

No. 658,164.

Patented Sept. 18, 1900.

A. H. SULSER.

BOX COUCH.

(Application filed July 31, 1900.)

(No Model.)

3 Sheets—Sheet 1.

Fig. 1.

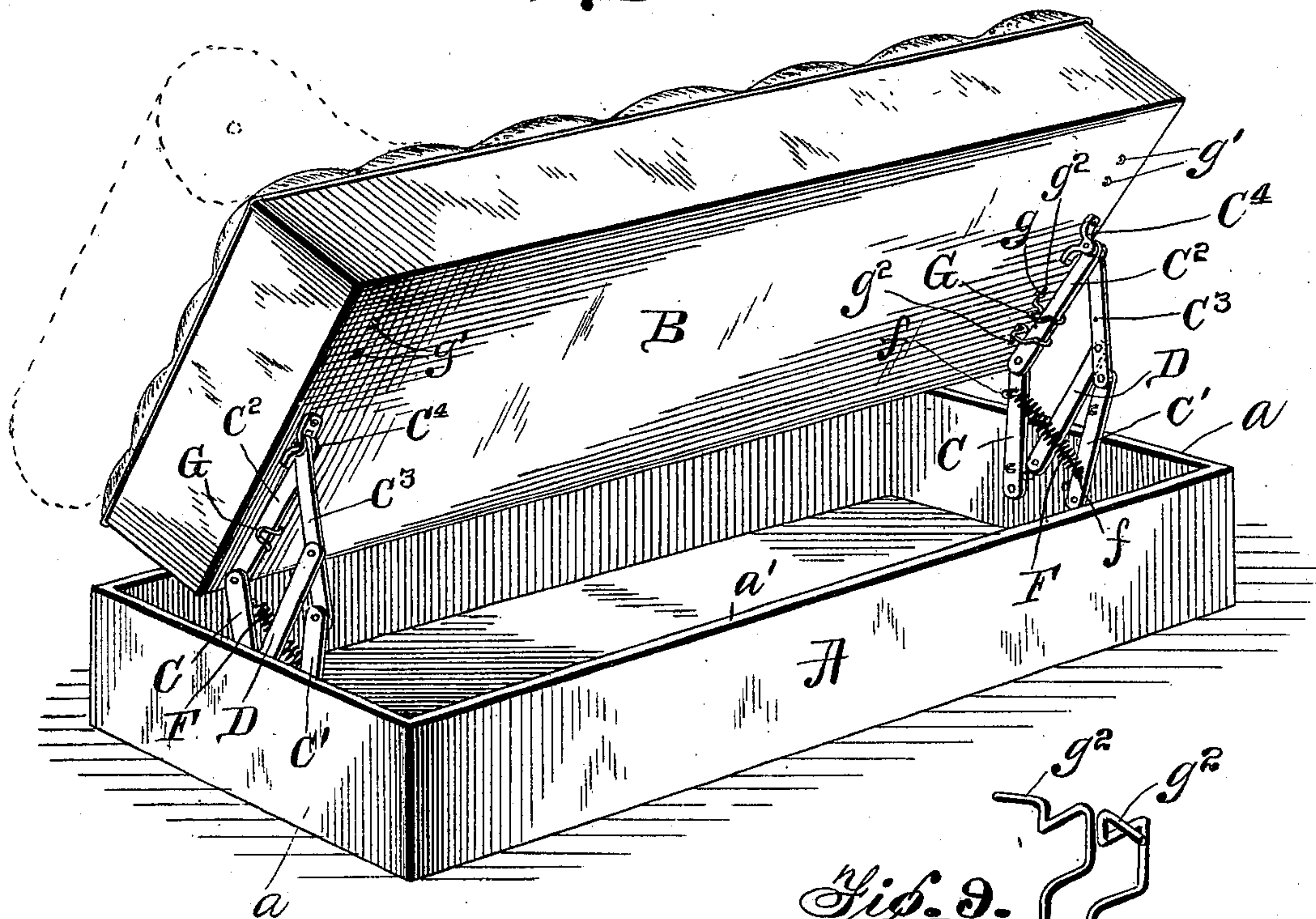


Fig. 9.

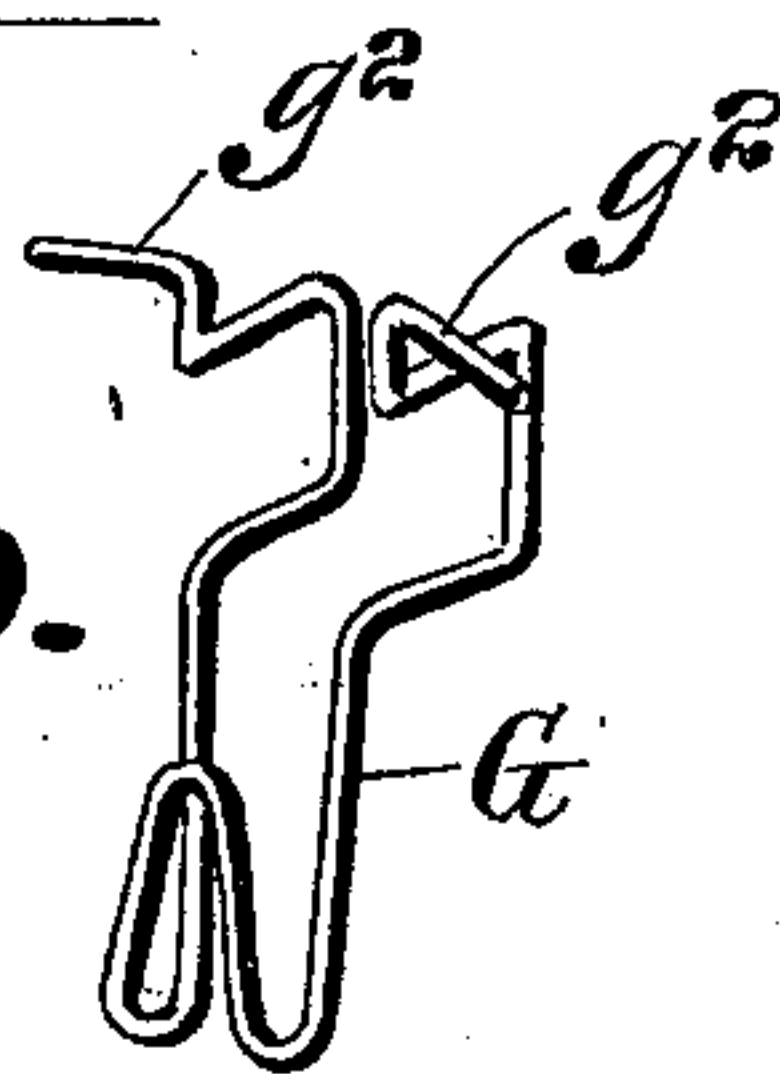
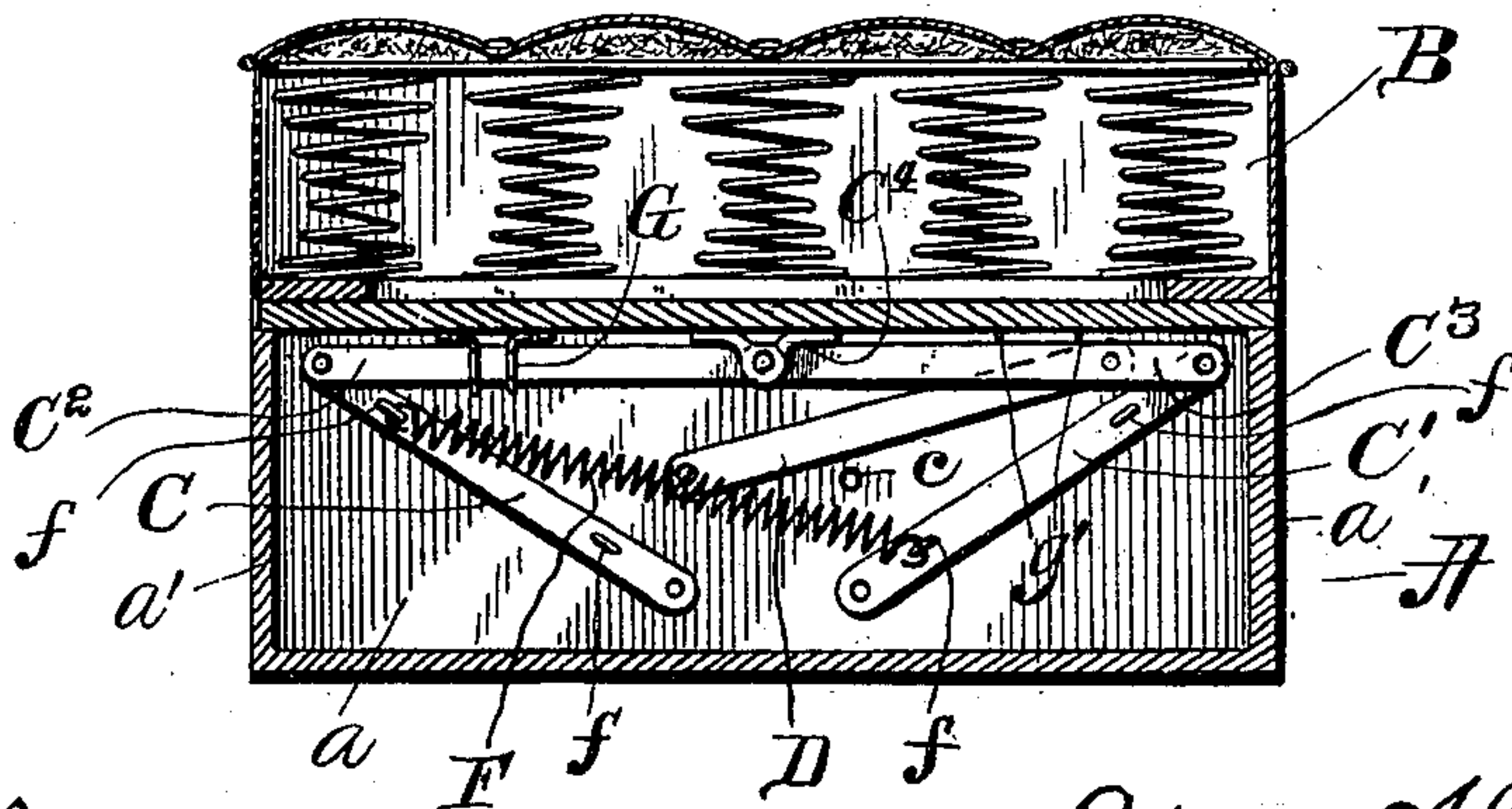


Fig. 2.



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Fig. 3.

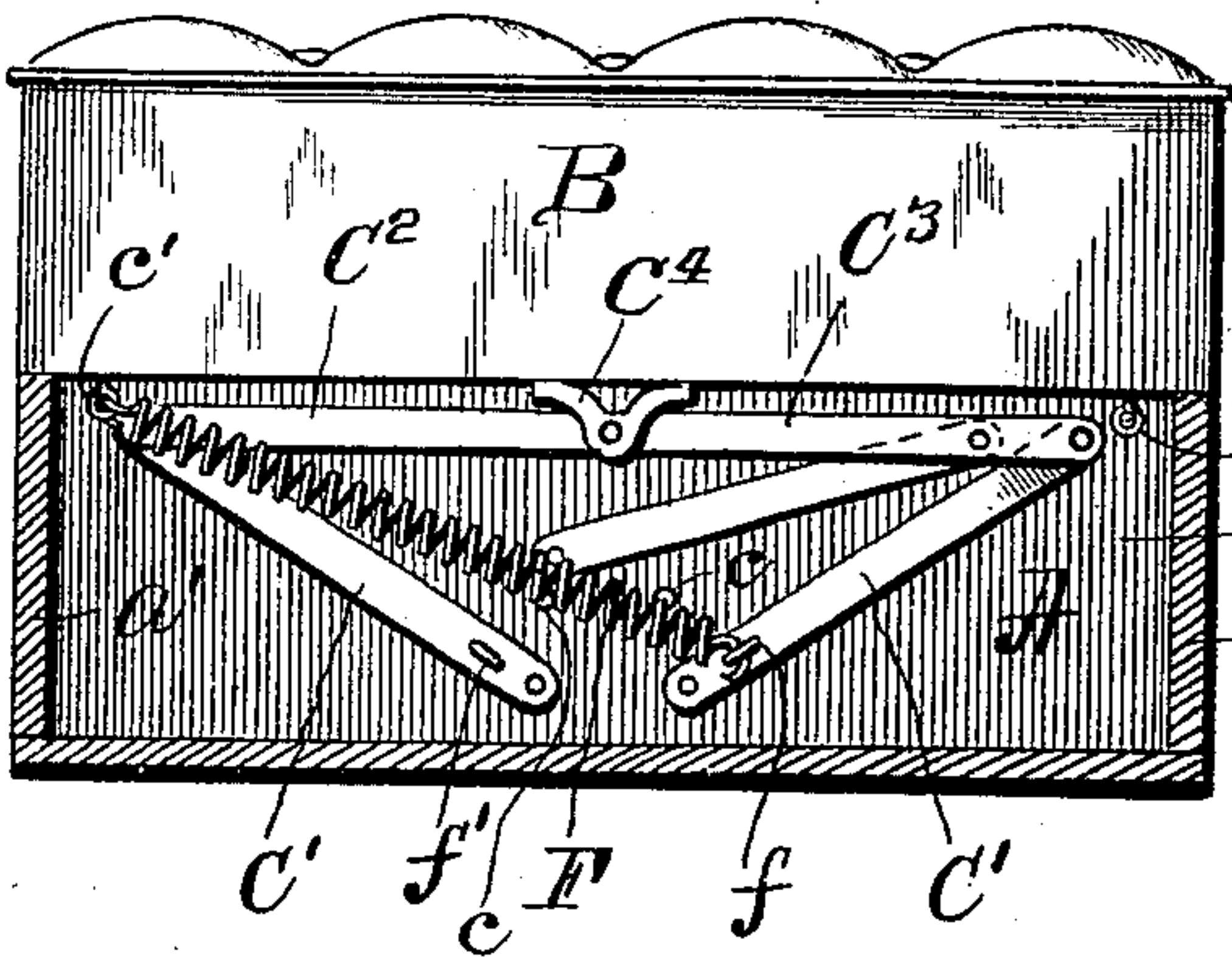


Fig. 4.

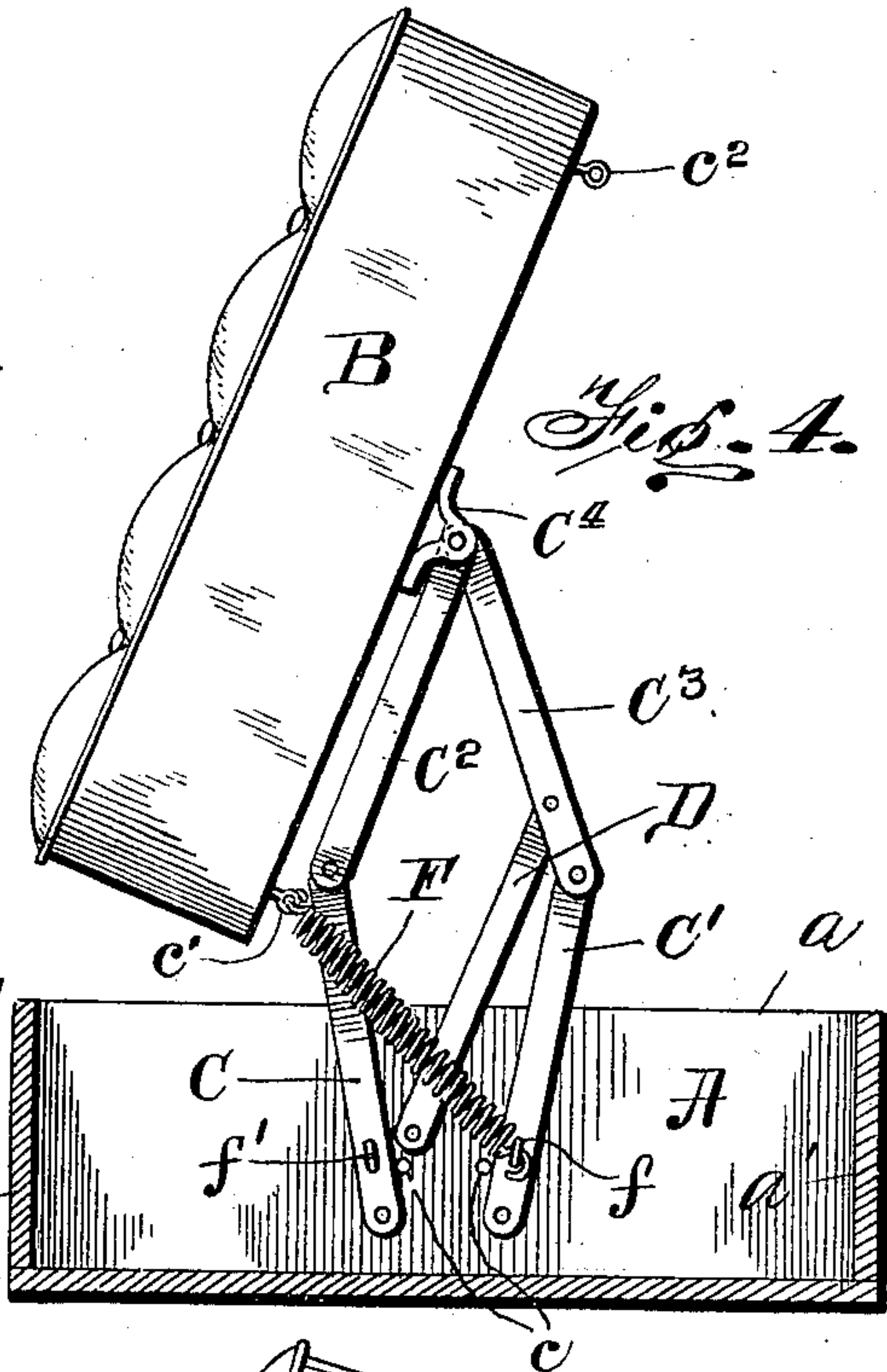


Fig. 5.

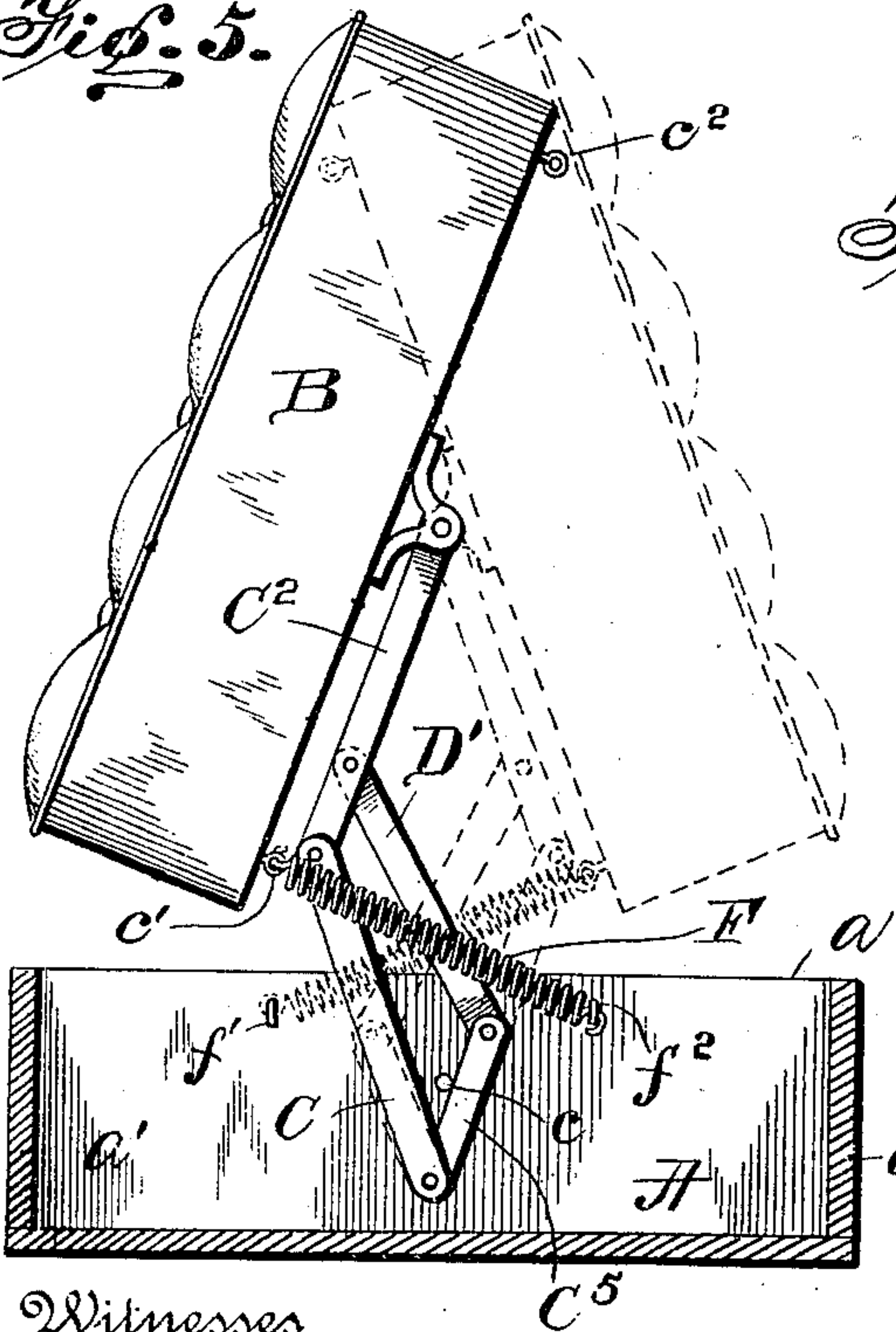
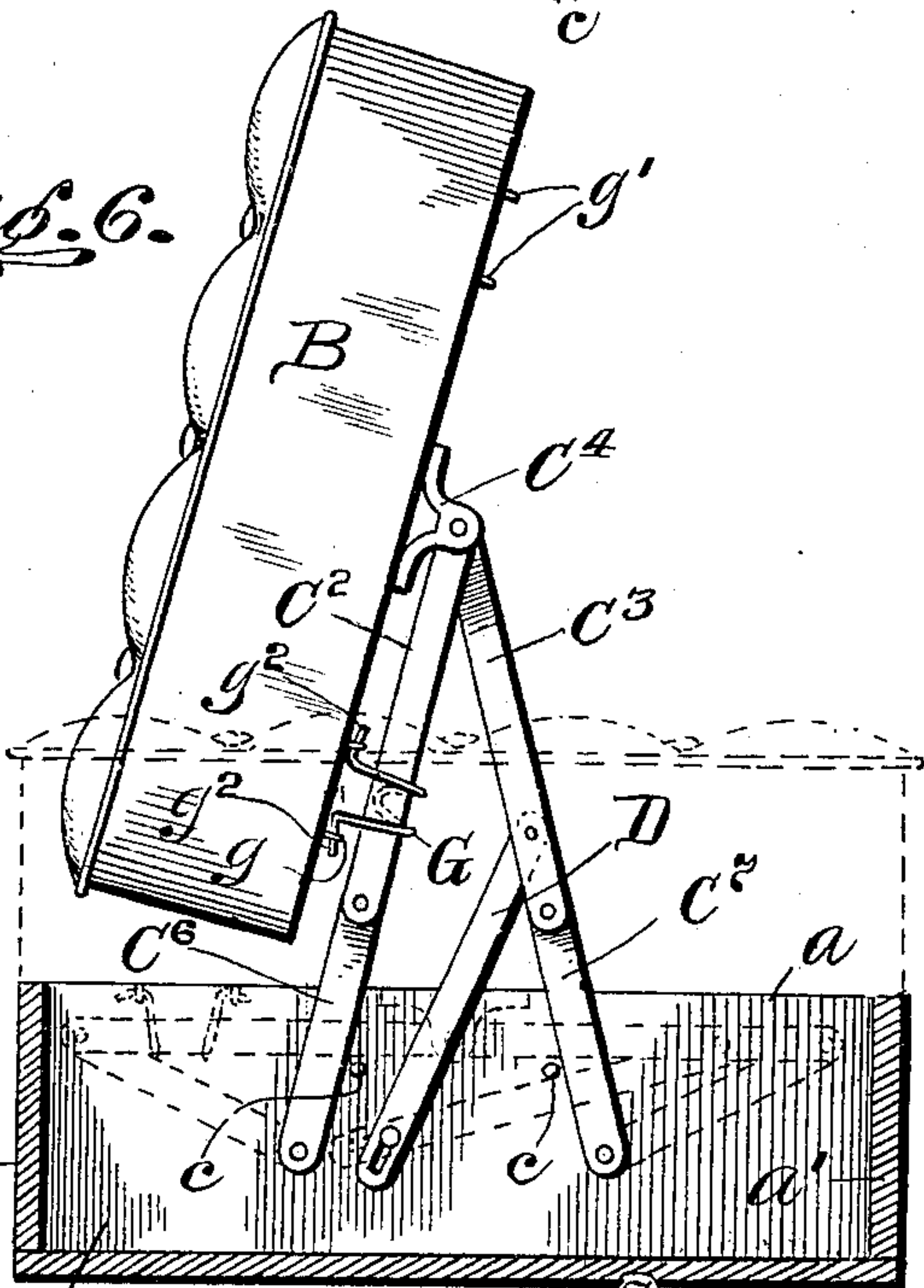


Fig. 6.



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3 Sheets—Sheet 3.

Fig. 2.

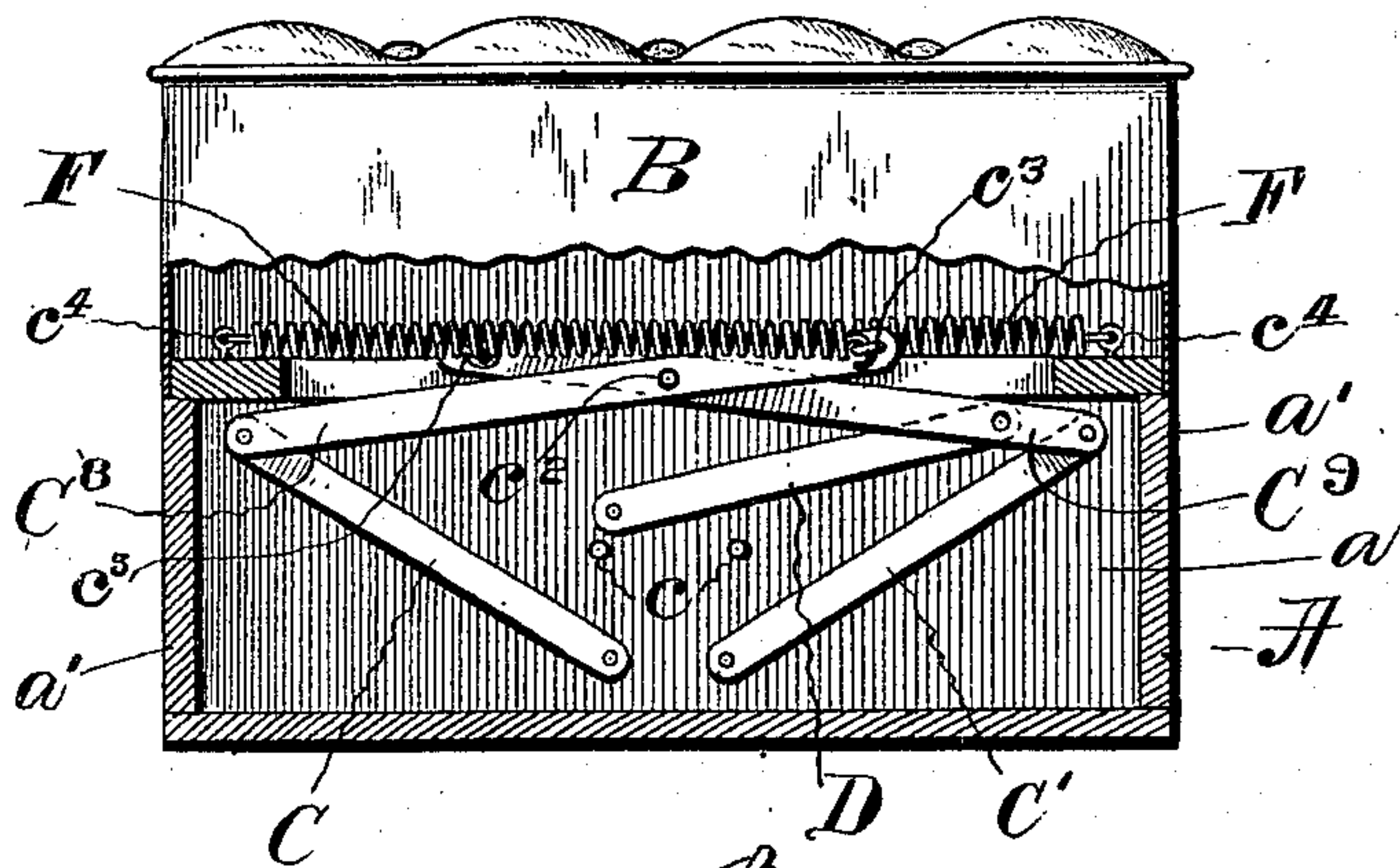
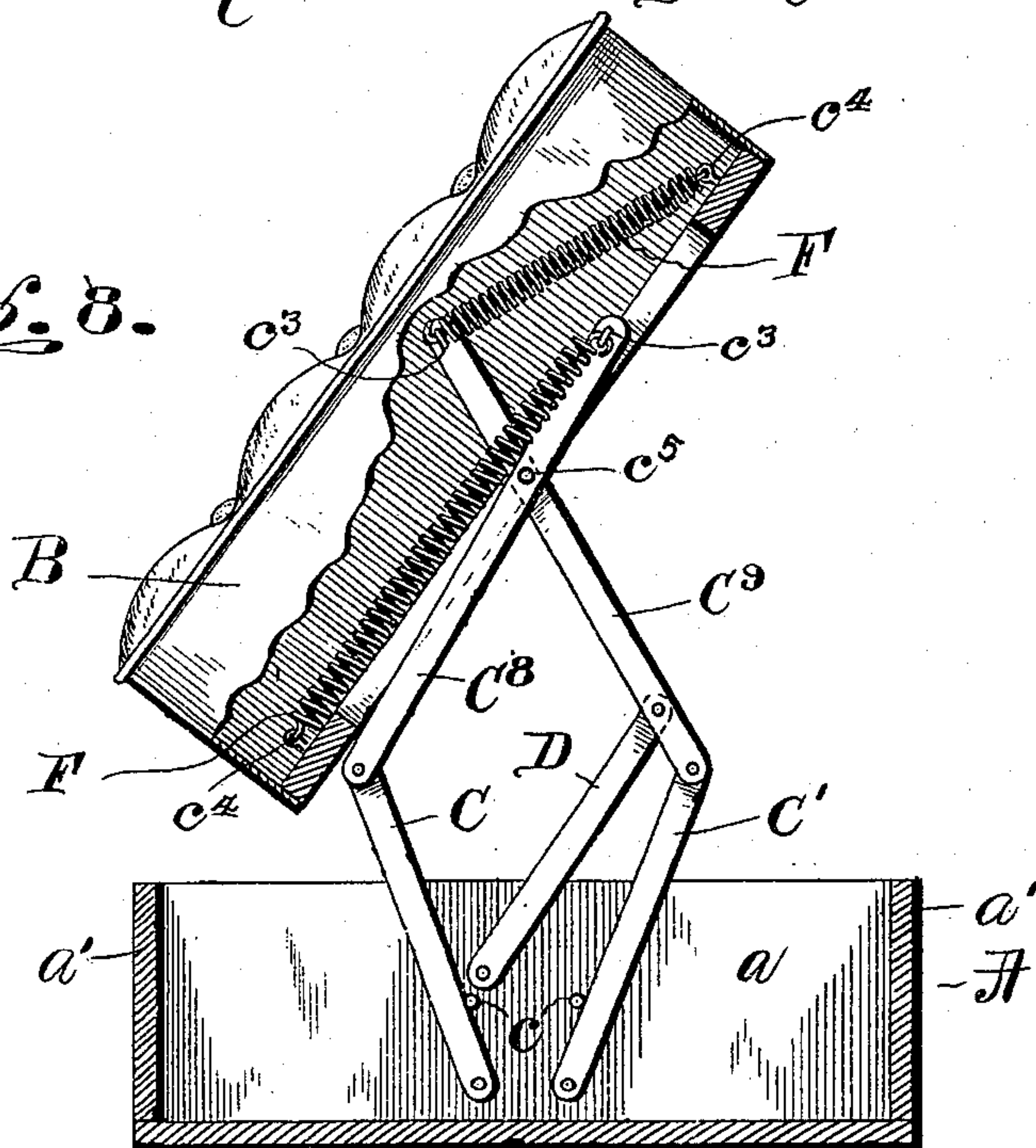


Fig. 8.



Witnesses

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UNITED STATES PATENT OFFICE.

ADAM H. SULSER, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR OF
ONE-HALF TO A. J. HASKE, OF SAME PLACE.

BOX-COUCH.

SPECIFICATION forming part of Letters Patent No. 658,164, dated September 18, 1900.

Application filed July 31, 1900. Serial No. 25,453. (No model.)

To all whom it may concern:

Be it known that I, ADAM H. SULSER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Box-Couches, of which the following is a specification.

This invention relates to improvements in box-couches, and more particularly to the mechanism for opening and closing the same.

So far as I am informed box-couches as heretofore constructed have been capable of the opening of the top or cover from one side only. In many instances these couches are made with a fixed head-roll or pillow-roll, and in such constructions it is requisite that the rear side of the couch be placed adjacent to the wall, as otherwise the opening of the couch to have access to the contents will cause considerable inconvenience and annoyance.

The broad purpose of the present invention is to produce a couch of this character having a head or pillow roll or otherwise that may be used in any position preferred in an apartment and access to the contents whereof may be had from either side thereof.

Another object is to provide a couch the cover of which may be raised or lowered without withdrawing the couch from the wall against which it may be standing.

With the above-stated objects in view the invention consists in certain novel features of construction and combinations of parts, the essential elements of which are set forth in the appended claims and a preferred form of embodiment of which is specifically described hereinafter and illustrated in the accompanying drawings.

Referring to the drawings, in which similar letters of reference are used to denote similar parts in each of the several views, Figure 1 represents in perspective one form of the invention with the cover raised. Fig. 2 is a cross-section of the device shown in Fig. 1 with the cover closed. Fig. 3 is a cross-section showing different connections of the spring. Fig. 4 is a cross-section of the device shown in Fig. 3 with the cover raised. Fig. 5 is a sectional view of a modified arrangement of links and spring. Fig. 6 is a sectional view of the invention wherein the use of a spring

is dispensed with. Fig. 7 is a cross-section illustrating another arrangement of the links. Fig. 8 is a similar view showing the cover raised, and Fig. 9 is a detail perspective view of the hook or catch used in connection with the mechanism shown in Figs. 1, 2, and 6.

Generally speaking, the base and top or cover of the couch are connected by systems of pivoted links, there being one set or system at each end. The lower links of the system at each end of the couch are pivoted at their lower ends on studs projecting inward from the couch ends, the upper ends of said links being pivotally connected to one end of the upper links of the system, the opposite ends of said upper links being pivotally attached to the couch-cover at about its longitudinal center, so that either edge of said cover may be raised, the pivots of the upper links constituting a vertically-movable fulcrum, thereby permitting the other edge of the cover to swing inward over the base, so that the couch may be opened when shoved snugly against a wall or partition.

Since the systems of links at the opposite ends of the couch are identical, I will confine my description to the system at one end only to avoid prolixity.

Referring more particularly to Figs. 1 and 2, A indicates the base, and B the cover, of the couch. To the inner side of each end a of the base, at equal distances from the sides a' , are pivoted the lower ends of the lower rods or links $C C'$. The opposite ends of said links are pivoted to the upper links $C^2 C^3$, respectively, the upper ends of the latter links being pivotally secured in any desired manner at the approximate longitudinal center of the under side of the cover, as indicated at C^4 . To the upper link C^3 is pivotally connected the brace-rod D, having its lower end pivoted to the inner side of the base of the couch. A spring F extends between the links C and C' and is connected to the same by means of the screw-eyes or hooks $f f$.

$g g'$ denote screw-eyes or hooks secured to the bottom of the cover approximately on a line with the point of connection of the upper links $C^2 C^3$ with the cover and at opposite sides thereof, adapted to receive the legs $g^2 g^2$ of the catch G. The purpose of this con-

struction is that the hook G may be engaged with either link C² or C³ when the cover is in an elevated position, and thus, in conjunction with the spring, securely hold the cover in its elevated position. While the catch G is a convenient form of device for this purpose, it will be understood that other means may be employed and accomplish the same end, such as slide-bolts or turn-buttons permanently attached to the cover at the points occupied by the screw-eyes shown. Stops c c are secured to the ends a at appropriate points and serve to limit the movement of the lower links C C', and thus determine the height to which the cover B may be raised. When it is desired that the cover be opened in the direction opposite to that shown in Fig. 1 and retained in that position, the legs of the catch G are disengaged from the screw-eyes g and connected with the link C³ and the screw-eyes g'.

Referring to Figs. 3 and 4, the connecting-links are identical with those shown in Figs. 1 and 2. The spring F, however, instead of being connected to the link C at one end is hooked onto a screw-eye or staple c' in the bottom of the cover. As will be observed, in this form I dispense with the use of the catch or hook G and accomplish the same end. Screw-eyes or staples c² are provided in order that the spring F may extend from the staple c² to staple f' of the link C. In order to maintain the cover in an open position opposite to that indicated in these figures, the spring is disengaged from the eye c' and connected to the eye c² on the opposite edge of the cover, also disconnecting the end of the spring from the eye f' on the link C' and attaching it to the eye f' on the link C. In the form shown in Fig. 5 the link C⁵ is shorter and the brace-rod D' is pivoted to its upper end instead of to the base of the couch. The link C³ is dispensed with in this form and the spring F is secured at one end to a screw-eye c' in the bottom of the cover and at the other end to the screw-eye f² in the base portion. When it is desired to open the couch in the direction opposite to that shown, the stop c and spring F are removed and link C⁵ is shifted behind the link C, and the stop is then replaced, the links C and C², the brace-rod D', and the spring then being shifted to the positions indicated in dotted lines. The shifting of the parts as described is not essential, but preferable, as affording greater ease of access of the base.

In Fig. 6 I have shown a modification wherein I dispense entirely with the use of the spring. In this figure the links C⁶ C⁷ are somewhat shorter and are pivoted to the base at a greater distance apart than those shown in Figs. 1 to 4, having their upper ends pivoted to the links C² C³, respectively, and the latter links being pivotally connected to the bottom of the cover, as hereinbefore described. The brace-rod D extends from the link C³ to the base. The position assumed

by the operating mechanism when the couch is closed is that indicated in dotted lines.

In the form shown in Figs. 7 and 8 the links C⁸ C⁹ cross each other and are pivoted to the lower edge of the cover and to each other, as at c⁵. The upper ends are extended beyond the pivot and are provided with hooks or eyes c³, to which are attached one end of the spring F, the other end of which is secured to the hook or eye c⁴ on the inner sides of the bottom of the cover. It will be observed that in this form two springs are always attached to the system of links. However, one spring only operates at a time, depending upon the side from which the couch is opened.

It will be understood that the spring F, described herein, is not essential to the operation of the device, its purpose being, first, to assist in raising the cover, and, secondly, to maintain the cover in its raised position; but the system of links is always effective for the purpose of enabling the cover to be raised from either side whether the spring be employed or not.

The operation of the invention will be readily understood from the foregoing description.

It will now be seen that the operating mechanism such as here shown and described is well calculated to accomplish the objects primarily stated. However, it is to be understood that the invention here disclosed is capable of being embodied in other forms than that in which I have preferred to show it in the present case.

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

1. In a box-couch, the combination of a base and cover and means whereby the cover may be raised vertically and opened from either side thereof.

2. In a box-couch, the combination of a base and cover and a pivoted system of rods or links connecting the base and cover whereby the cover may be raised vertically and opened from either side thereof.

3. In a box-couch, the combination of a base and cover and a pivoted system of rods or links connecting the base and cover whereby the cover may be raised vertically and opened from either side thereof, embracing a brace-rod attached at one end to a link and at the other end to the base of the couch.

4. In a box-couch, the combination of a base and cover and a pivoted system of rods or links connecting the base and cover whereby the cover may be raised vertically and opened from either side thereof, and a spring tending to raise the cover.

5. In a box-couch, the combination of a base and cover and a pivoted system of rods or links connecting the base and cover whereby the cover may be raised vertically and opened from either side thereof, a spring tending to raise the cover, and means to limit the movement of the links.

6. In a box-couch, the combination of a base and cover and a pivoted system of rods or links connecting the base and cover whereby the cover may be raised vertically and opened from either side thereof, a spring attached at one end to a link of the system of links tending to raise the cover.

7. In a box-couch, the combination of a base and cover and a pivoted system of rods or links connecting the base and cover whereby the cover may be raised vertically and opened from either side thereof, a spring attached at one end to a link of the system of links tending to raise the cover, and means to limit the movement of the links.

8. In a box-couch, the combination of a base and cover and a pivoted system of rods or links connecting the base and cover whereby the cover may be raised vertically and opened from either side thereof, a spring connected to one of the lower links of the system tending to raise the cover, and means to limit the movement of the links.

9. A box-couch comprising a base and cover, a connected series of rods or links pivoted respectively to the base and cover and to each other, a brace-rod pivoted at one end to the base of the couch and at the other end to a link.

10. A box-couch comprising a base and cover, a connected series of rods or links pivoted respectively to the base and cover and to each other, a brace-rod pivoted at one end to the base of the couch and at the other end to a link, and adjustable means adapted to connect the top or cover with one of the upper links of the system.

11. A box-couch comprising a base and cover, rods or links pivoted to the base, said links each pivoted to a rod or link the opposite ends of which are pivotally connected to the cover, a brace-rod connecting the base with one of the connecting-links, a spring

tending to raise the cover, and means limiting the movement of the links.

12. A box-couch comprising a base and cover, rods or links pivoted to the base, said links each pivoted to a rod or link the opposite ends of which are pivotally connected to the cover, a brace-rod connecting the base with one of the connecting-links, a spring attached at one end to one of the links tending to raise the cover, and means limiting the movement of the links.

13. A box-couch comprising a base and cover, rods or links pivoted to the base, said links each pivoted to a rod or link the opposite ends of which are pivotally connected to the cover, a brace-rod connecting the base with one of the connecting-links, a spring connecting the lower links, and means to limit the movement of the links.

14. A box-couch comprising a base and cover, a connected series of rods or links pivoted respectively to the base and cover and to each other, a brace-rod pivoted at one end to the base of the couch and at the other end to a link, a spring connecting the lower links of the series, and adjustable means connecting the top or cover with one of the upper links.

15. A box-couch comprising a base and cover, rods or links pivoted to the base, an upper rod or link pivoted to one of said last-named links and to the cover, a brace-rod pivotally connected to the other of said links and to the upper rod or link, a spring tending to raise the cover, and means to limit the movement of the links.

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

ADAM H. SULSER.

Witnesses:

A. J. HASKE,
R. S. BELEW.