

(No Model.)

3 Sheets—Sheet 1.

H. R. PLIMPTON.

SOFA BED.

No. 271,919.

Patented Feb. 6, 1883.

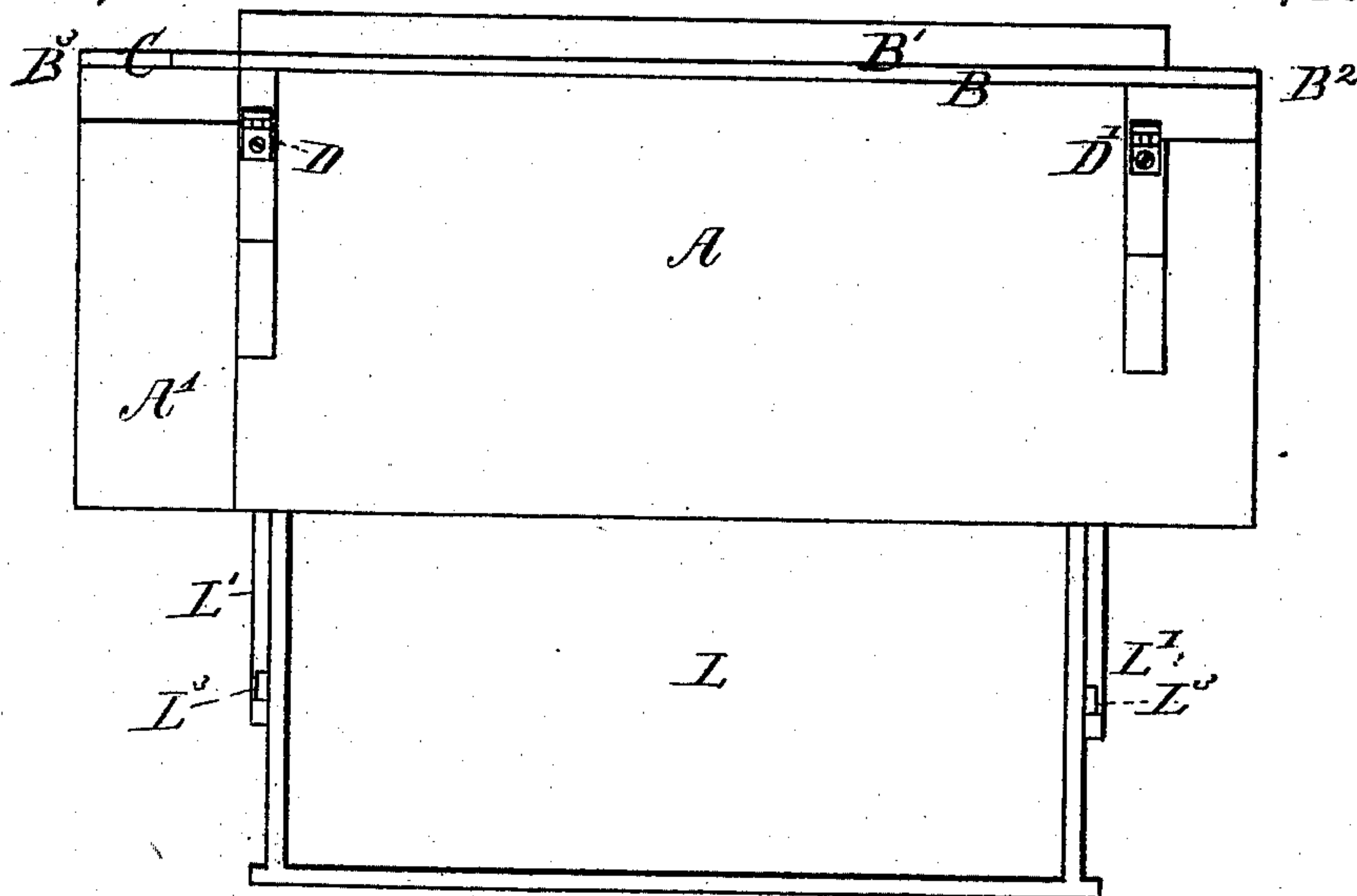


Fig. 1.

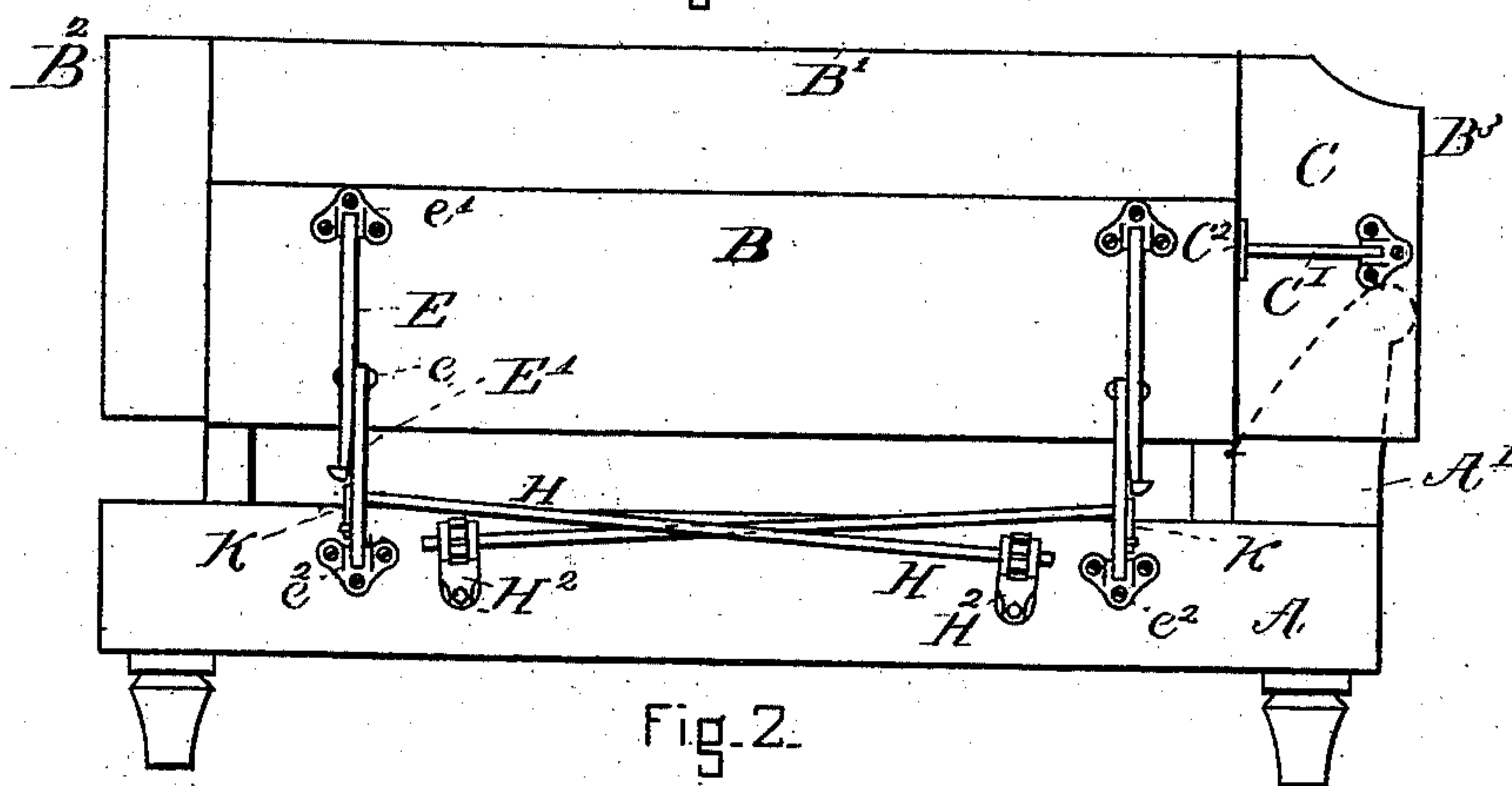


Fig. 2.

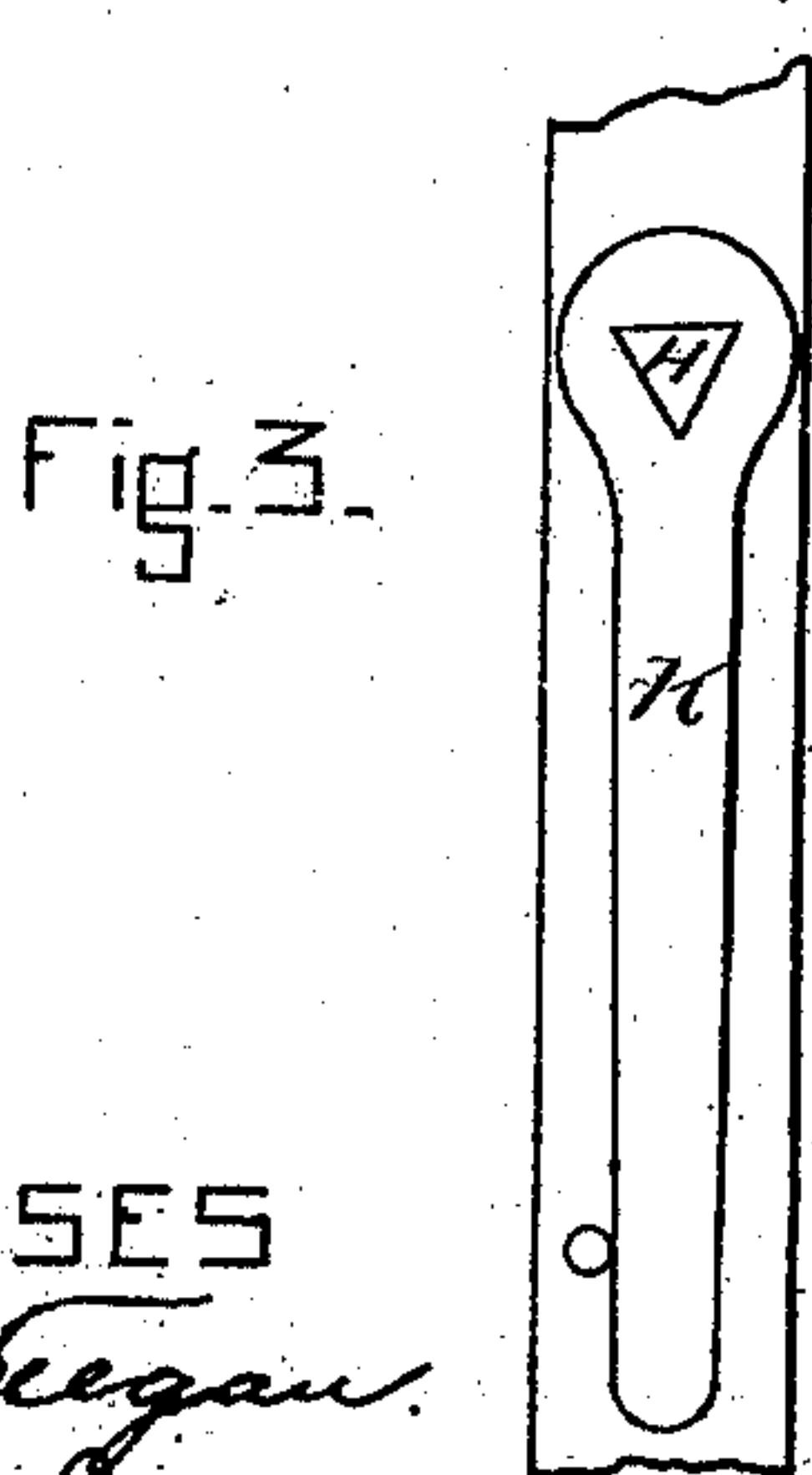


Fig. 3.

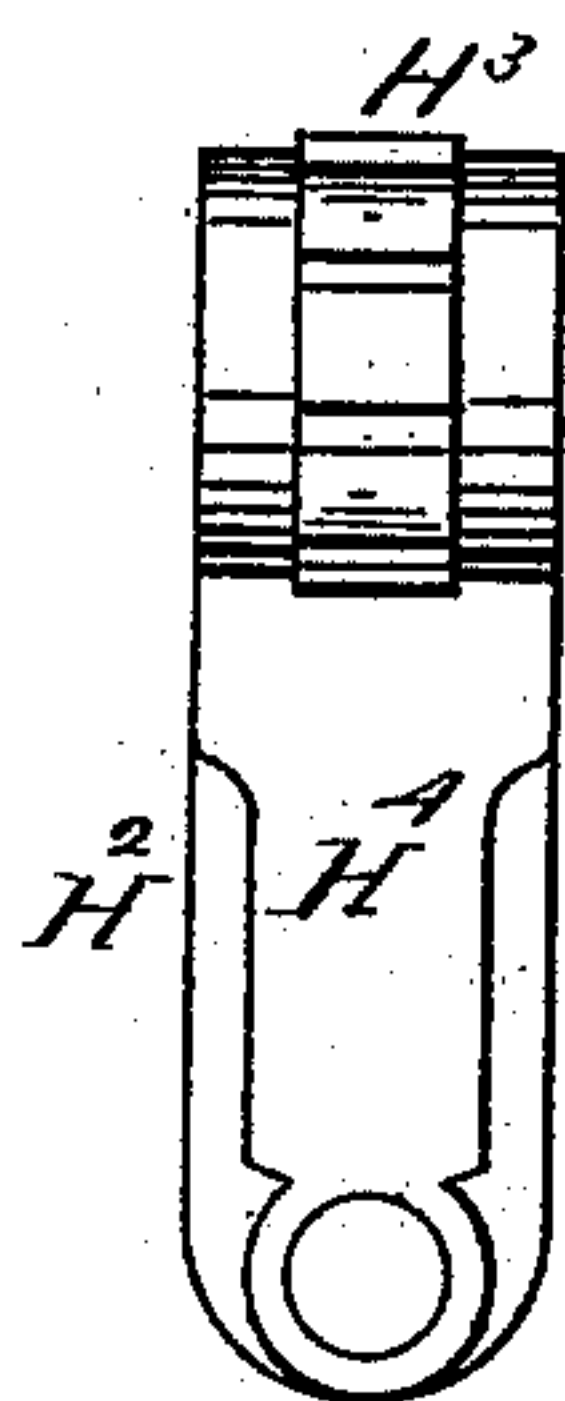


Fig. 4.

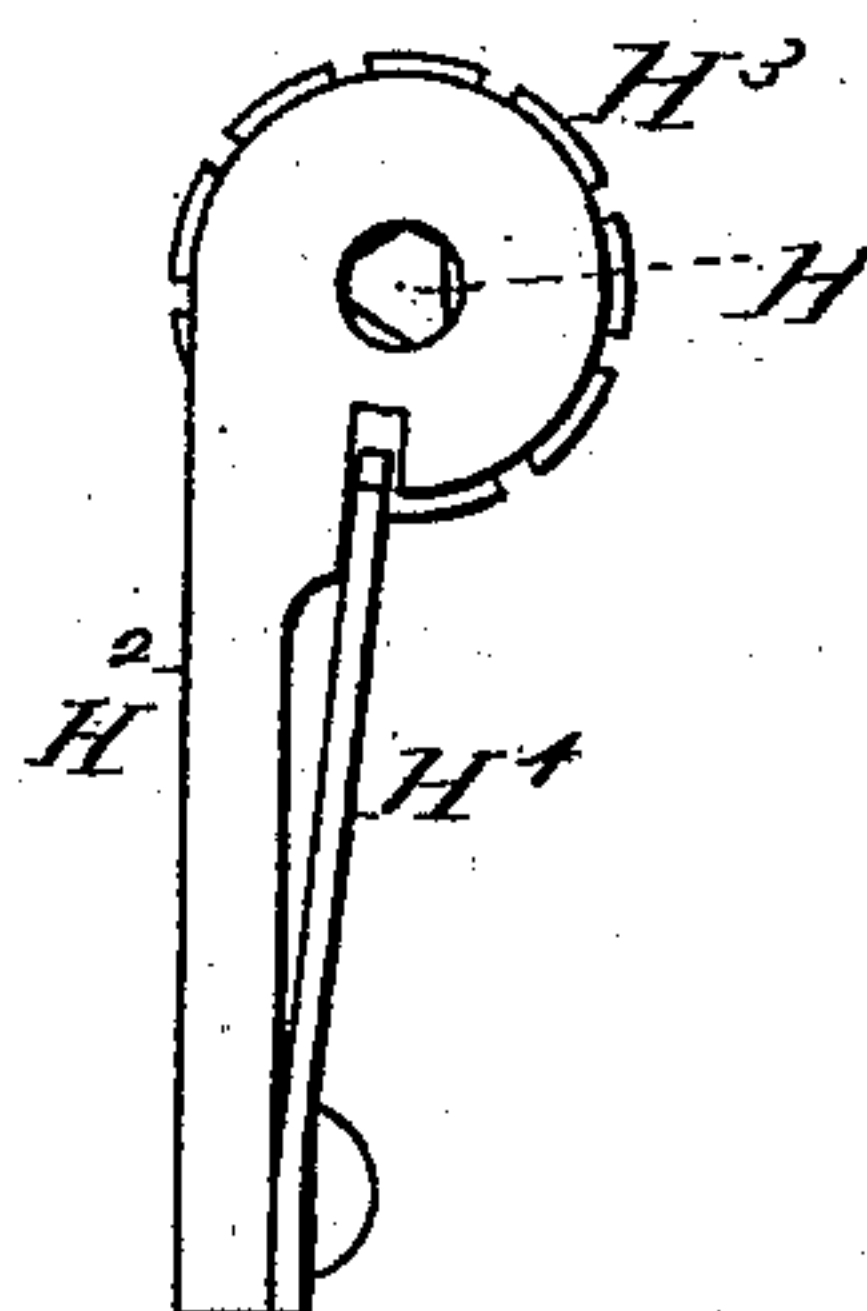


Fig. 5.

WITNESSES

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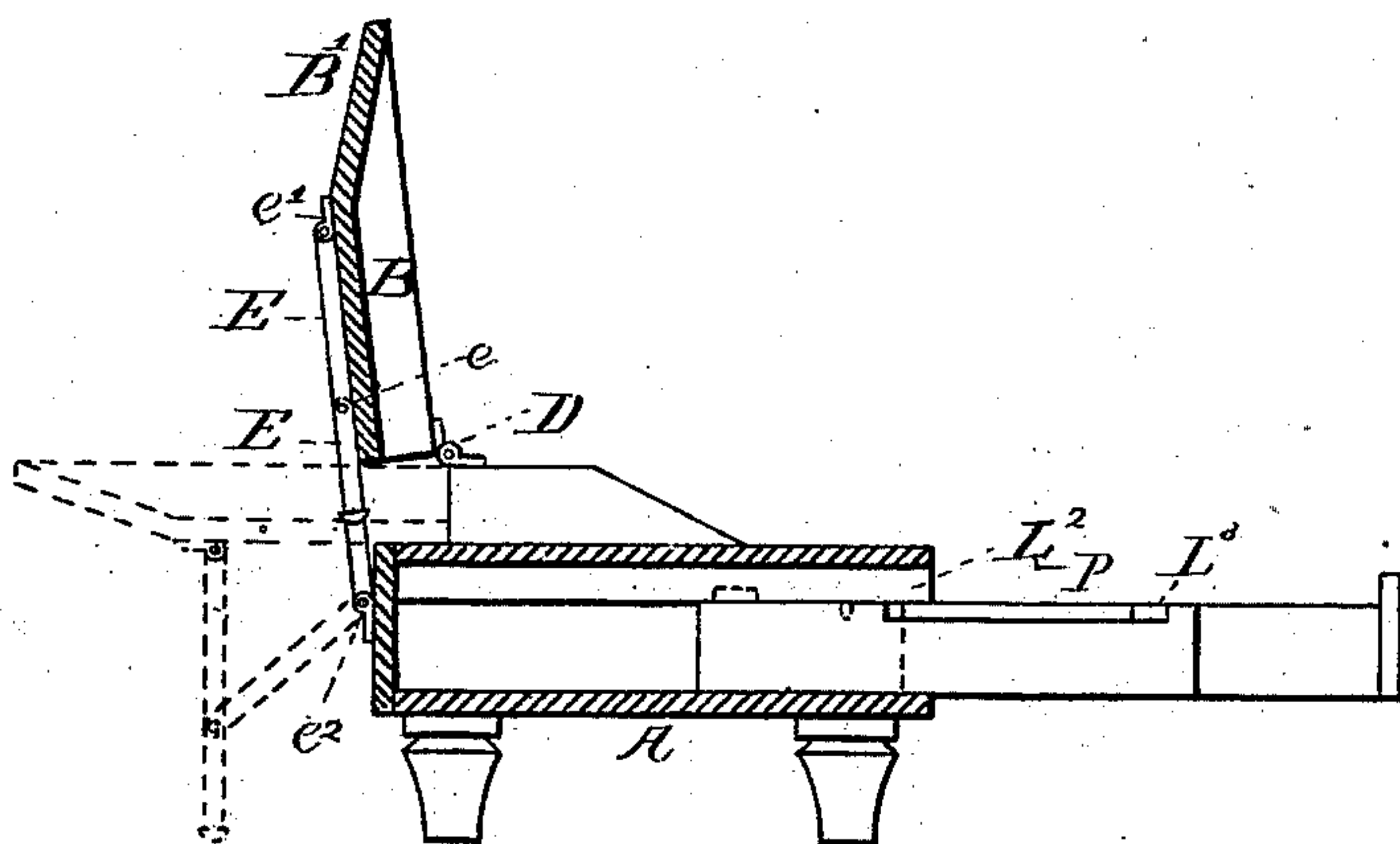


Fig. 6.

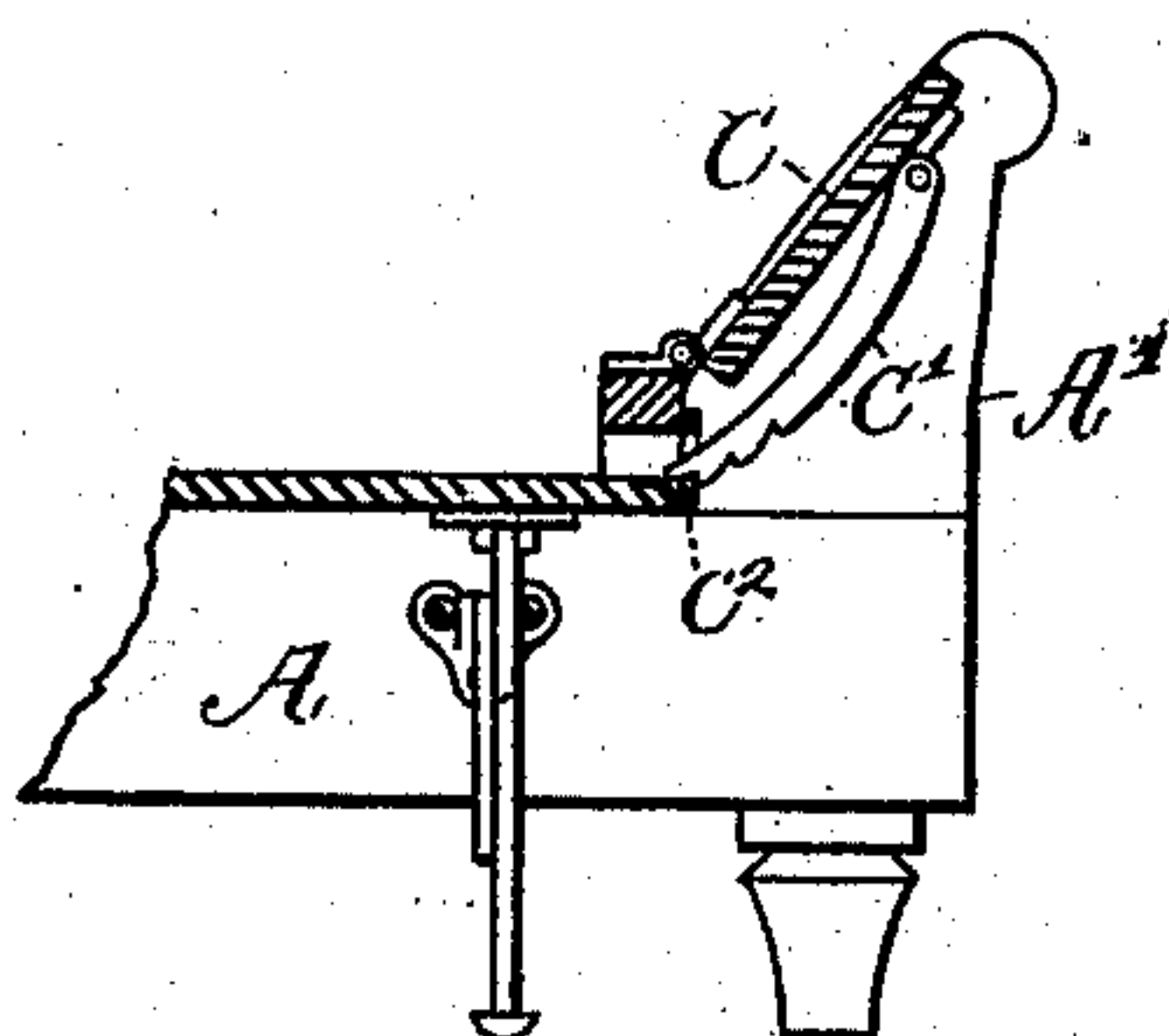


Fig. 7.

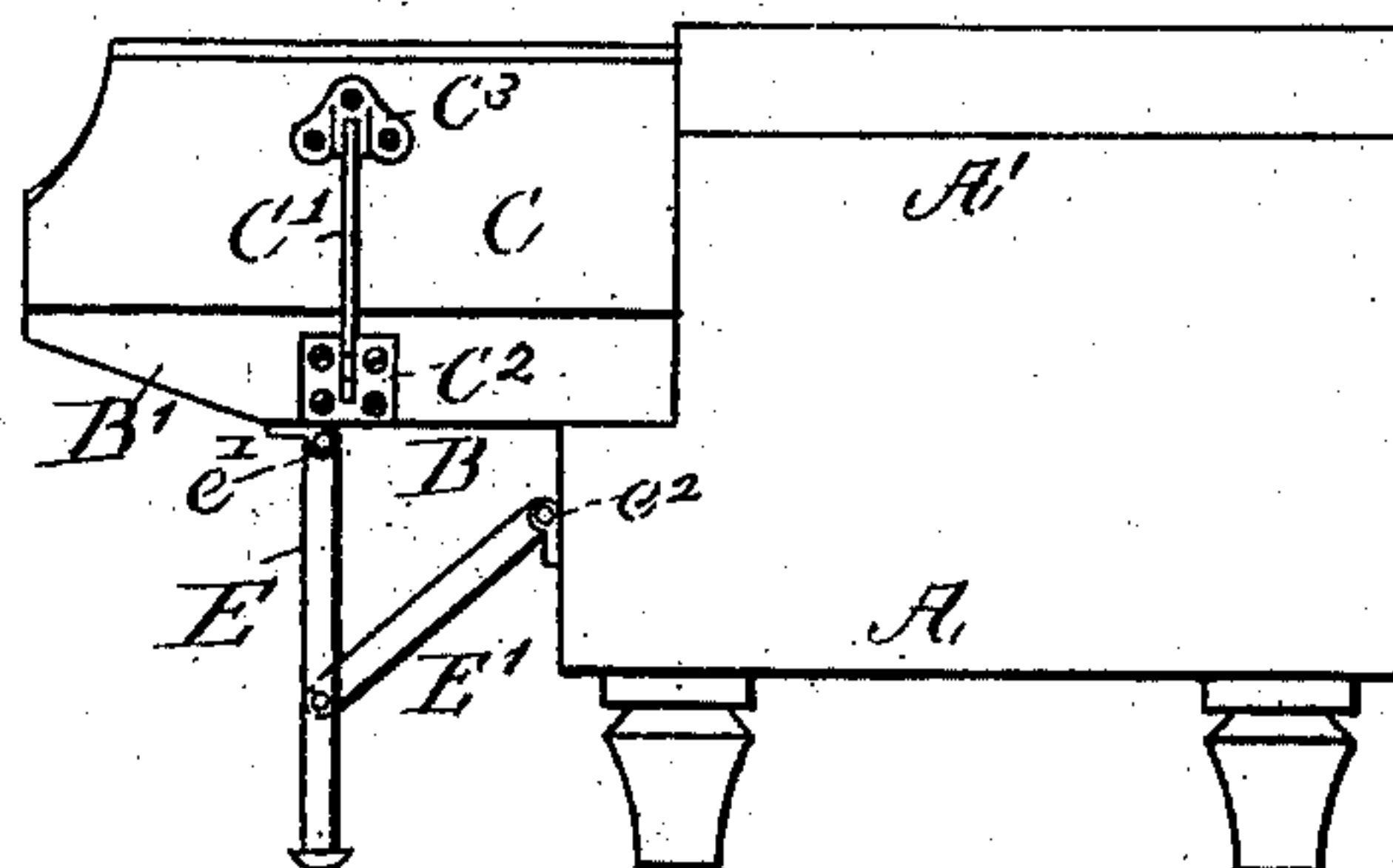


Fig. 8.

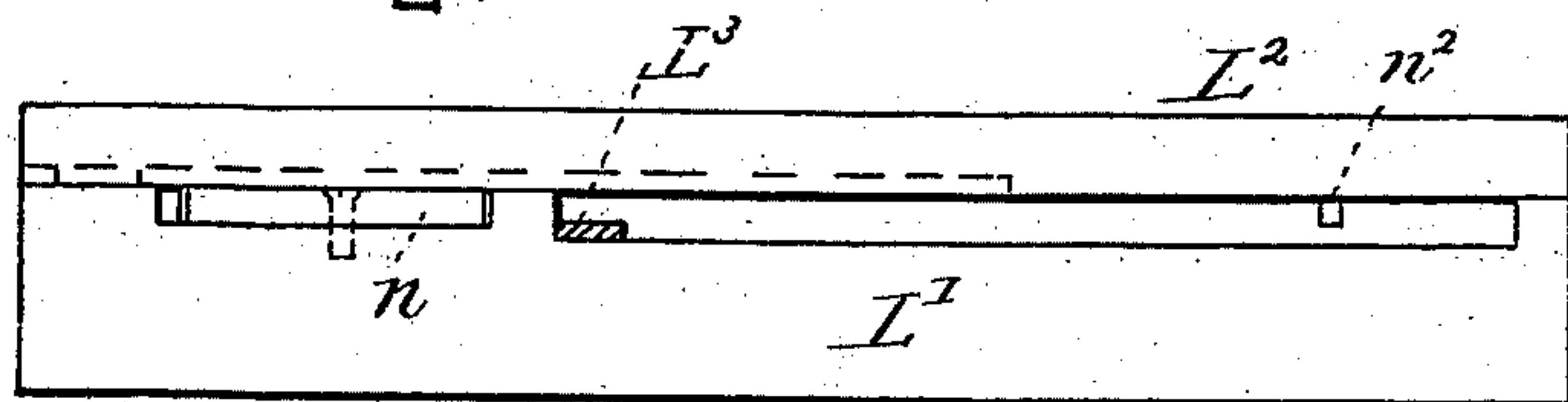


Fig. 9.

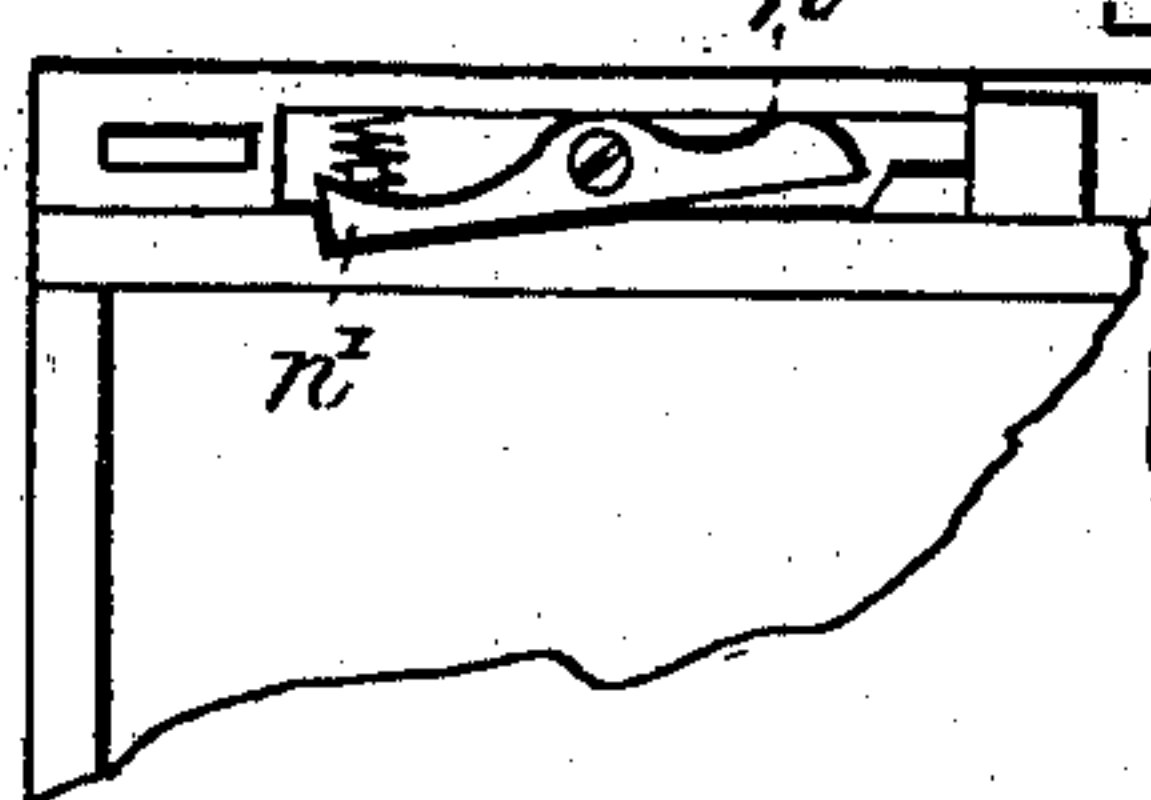


Fig. 10.

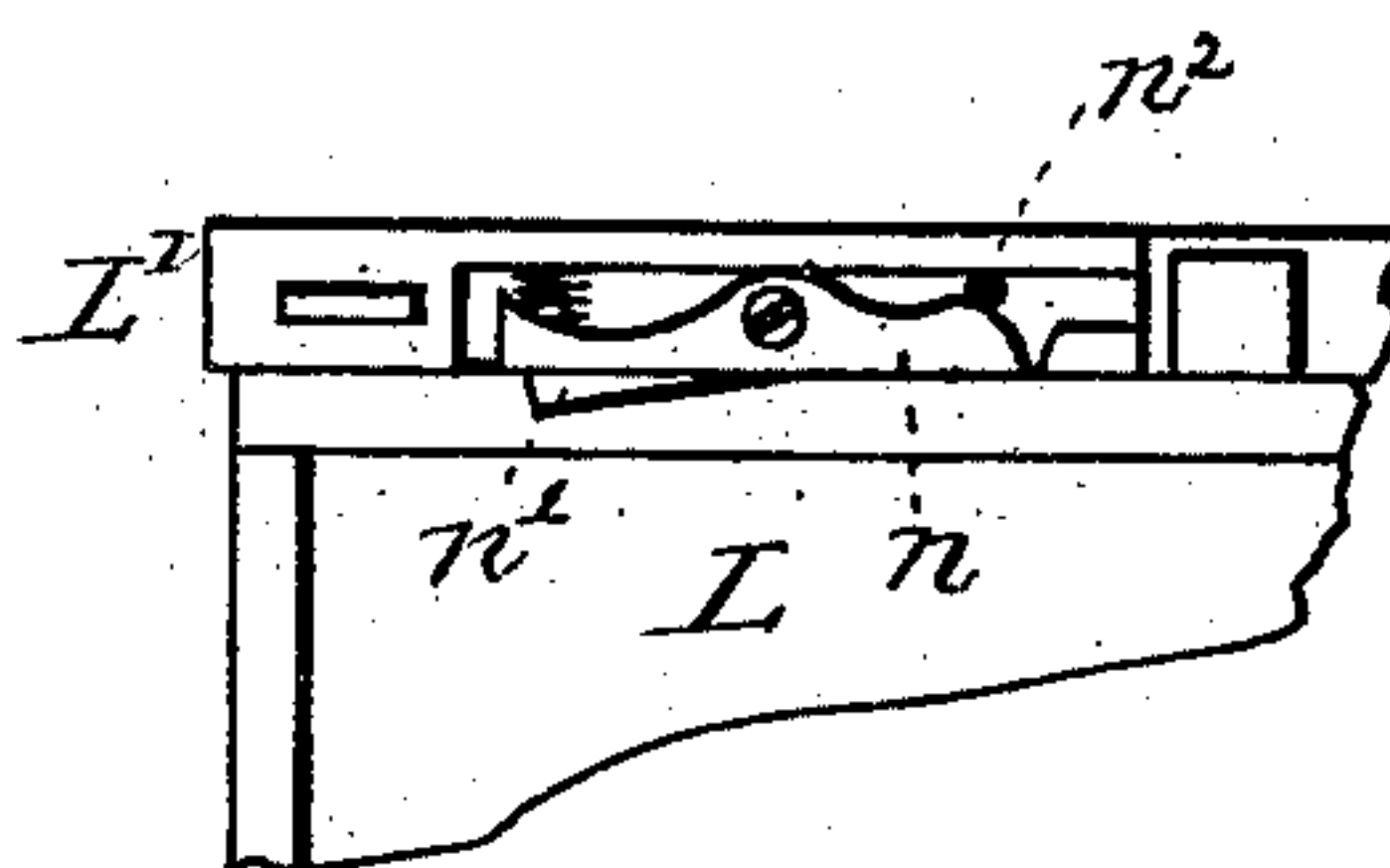


Fig. 11.

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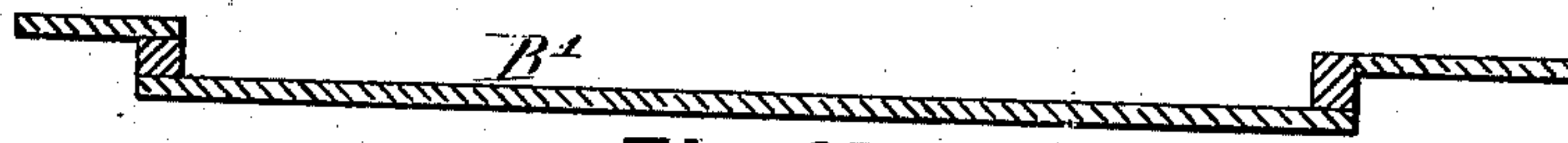


Fig. 12.

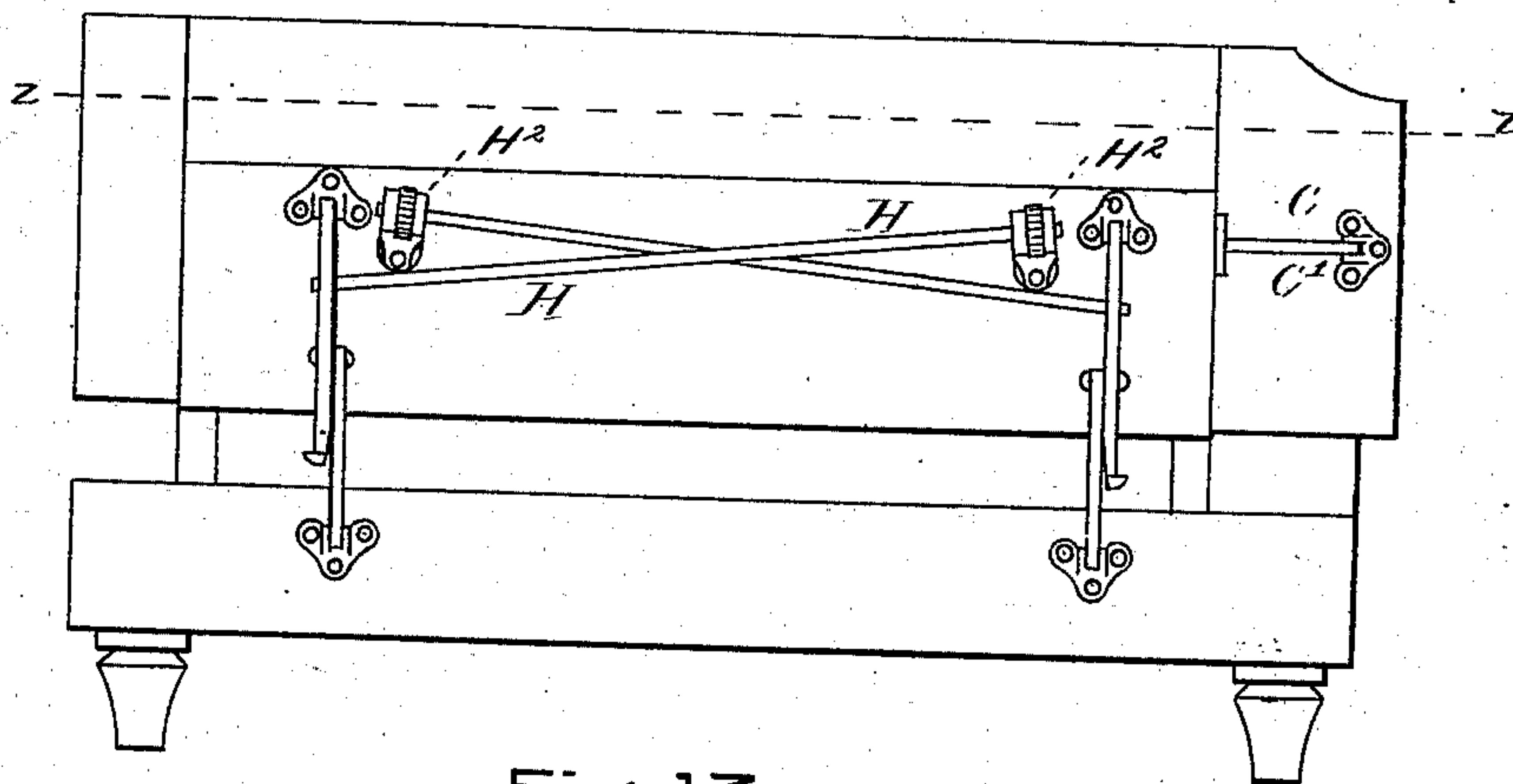


Fig. 13.

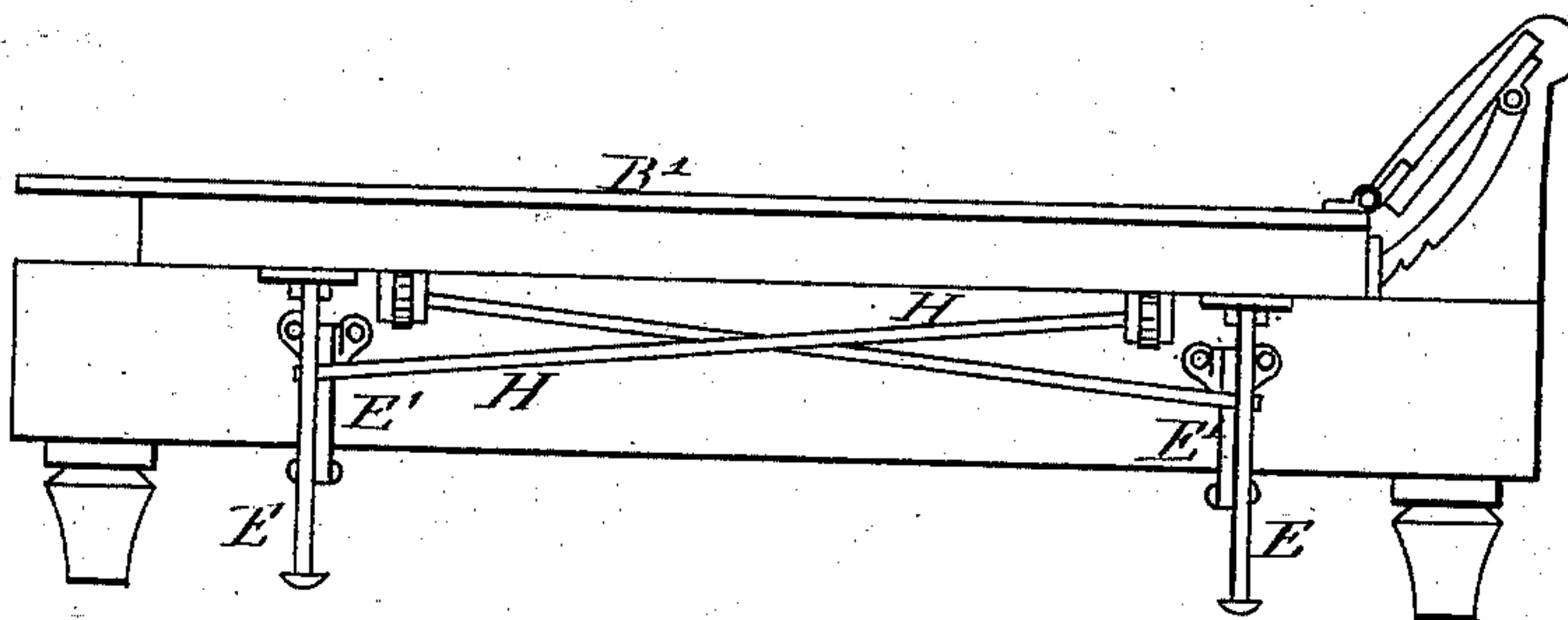


Fig. 14.

WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY R. PLIMPTON, OF BOSTON, MASSACHUSETTS.

SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 271,919, dated February 6, 1883.

Application filed September 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY RICHARDSON PLIMPTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Sofa-Beds, of which the following is a specification.

My invention relates to that class of lounges or sofas the backs of which may be so adjusted as to convert the article into a bed, the object being to so improve the construction that when the back is turned up the edge and end of the same appear thin, and in this respect resemble an ordinary sofa or lounge. It also projects less from the wall.

Another object of my invention is to so improve the back-supporting device that the back may be easily raised and held in place and the back-supporting legs properly braced. These and other minor objects are attained by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a plan, showing a crib-drawer as it appears when it is drawn out. Fig. 2 is a rear elevation. Figs. 3, 4, 5 show in detail parts of the spring used for balancing the weight of the back. Fig. 6 is a cross-section, showing the back up in full lines, and down in dotted lines. Fig. 7 is a longitudinal vertical section, showing one end of my lounge. Fig. 8 is an end elevation of the lounge. Figs. 9, 10, and 11 show in detail the devices used for supporting the drawer-crib. Fig. 12 is a horizontal section through the upper part of the sofa, taken in the line $z z$ of Fig. 13; and Figs. 13 and 14 are modifications of the back-supporting devices shown in Fig. 2.

In the drawings, A represents the body of the lounge. A', Figs. 1, 2, and 7, represents the fixed head of the lounge; and C, Figs. 1, 2, 7, and 8, represents that part of the back which, when the said back is turned down, is turned up to complete the head of the bed. This part C is held in place by a ratchet-latch, C', Figs. 2, 7, and 8. The upper end of this ratchet-latch is pivoted at C³, while the lower or notched end engages with the plate C², Figs. 2, 7, and 8.

B B', Figs. 1, 2, 6, and 8, represent the back of the lounge, this back being connected to the body of the lounge by the hinges D D', Fig. 1, and held in position by the toggle-legs E E'

(See Figs. 2, 6, 8.) These toggle-legs are connected to each other by a pivot, e , Fig. 2, the upper end of the leg E being pivoted to the back of the sofa at e' , while the end of the toggle part E' is attached to the base of the lounge at e^2 . (See Figs. 2 and 8.)

In Figs. 2 and 6 I have shown the lounge with the back up, and in Fig. 8 I have shown the lounge with the back turned down, the part E acting as a leg for supporting the same.

H H, Fig. 2, are spring-rods, (preferably the well-known torsion door-springs, although others may be used,) attached as shown in Fig. 2, and so adjusted as to have a tendency to throw the toggle E' to a vertical position, the effect of which would be to turn the back B B' of the lounge upward, as shown in Figs. 2 and 6. These torsion-springs H H also serve to keep the toggle device E E' in line when the back is turned up, as shown in Fig. 6, so that the same shall act as a firm brace for supporting the back. The device for straining up the torsional springs H H is shown enlarged in Figs. 4 and 5, in which is represented a housing-piece, which is firmly attached to the base A of the lounge, Fig. 2.

H³ is a notched disk attached to the end of the spring H, and so arranged in connection with the latch H⁴ that it may be locked in any desired position.

K, Figs. 2 and 3, is a wrench attached to the end of the spring H, and serves to hold the same from turning in the part E'. By means of the notched disk H³ and the wrench K the torsion-springs H H may be brought to any desired degree of tension to an extent of balancing the entire weight of the back B B'.

Heretofore the backs of bed-lounges have been made with the upper and end edges thick, so that these bed-lounges have always had a heavy and clumsy look, which would distinguish them from an ordinary lounge. To avoid this defect I have introduced into my bed-lounges details of construction which admit of having the exposed edges of the back made as thin as are the edges of an ordinary lounge, and stand near the wall when in lounge form. Thus when my lounge is used as such there is nothing to indicate that it is a bed-lounge, the upper edge, B', and the end edges, B² B³, all being made thin, as indicated in Fig. 1, so as

to give the ordinary finish and style of a regular lounge, and still retain all of the advantages of the best constructed bed-lounge.

L, Figs. 1 and 6, represents a crib-drawer, which may serve the double purpose of a receptacle for clothing, and also when drawn out is a child's bed. This drawer is provided with supporting-slides L'. (See Figs. 1 and 9.) These supporting-slides lie between the sides of the drawer and the vertical casing, and are so arranged that they can slide out of the drawer for a certain limited distance and assist in holding the same up, as will be hereinafter explained. The drawer L is provided with metallic lugs L³. (See Figs. 1, 6, and 9.) These lugs are firmly attached to the sides of the drawer, and project as shown, so as to overlie a part of the slide L', the upper edge of the said slide being cut away, as indicated at P, Fig. 6, to make room for this lug. The slide L' has upon its upper side a latch, n, Figs. 10 and 11, this latch being so adjusted, as shown in Fig. 10, that when the drawer is back in its place the latch n is in position to engage with the notch n' in the edge of the drawer. When the drawer is being drawn out the slide L' will come out with it until the slide L' has been drawn out so far as to bring the latch n in contact with the pin n² in the fixed

part L², (see Figs. 9 and 11,) in which case the latch n is withdrawn. This contact will throw the latch n out of connection with the drawer L, as shown in Fig. 11, and thus allow the drawer L to be drawn out to its full extent, as shown in Fig. 6, in which position it is supported by the lugs L³, which rest upon the slide L'.

I claim—

1. In a lounge-bed, the combination of the beveled or thin-edged back B B' B² B³ with the body A, substantially as described, and for the purpose set forth.

2. In a lounge-bed, the combination of the springs H H and toggled legs E' E with the base A and back B, operating together substantially as described, and for the purpose set forth.

3. In a lounge-bed, the combination of the drawer-crib L and the drawer-slides L' L' with the fixed guides L² L², adapted to support the said crib, and the base A, all operating together substantially as described, and for the purpose set forth.

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Witnesses:

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