

(No Model.)

F. W. HERINGSHAUSEN.

SOFA BED.

No. 368,472.

Patented Aug. 16, 1887.

Fig. 1.

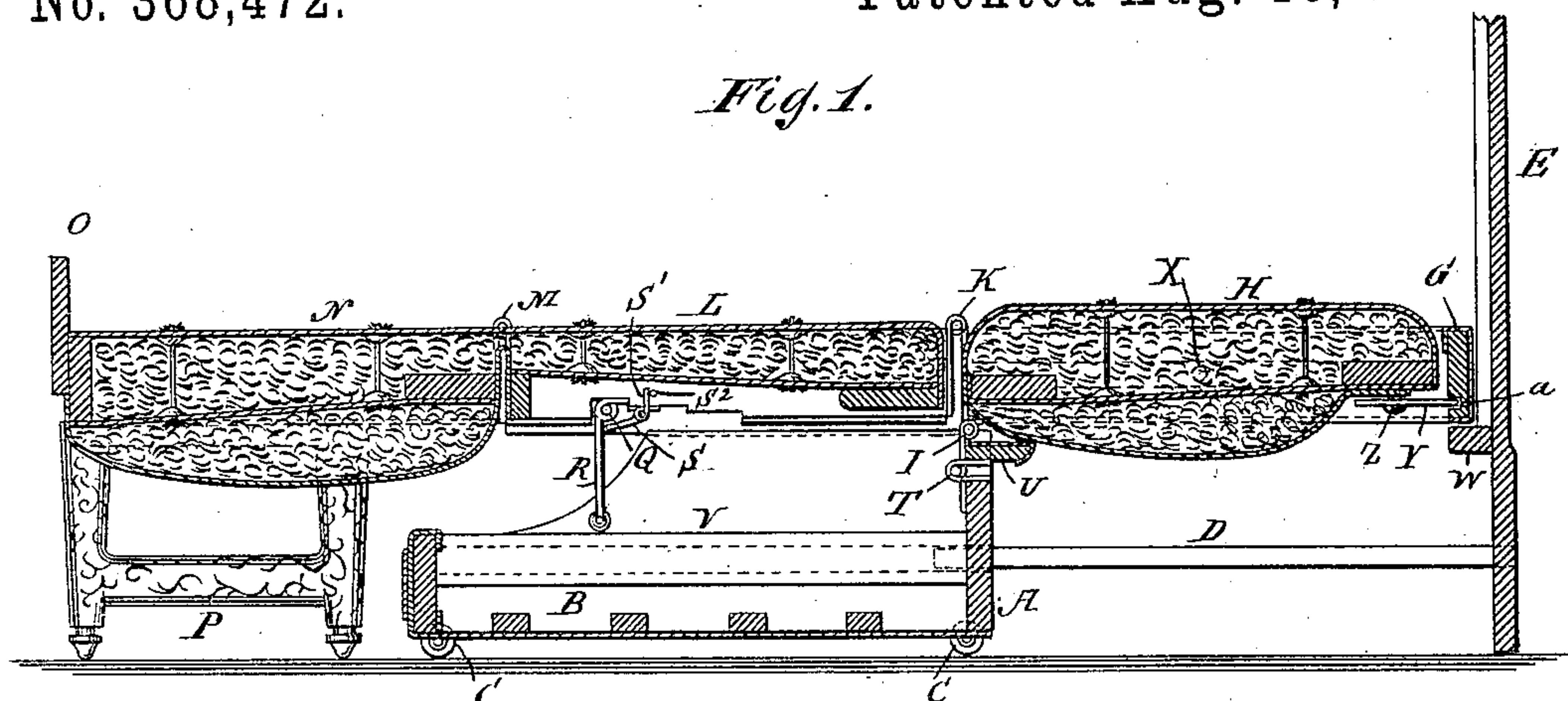


Fig. 2.

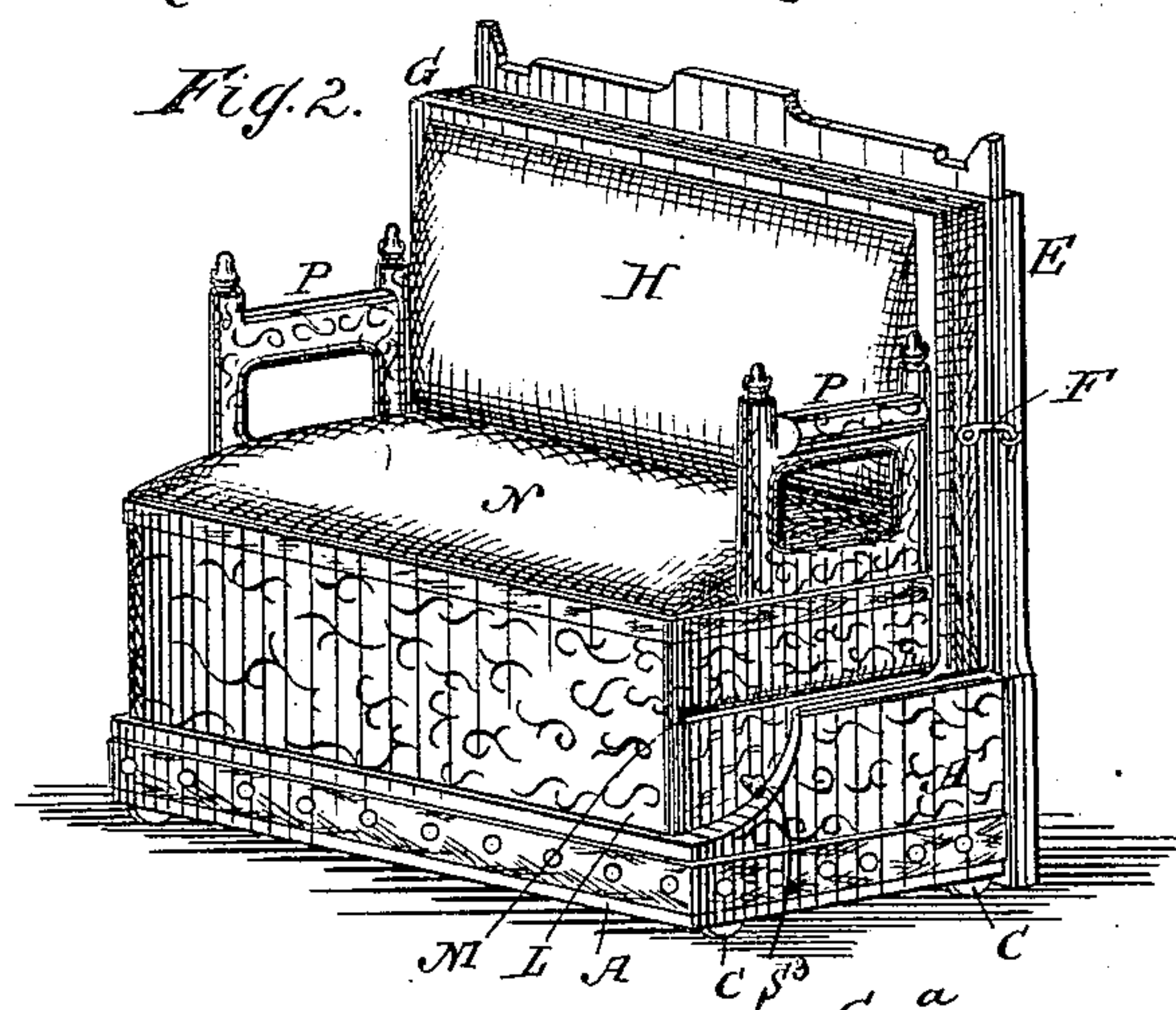
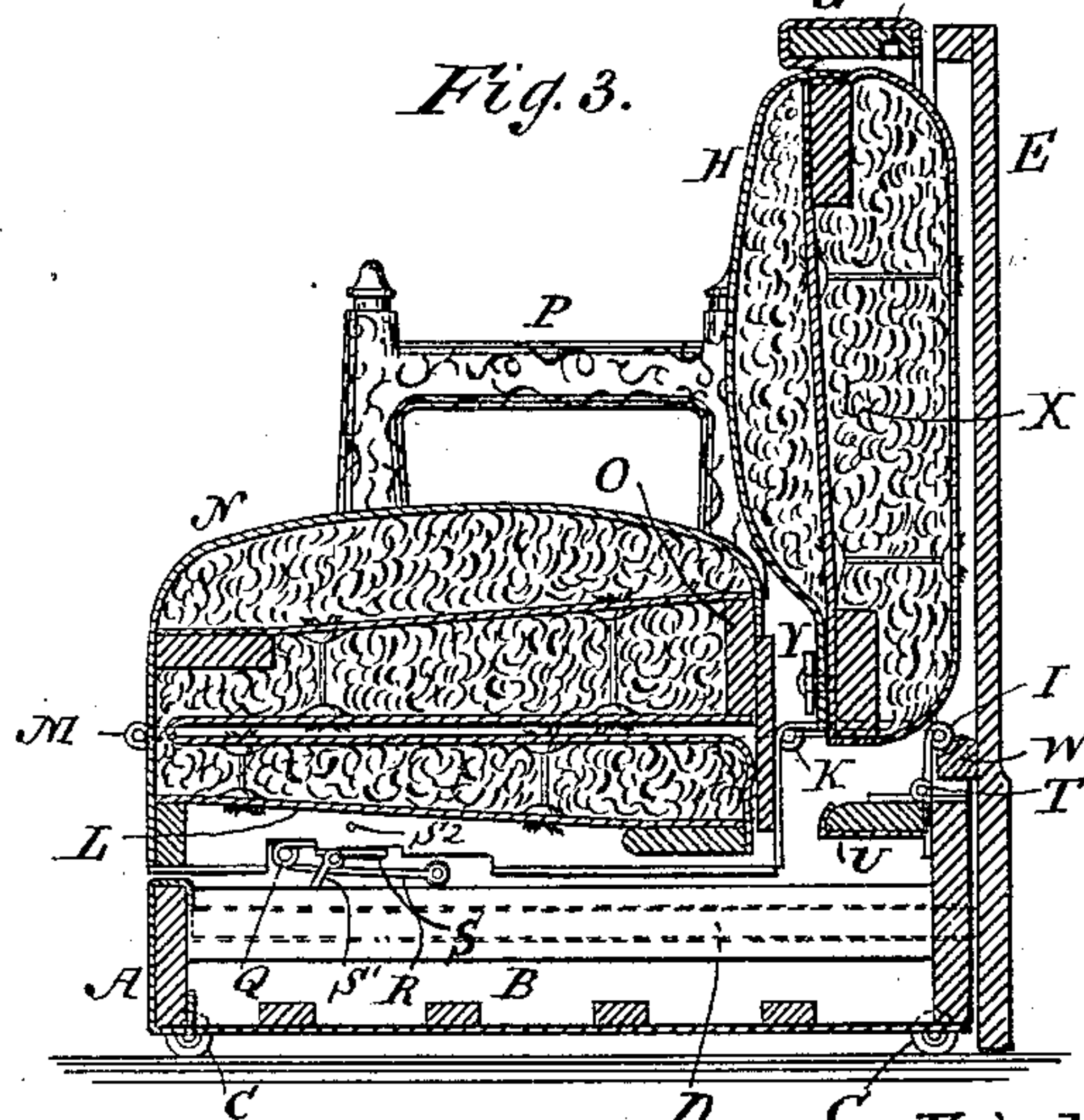


Fig. 3.



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SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 368,472, dated August 16, 1887.

Application filed May 5, 1887. Serial No. 237,239. (No model.)

To all whom it may concern:

Be it known that I, FRIEDERICH W. HERINGSHAUSEN, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Sofa-Beds, of which the following is a specification.

This invention relates to improvements in sofa-beds, as set forth in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical longitudinal section of a sofa-bed opened to form a bed. Fig. 2 is a perspective view of a sofa-bed closed to form a sofa. Fig. 3 is a vertical longitudinal section of a sofa-bed closed to form a sofa.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a main frame or support having a receptacle, B, for the reception of articles such as bed-clothing, pillows, sheets, and the like. The main frame A is set on rollers or casters C, so as to be readily movable.

The guides or arms D, which run in suitable ways in the main frame and which are connected with the head-board E, enable the head-board to be moved out to the position shown in Fig. 1, or to be moved to its closed position seen in Figs. 2 and 3. A locking device, F, such as a hook and eye, can be used to lock the head-board E to the head frame or section G. When moved to its open position, the head-board E, as seen in Fig. 1, allows the head frame or section G to be swung to its open or horizontal position.

The head-frame G is jointed or pivoted at I to the main frame A. The joint I allows the head-frame G to be swung to its open position when it is desired to form a bed, as seen in Fig. 1, or to its closed position seen in Figs. 2 and 3, where the frame G and its cushion H form the back of a sofa.

The middle section, L, is jointed or pivoted at K to the head-section, G. The middle section, L, has legs or supports R, jointed or pivoted at Q. The legs R, when the device is in the form of a bed, rest on ledges V of the main frame and support the middle section, L, in the position shown in Fig. 1. When the device is closed to form a sofa, the legs R are folded to the position shown in Fig. 3. A locking-arm, S, is adapted to hold the legs R

in the position shown in Fig. 1. Said arm S has an arm, S', which is adapted to rest against a stop, S², as seen in Fig. 1. By turning the finger-knob S³, Fig. 2, the locking device S S' can be moved to the position shown in Fig. 1 or to that shown in Fig. 3.

The foot-section N is jointed or pivoted at M to the middle section, L, and said foot-section is provided with a foot-board, O, and with supports P. The foot-board O, when the foot-section N is open, comes to the position shown in Fig. 1, while, when the foot-section N is closed, the foot-board O rests in the interior of the device, as seen in Fig. 3. When the foot-section N is closed, the supports P serve as arm-rests, as seen in Figs. 2 and 3. The lateral arm rests or supports P are fixedly secured to said foot-section, so that pivots or joints are avoided and the supports P are firmly held in place.

A swinging ledge or support, U, is jointed or pivoted at T to the main frame A. When the head-section G is opened, the ledge U is swung to the position shown in Fig. 1, so as to support one edge of the cushion H. The head-board E has a ledge, W, to support or steady the head-frame G, as seen in Fig. 1. When the device is closed, the ledge U is swung into the main frame A, as seen in Fig. 3.

The cushion H is mounted on a pivot or axle, X, Fig. 1, having bearings in the head-frame G. The cushion H can thus be turned or swiveled in the head-frame G, so as to expose either the mattress face or portion of the cushion H, as seen in Fig. 1, or the upholstered face or portion of said cushion, as seen in Figs. 2 and 3. A stop or catch, Y, holds the cushion H in the position shown in Fig. 1. Said catch Y is shown in the form of an arm pivoted to the cushion at Z, so that said catch Y can be swung into or out of engagement with the shoulder or recess *a* in the head-frame G.

The foot-section N has an upholstered face or portion which is exposed when the device is made into the form of a sofa, as seen in Figs. 2 and 3. The mattress face or portion of said foot-section is exposed when the device is put into the form of a bed, as seen in Fig. 1.

To close the bed shown in Fig. 1, so as to form a sofa, the foot-section N is swung about the joint M, so that said foot-section will come to rest upon the middle section. The cushion

H is turned so as to expose its upholstered face, the locking device S S' is turned to the position shown in Fig. 3, and the head-frame G is then swung about the joint I, so as to cause the head-frame and its cushion H to form a back for the sofa, and the head-board E is then moved against the head-frame. The swinging of the head-frame G into an upright position about the pivot I will cause the middle section, L, to move toward the front of the main frame A, and also to fall or move downwardly. This motion of the middle section, L, will move the legs or support R, so that said support R will be tripped or swung about its joint Q against the middle section, L. The support R will thereby be brought to the position shown in Fig. 3, leaving the middle section, L, free to rest snugly upon the main frame A. When the sofa is opened into a bed, the swinging of the head-frame G to the position shown in Fig. 1 will cause the middle section, L, to move toward the back of the main frame A and to the position shown in Fig. 1, thus allowing the support R to come to the position shown in Fig. 1, in which position the support R will be locked by a proper adjustment of the locking device S S'.

It will be noticed that the rising of the middle section, L, to the position shown in Fig. 1 will bring said middle section to the height which is occupied by the section N when the parts are in the position shown in Fig. 2. The bed shown in Fig. 1 is thus made to occupy the same height as the sofa-seat of Fig. 2.

What I claim as new, and desire to secure by Letters Patent, is—

1. A sofa-bed consisting of the main frame A, a head-board, E, having arms D, slidable on the main frame, a head-section, G, hinged at one end to the main frame, a cushion centrally swiveled in the head-section to rotate therein, a locking device for holding the cushion stationary, a support, U, on the main frame for the cushion, a middle section, L, jointed to the head-section, in which the cushion rotates, folding supports R for the middle section, and a foot-section hinged to the middle section and having supports P, substantially as described.

2. A sofa-bed consisting of the main frame A, having end ledges, V, the sliding head-board E, having a ledge, W, a hinged head-section, G, adapted to rest on the ledge of the head-board, the middle section, L, hinged to the head-section and having the pivoted legs R, adapted to rest on the ledges of the main frame, the rotating arm S, having an arm, S',

to open the pivoted legs, and a foot-section hinged to the middle section, substantially as described.

3. A sofa-bed consisting of the main frame A, having the end ledges, V, a head-board, E, having the ledge W and arms D, slidable on the main frame, the head-section G, hinged to the main frame and adapted to rest on the ledge of the head-board, the cushion H, swiveled in the head-section to rotate therein, a locking device for the cushion, a middle section, L, hinged to the head-section, a ledge, U, hinged to the main frame for supporting one edge of the cushion, the folding legs R, pivoted to the middle section and adapted to rest on the ledges of the main frame, a rotating arm, S, having an arm, S', to swing the pivoted legs open, and a foot-section hinged to the middle section, substantially as described.

4. The combination, with a main frame, A, sliding head-board E, having the support W, and the folding middle and foot sections L and N, of a hinged head-section, G, adapted to rest on the support of the head-board when the latter is extended, a cushion, H, swiveled at its ends centrally between its longitudinal edges within said head-section to rotate therein, and a locking device for connecting the cushion with the head-section in which it rotates, substantially as described.

5. The combination, in a sofa-bed, of the main frame A, hinged middle and foot sections, L and N, a hinged swinging head-section, G, and a cushion, H, swiveled at its ends centrally between its longitudinal edges within said head-section to rotate therein, substantially as described.

6. The combination, with a main frame, A, a head-board, E, adapted to move to and from said main frame, and a support, U, jointed to said main frame, of a head-section, G, jointed to said main frame and adapted to engage a support, W, secured to the head-board, a cushion, H, swiveled in the head-section and adapted to engage the support U, a middle section jointed to said head-section, and a foot-section jointed to said middle section, and suitable supports, P R, for said foot-section and middle section, substantially as set forth.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

F. W. HERINGSHAUSEN. [L. S.]

Witnesses:

H. A. TONNER,
W. C. HAUFF.