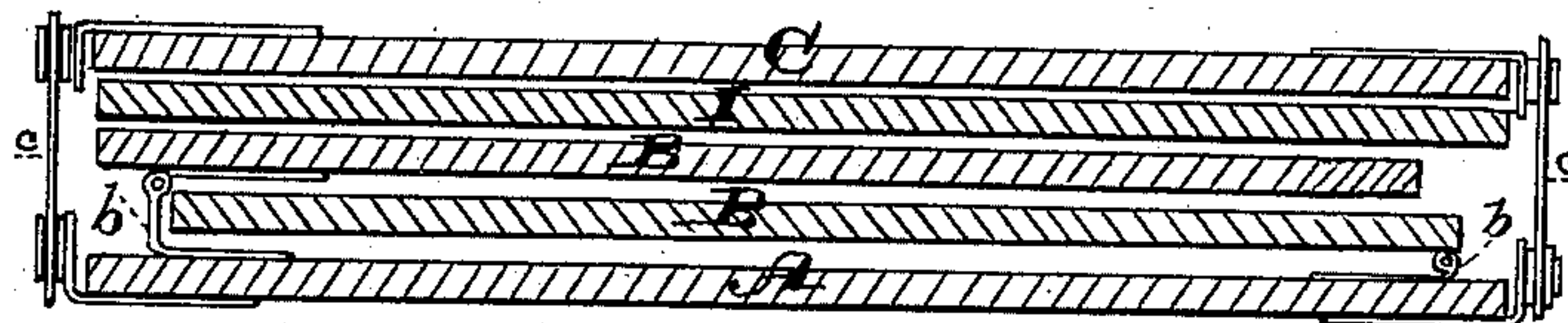


FIG. 5.

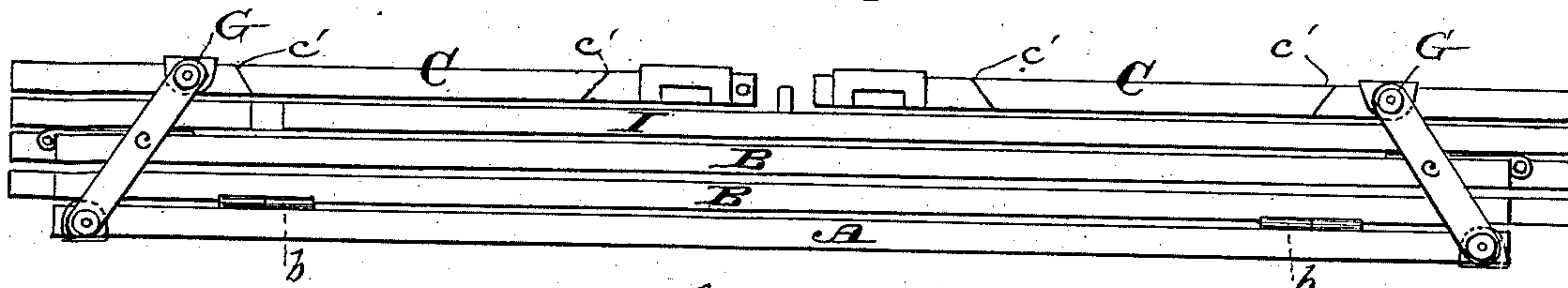
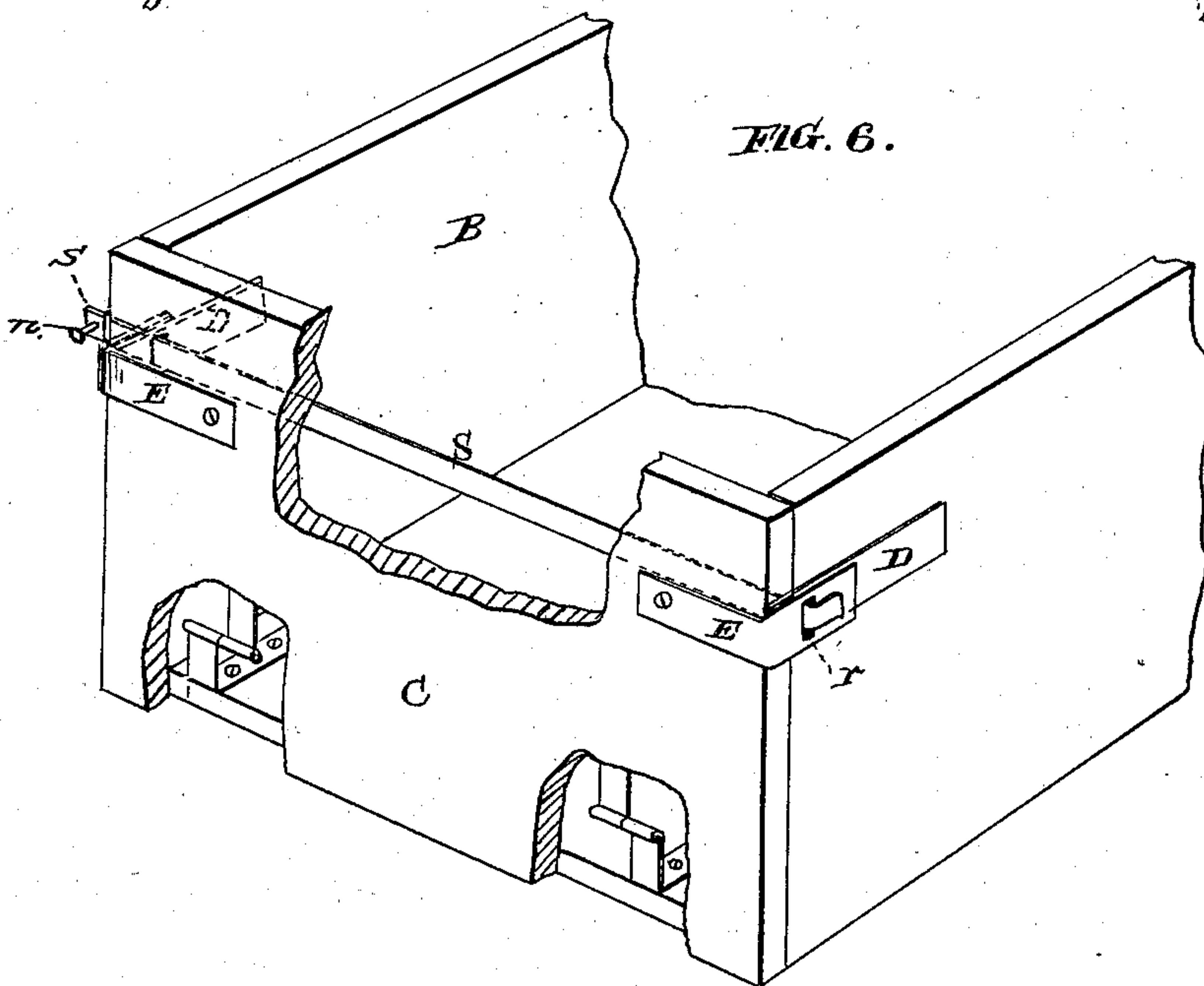


FIG. 6.



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UNITED STATES PATENT OFFICE.

PARIDE CANESSA, OF SAN FRANCISCO, CALIFORNIA.

FOLDING BOX.

SPECIFICATION forming part of Letters Patent No. 280,013, dated June 26, 1883.

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

To all whom it may concern:

Be it known that I, PARIDE CANESSA, of the city and county of San Francisco, State of California, have invented an Improved Folding

Box; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the class of boxes the parts of which are constructed and arranged to fold together in small compass for transportation and convenience in handling when not in use.

My invention consists in the means of hinging or connecting the sides and ends to the bottom, whereby they may be folded readily; in means for securing them together when opened, and of fastening the cover or lid thereto; and in certain other and further details of construction, all of which will be hereinafter fully explained, reference being made to the accompanying drawings, in which—

Figure 1, Sheet 1, is a perspective view of my box, showing the lid open and a portion of the front side broken away. Fig. 2 is a perspective detail, showing the means for locking the sides and ends. Fig. 3 is a view of one corner of the box and a portion of the under side of the bottom A, showing the links *c*. Fig. 4, Sheet 2, is a cross-section of the box folded. Fig. 5 is a side view of the same. Fig. 6 shows a modification in means for locking the sides and ends.

The object of my invention is the provision of a box adapted to be folded up into a small compass when desirable, and to be opened and rigidly fixed when in use. The uses of such a box need not here be set forth at length; but the mention of fruit and packing boxes for general merchandise, traveling-boxes, &c., will show the obvious advantages of the invention.

A is the bottom of the box. B B are its sides, and C C its ends. The sides are hinged to the bottom by means of hinges *b*, placed inside for the sake of appearances. The arrangement of these hinges upon one side is such that when its side B is folded down it will lie flat upon the bottom, while the other side is adapted to lie flat upon the first side. This is accomplished by having the pintles of the hinges on the latter side higher up than on the former, whereby the side B, to which they are attached, will be raised in its folding suf-

ficiently high to clear the edge of the first side piece when lying down, Figs. 1, 4. The ends of the side pieces are provided with dovetails *b'*.

The ends C C are connected with the bottom A by means of elastic links *c c*, pivoted to the edges of each. These links are long enough to permit the ends to clear the dovetails *b'* when folding down to lie upon the uppermost side piece or upon the cover, as in Figs. 4 and 5. The edges of the end pieces, C C, are mortised out at *c'*, to admit the dovetails *b'* of the sides.

Secured to the ends of the sides B B, near their upper edges, are straps D, having their ends turned to form eyes *d*. Secured in corresponding position upon the ends C C, though by one screw only, near the center of the end of the box, in order that they may be sprung out when desired, are elastic straps E, having their ends bent around the edges of the end pieces and notched out or forked, forming double eyes *e e*, between which the eyes *d* are fitted when the parts are all brought to an upright position. Small pins F, secured to the box by chains or cords *f*, are fitted down through the eyes *e d e*, and thus lock the parts firmly together, Fig. 2. An additional security is added by reason of the sides dovetailing into the ends, as these latter cannot be moved without first moving the sides, which are themselves guarded by the elastic links *c c*, as shown. These links may be pivoted in any suitable manner; but I prefer, for the sake of strength and for appearances, to have straps G G secured to the outer faces of the bottom and the ends and bent around the edges of each, as shown, forming bearings to which the links are pivoted.

Small strips of metal, H, may be used as face-plates to cover the dovetail joint of the sides and ends, Fig. 1.

To the upper edge of one of the sides B are secured staples *i*.

I is the lid or cover, the rear edge of which is provided with hooks *i'*, which engage with the staples *i* and form therewith hinges to hold the lid in place, and yet to allow it to be readily removed when necessary. In order to secure this lid in front, I have shown three means, which may be used together or separately. The first is the flat lock L, the bolt of which

engages with the staple *l* in the cover in the ordinary manner. The second is the pivoted catch *J*, which engages with a staple or eye, *k*. The third is a link, *M*, hinged to a small bearing, *m*, within the box. This link, when turned down, is out of the way, but when turned up passes up through a slot, *m'*, in the cover, and is secured by any suitable form of padlock.

The first two of the locking devices which I have described are well known; but the last one is particularly advantageous in connection with this box, in that, by reason of the link *M* being hinged, it may be turned down, and so be out of the way when the parts are folded together.

In order to fold the box, the pins *F* are first taken out, the eye ends of the straps *E E* are sprung out enough to clear the sides *B B*, and the sides and ends are separated, the sides being bent out enough to disengage the dovetails *b' b'*, and the ends being then bent out sufficiently to allow the sides to pass inward. The front side is then laid down flat upon the bottom and the other side folded down upon it. The cover, which has been previously unhinged, is then laid upon the uppermost side, and the ends are folded down flat upon the cover, Figs. 4 and 5. The locking-pins are then inserted in some of the convenient eyes, to be out of the way.

Upon the end pieces I may secure any suitable form of handle. I have here designated one handle by *R*.

As a modification of the means I have heretofore shown for locking the parts together I may use those shown in Fig. 6.

The straps *D E*, instead of being provided with eyes, have slots *r* made in them. A long bar, *S*, is pushed through these slots and lies against the inner surface of the end. At one side it is secured by having its end turned at right angles, and at the other side by having a small pin or staple, *n*, fitted through it. In this modification I show a feature which I have heretofore referred to in connection with the sides—namely, the raising of the pintles of the hinges.

It will be observed that when applied to the ends, as shown in this figure, these latter may be raised high enough to fold down upon the sides, thus accomplishing the same result as the pivoted links *c c*.

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

1. In a box, the bottom *A*, in combination with the sides *B B*, hinged thereto, and the ends *C C*, hinged to the bottom by means of the links *c c*, pivoted to the ends and to the bottom, substantially as herein described.

2. In a box, the bottom *A*, in combination with the sides *B B*, having dovetails *b'* and hinged by hinges *b* to the bottom, and the ends *C C*, hinged to the bottom by pivoted links *c c*, and having notches or mortises *c'*, in which the dovetails *b'* of the sides fit, substantially as herein described.

3. In a box, the bottom *A*, in combination with the sides *B B*, hinged thereto, the ends *C C*, hinged by means of the pivoted links *c c*, and a means for locking the sides and ends together when raised to form the box, substantially as herein described.

4. In a box, the bottom *A*, in combination with the sides *B B*, hinged to the bottom, the ends *C C*, the pivoted links *c c*, hinging them to the bottom, and the means for locking the sides and ends together, consisting of the straps *D* on the sides, having eyes *d*, the straps *E* on the ends, having eyes *e*, and the pins *F*, passing through said eyes *d e*, substantially as herein described.

5. In a box, the bottom *A*, sides *B B*, and ends *C C*, hinged together substantially as described, in combination with the cover or lid *I* and the means for hinging it, consisting of the hooks *i'* and staples *i*, arranged as shown, and the means for locking its front, consisting of the hinged link *M* on the side *B*, the slot *m'* in the lid, and a padlock, all arranged substantially as herein described.

6. In a box, the bottom *A* and hinged sides *B B*, in combination with the hinged ends *C C* and the means for locking them to the sides, consisting of the straps *D E* on the sides and ends and suitable fastening devices, substantially as herein described.

In witness whereof I hereunto set my hand.
PARIDE CANESSA.

Witnesses:

WM. F. BOOTH,
S. H. NOURSE.