

(No Model.)

2 Sheets—Sheet 1.

E. A. C. HESSE.
SOFA BED.

No. 501,602.

Patented July 18, 1893.

Fig. 1.

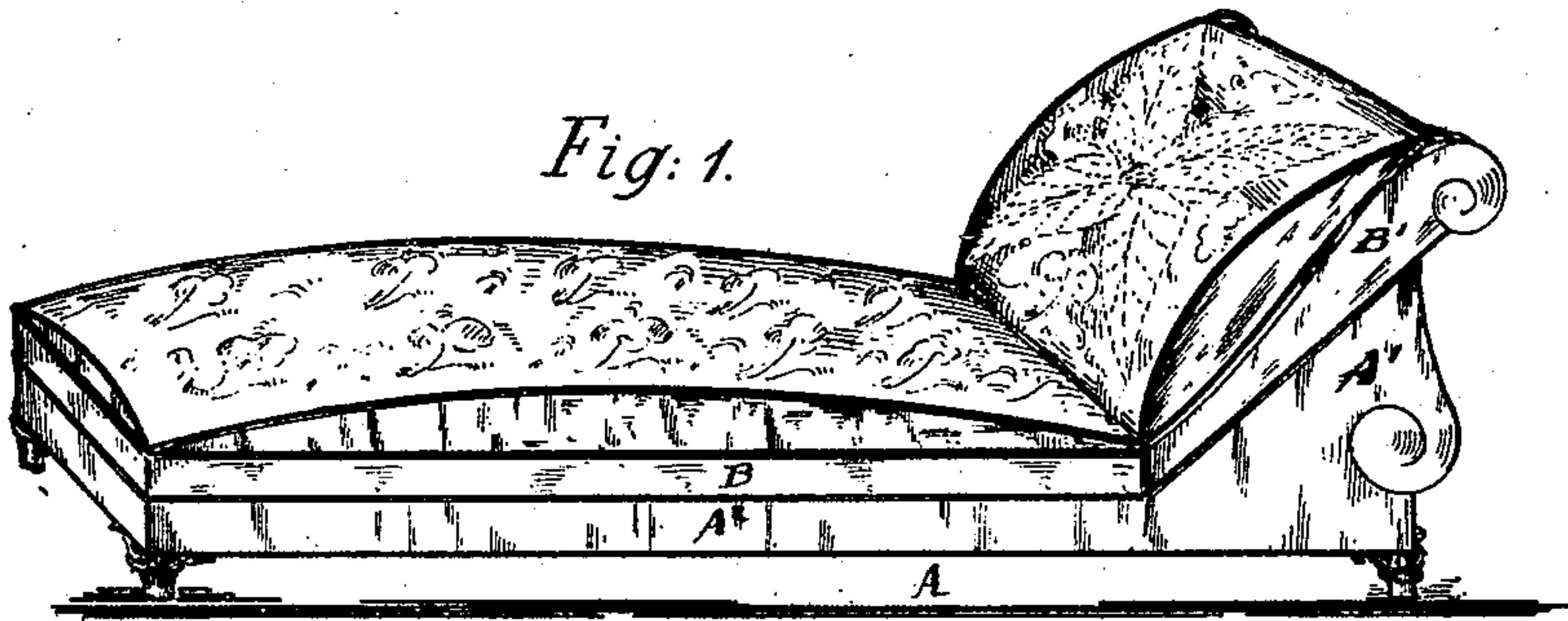


Fig. 3.

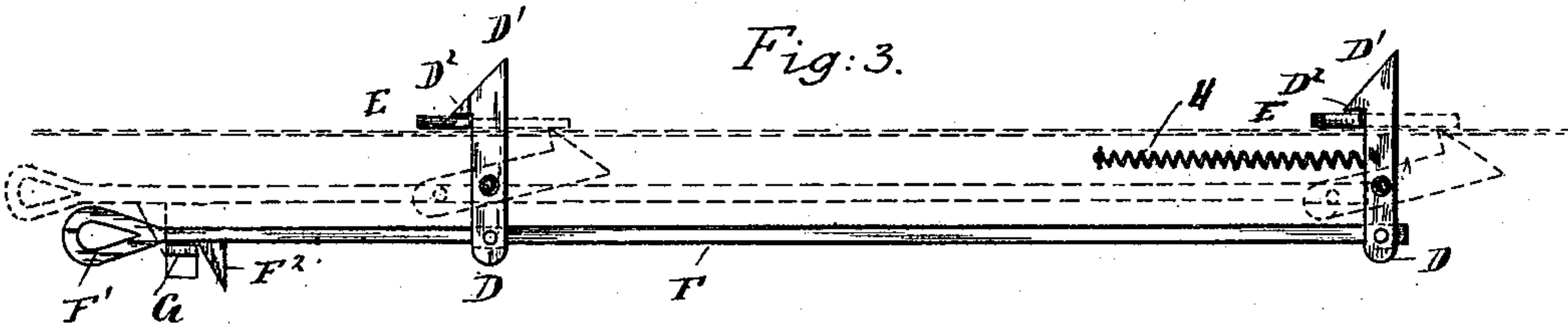


Fig. 2.

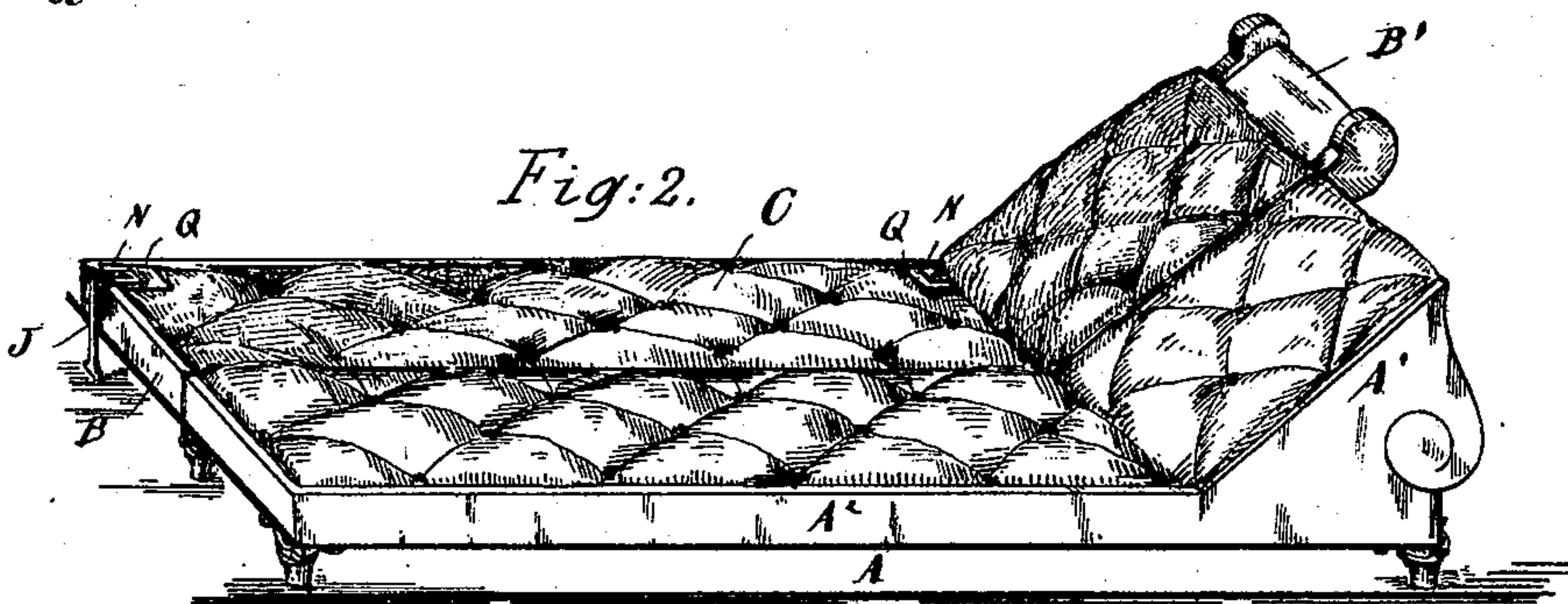
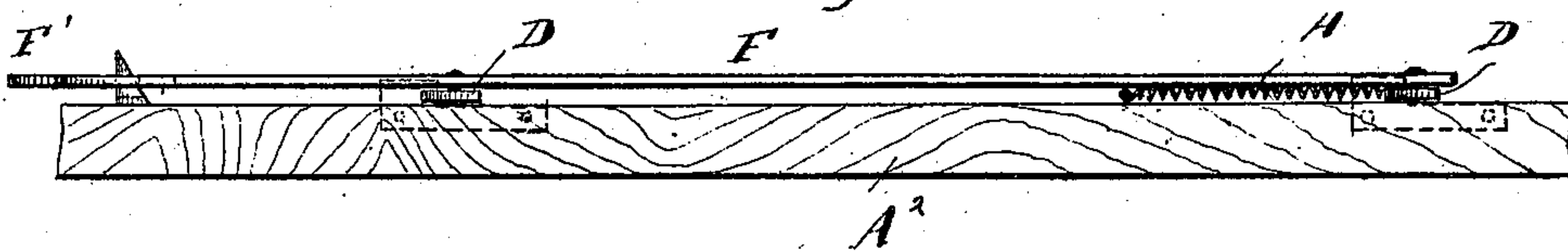


Fig. 4.



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SOFA BED.

2 Sheets—Sheet 2.

No. 501,602.

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Fig. 5.

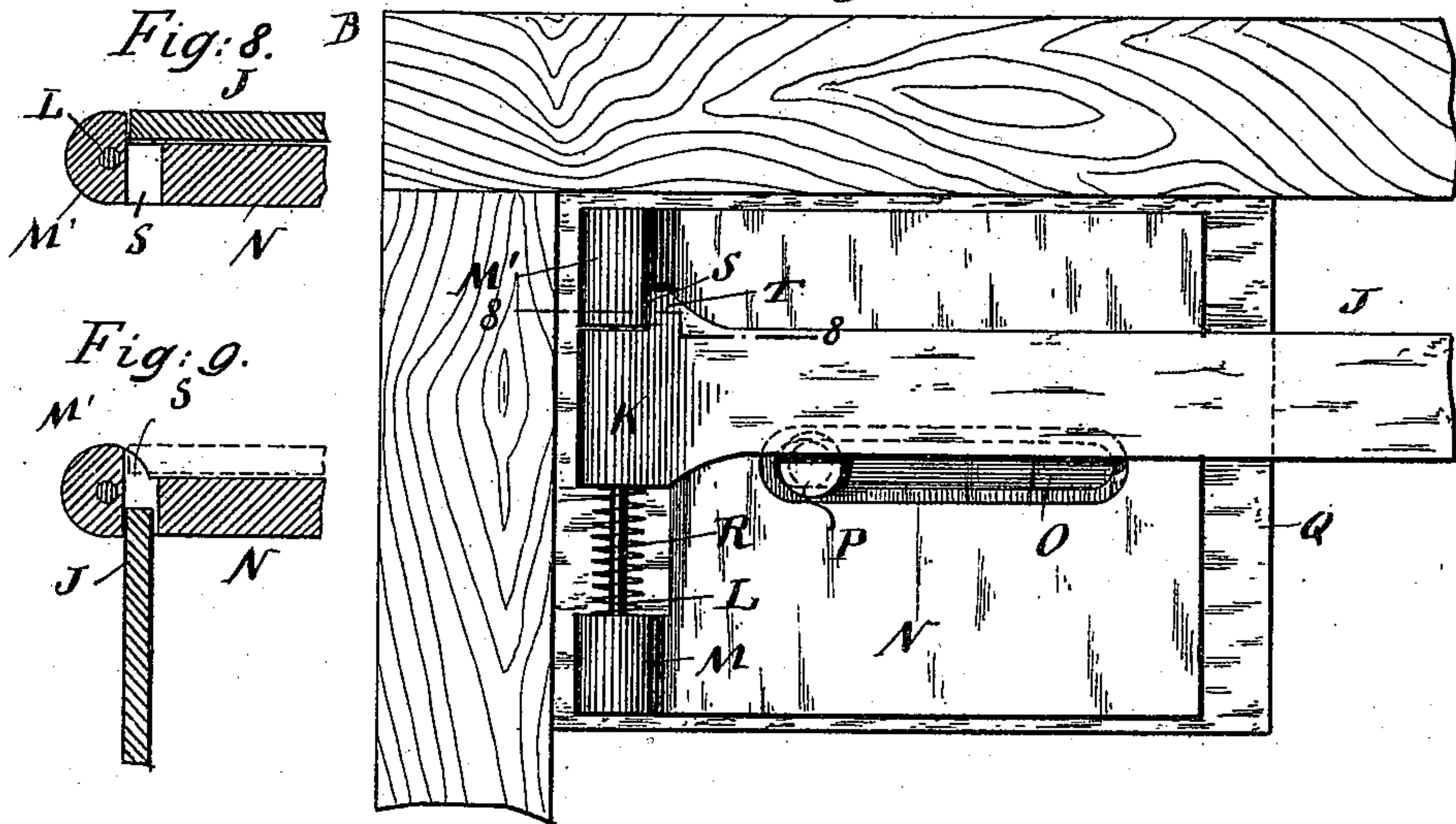


Fig. 8.

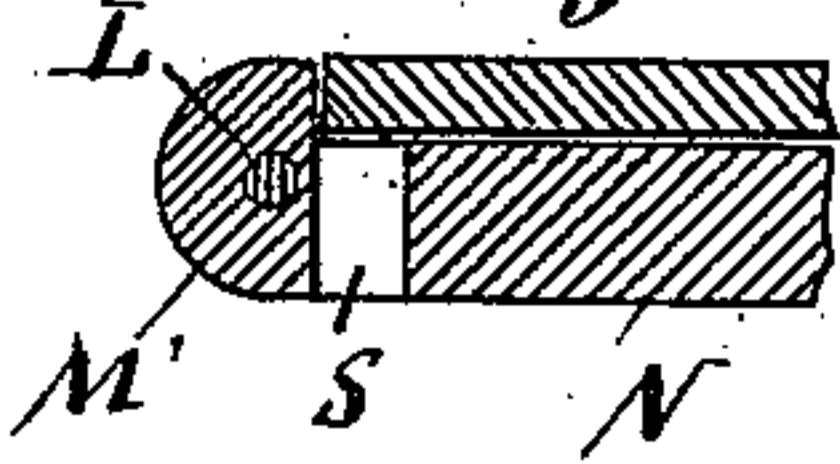


Fig. 9.

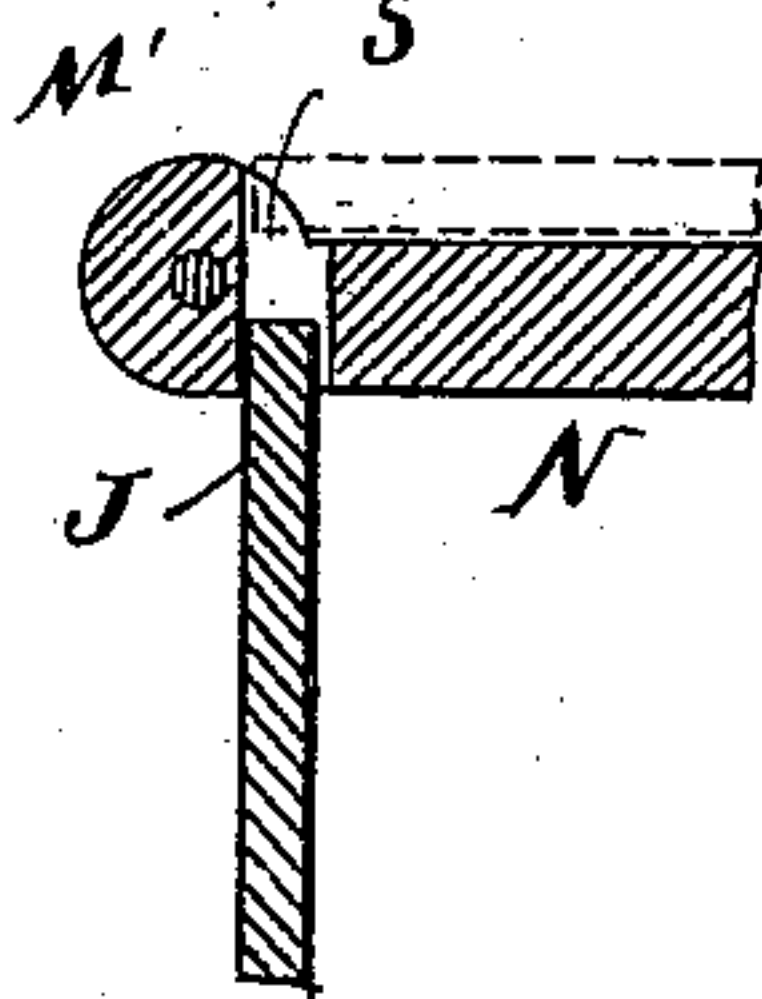


Fig. 6.

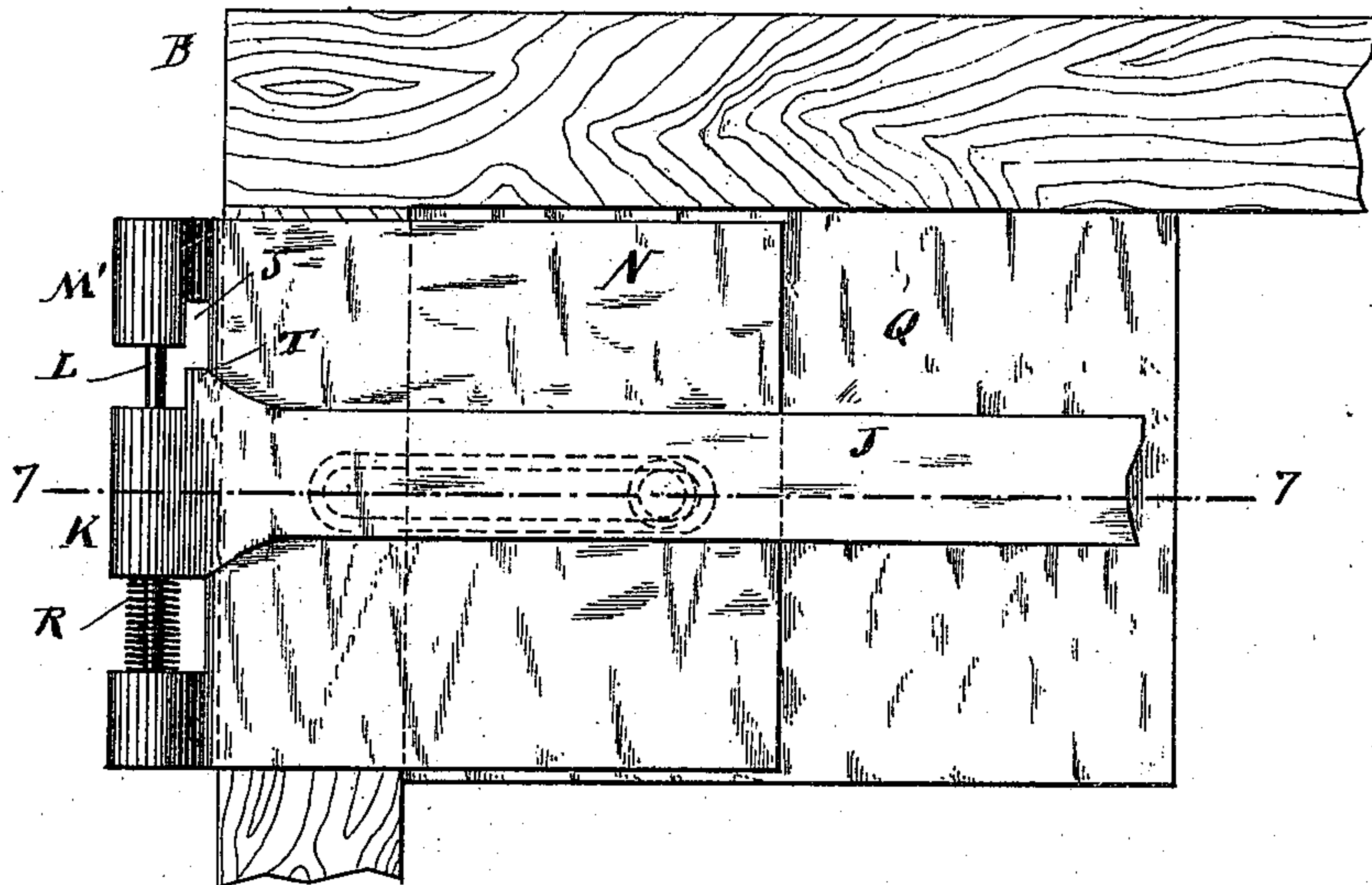
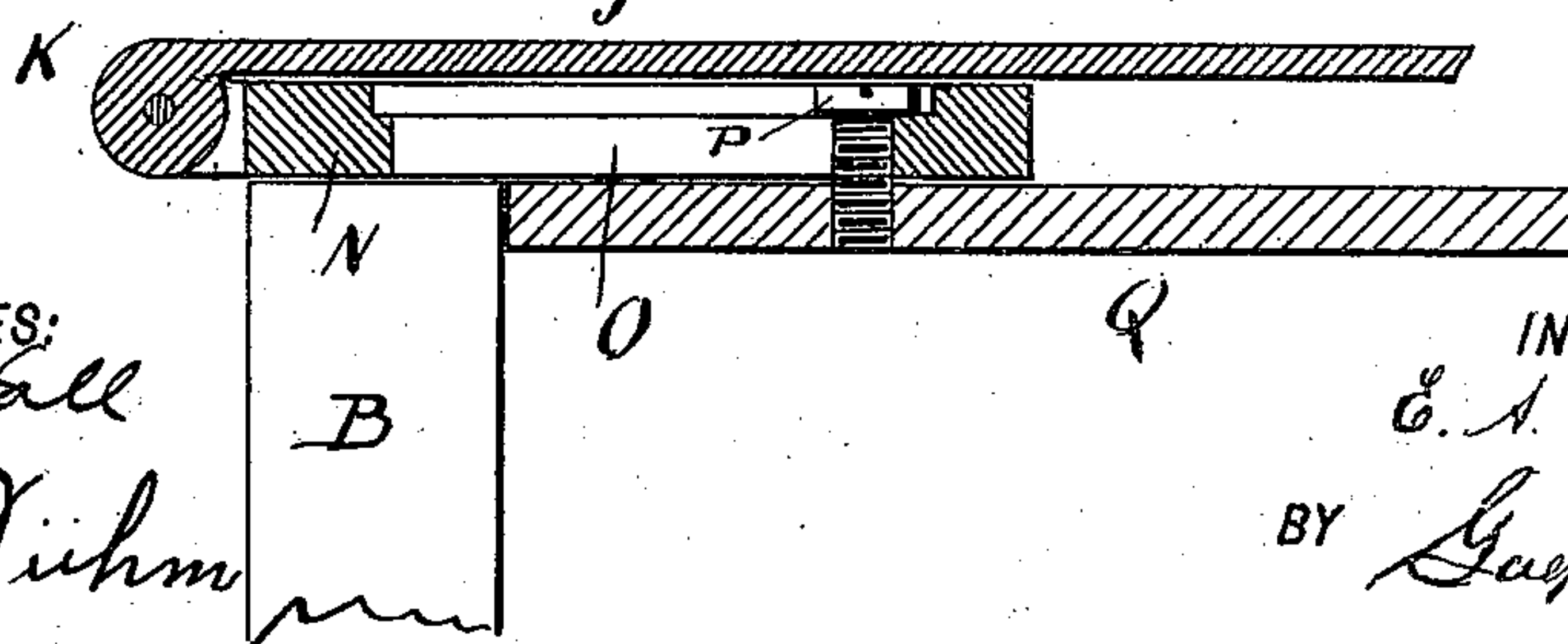


Fig. 7.



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UNITED STATES PATENT OFFICE.

ERNST A. C. HESSE, OF BROOKLYN, NEW YORK.

SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 501,602, dated July 18, 1893.

Application filed March 21, 1892. Serial No. 425,686. (No model.)

To all whom it may concern:

Be it known that I, ERNST A. C. HESSE, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sofa-Beds, of which the following is a specification.

This invention relates to improvements in sofa-beds, and especially to that class in which the seat can be swung to the rear to form a bed of double the width of the sofa. This invention relates especially to devices for locking the seat on the body frame when the sofa-bed is used as a sofa only, and also to an improved folding leg for the bed-section.

The invention consists in a folding-bed constructed with a main frame and a hinged bed-section frame, latches pivoted at the front of the main frame and having beveled heads for engaging catches on the bed-section frame, a rod uniting said latches, means for locking said rod in place and a spring acting on the latches.

The invention further consists in the combination with the swinging bed-section, of a sliding plate on the under side of the same, said plate being on the under side of said section when folded for use as a sofa. When unfolded the plate is on the upper side, a leg hinged on said plate, a spring acting on the leg and means for locking the leg in different positions.

The invention also consists in the construction and combination of parts and details which will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved sofa-bed as adjusted for use as a sofa. Fig. 2 is a perspective view of the same when adjusted as a bed. Fig. 3 is a side-view of the latches. Fig. 4 is a plan-view of the front side-wall of the supporting-frame. Figs. 5 and 6 are enlarged detail-plan-views of the top of the rear lower corner of the bed-section, showing the pivoted leg in different positions. Fig. 7 is a vertical longitudinal sectional view on the line 7 7, of Fig. 6. Fig. 8 is a sectional view, parts being broken out, on the line 8 8, of Fig. 5, and Fig. 9 is a similar view, the leg being adjusted in vertical position.

Similar letters of reference indicate corresponding parts.

The sofa-bed is constructed with the usual body-frame A and head-rest A' thereon, and to the rear-wall of the said body-frame the bed-section frame B is hinged, which is also provided with the hinged head-rest section B' fitting on the head-rest A' when closed. The bed-section frame B is upholstered in the usual manner on its upper side to form the sofa seat and head-rest, and on its under side it is provided with a mattress C. To the inner side of the front-wall A² of the main-frame A two latches D are pivoted, each provided with a beveled head D' and a hook D², which hooks can engage catches E secured to the under side of the front-wall of the bed-section frame B and projecting from the inner edge of said wall so that when the bed-section frame is folded down upon the main-frame, said catches strike the beveled ends of the heads D' and press them to one side and finally are engaged by the hooks D², whereby the bed-section frame is locked securely on the main-frame. The lower ends of the pivoted latches D are connected by a rod F, provided at one end with a handle F' and adjacent to said handle with a downwardly-projecting lug F². From the under side of the front rail A², a beveled catch G projects inward, and is adapted to engage the lug F² when the latches are in inclined position, as shown in dotted lines in Fig. 3, and whereby the latches are locked in this position. A helical spring H is fastened to one of the latches and to the inner side of the front wall A², and tends to keep the latches in vertical position. The adjustment of the latches in inclined position by means of the rod lowers them below the front wall of the main frame so that they are out of the way when the sofa is opened to be used as a bed. For the purpose of supporting the swinging or outer rail of the bed-section frame, I have provided a folding-leg J at each swinging corner on said bed-section frame. The leg J is provided at its hinged end with an eye K. Through said eye K, a hinge pin L passes, that is fastened in the two eyes M and M' formed on one end of a plate N having a longitudinal slot O through which a screw or pin P passes into a plate Q fastened

in the corner of the bed-frame, so as to be flush with the edges of the rails forming the bed-section frame. The plate N is thus adapted to slide on the plate Q in the direction of the length of the slot O and is held by the screw P on said plate Q. The width of the eyes K on the leg J is about half the distance between the two eyes M and M', and the rod L is surrounded by a helical spring R that presses one end of the eye K against the end of the eye M', which eye M' is provided at its inner side with the notch or recess S extending vertically through the same and adapted to receive a lug T projecting from the edge of the leg J.

Normally the plate N is in the position shown in Fig. 5, and the leg J is folded over the same, as shown in Figs. 5 and 6. When the bed-section frame is swung into open position and is to be used as a bed, the plate N is moved from the position shown in Fig. 5, into the position shown in Fig. 6, so that the eyes M, K and M' project beyond the edge of the end-rail of the bed-section frame. The leg J is then moved in the direction from the notch S of the eye M', whereby the spring R is compressed and the eyes K and M' are entirely disengaged. The leg J is then swung in the direction of the arrow x' , Fig. 7, turning on the rod L until it is in the vertical position, whereupon it is released and pressed by the spring R toward the eye M', its lug T passing into the bottom part of the notch S, whereby said leg is locked in the vertical position and held firmly and securely.

When the bed is to be folded, the leg J is disengaged from the eye M', turned in the inverse direction of the arrow x' and folded upon the plate N, and said plate with the leg is moved from the position shown in Fig. 6, to the position shown in Fig. 5. The folding-leg is entirely concealed from view, can easily be adjusted and is held firmly and securely.

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

1. In a sofa-bed, the combination of a main frame, a swinging bed-section hinged to the rear side wall thereof and provided with catches, two latches pivoted to the front wall of the main section for engaging said catches to lock the swinging bed-section in closed position for use as a sofa, and a rod connecting said latches for tilting them into inclined position below the front rail when the sofa is open for use as a bed.

2. In a sofa-bed, the combination of a main bed-section, a swinging bed-section hinged to the rear side-wall thereof and provided with catches, two latches pivoted to the front wall

of the main section for engaging said catches to lock the swinging section in closed position for use as a sofa, a rod connecting said latches for tilting them into inclined position below the front rail when the sofa is open for use as a bed, means for holding said rod in adjusted position and a spring for restoring said latches to their normal position.

3. In a sofa-bed, the combination of a main bed-section, a swinging bed-section hinged to the rear side-wall thereof, and provided with catches, two latches pivoted to the front wall of the main section for engaging said catches to lock the swinging section in closed position for use as a sofa, a rod connecting said latches for tilting them into inclined position below the front rail when the sofa is open for use as a bed, a lug on said rod and a catch on the main frame engaged by said lug for holding said rod in adjusted position, and a spring for restoring said latches to their normal position.

4. In a sofa bed the combination of a main-frame, a bed-section hinged thereto, a sliding plate attached to said bed-section on its upper face when unfolded, and adapted to move toward and from the end thereof, said plate having two eyes, one of which is provided with a notch, a rod connecting said eyes, a sliding leg mounted on said rod and provided with a lug adapted to engage said notch, to hold said leg in either open or closed position, and a spring acting on said leg, substantially as set forth.

5. In a sofa-bed, the combination of a main-frame, a bed-section frame hinged to the rear edge thereof, a plate mounted on the underside of the swinging bed-section on its upper face when unfolded, adapted to slide toward and from the end of said bed-section, two eyes on the outer end of said plate, one of which eyes is provided with a notch or recess extending vertically therethrough, a rod connecting the eyes, a spring surrounding said rod, and a leg having an eye through which said rod passes, said leg being provided with a lug adapted to pass into the recess or notch in one of the eyes of the plate, said lug being adapted to engage said notch to hold the leg in either a folded or unfolded position, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ERNST A. C. HESSE.

Witnesses:

OSCAR F. GUNZ,
CHARLES SCHROEDER.