

(No Model.)

2 Sheets—Sheet 1.

H. R. PLIMPTON.

SOFA BEDSTEAD.

No. 250,453.

Patented Dec. 6, 1881.

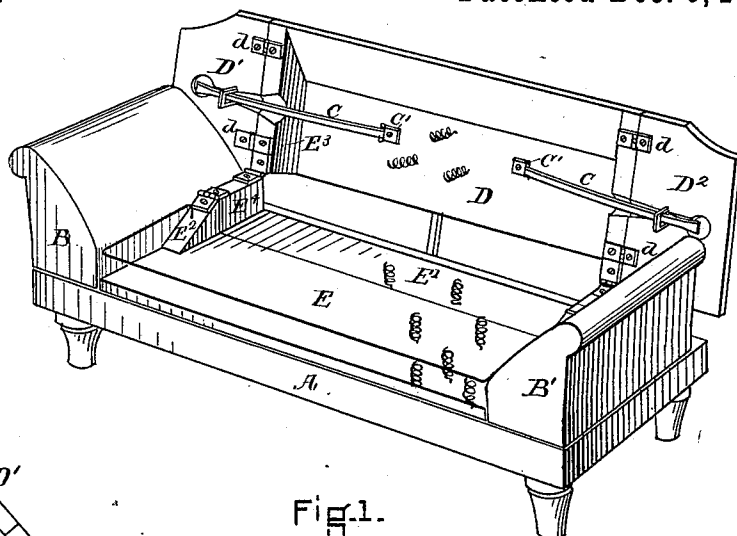


Fig. 1.

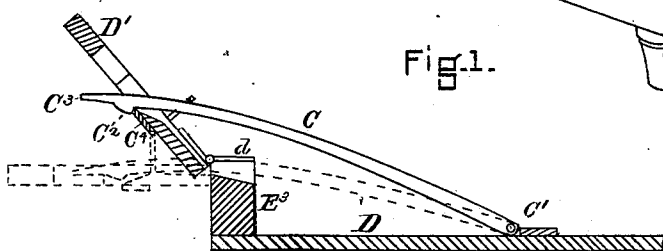


Fig. 3.

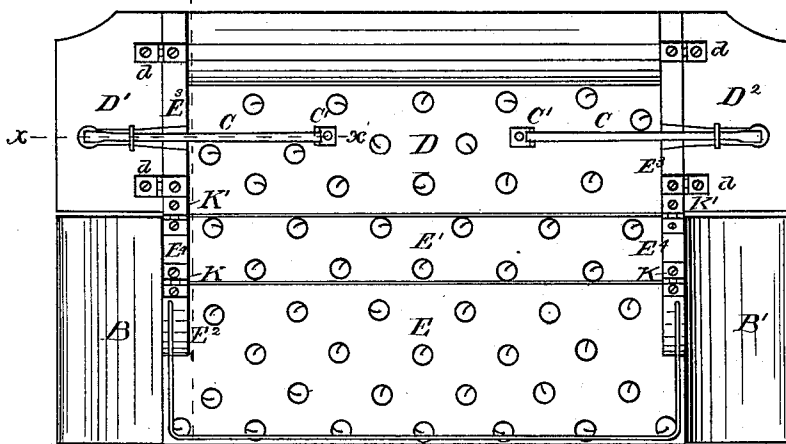


Fig. 2.

WITNESSES

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Henry Richardson Plimpton

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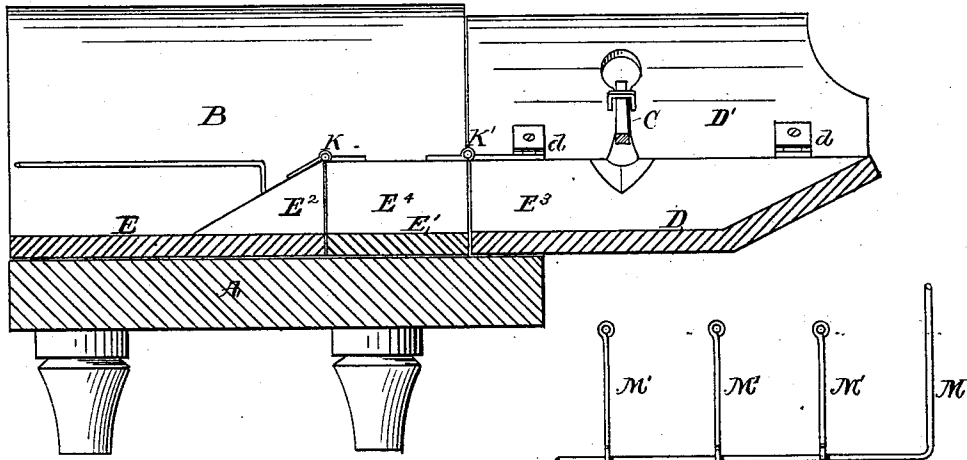


Fig. 4.

Fig. 5.

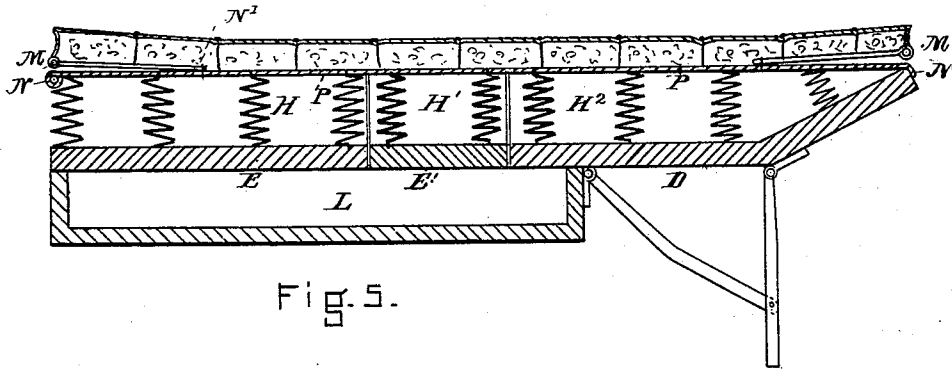


Fig. 6.

Fig. 7.

WITNESSES

Helen McFegan
William Elson

INVENTOR

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UNITED STATES PATENT OFFICE.

HENRY R. PLIMPTON, OF BOSTON, MASSACHUSETTS.

SOFA-BEDSTEAD.

SPECIFICATION forming part of Letters Patent No. 250,453, dated December 6, 1881.

Application filed March 16, 1880. (No model.)

To all whom it may concern:

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

My invention relates to articles of furniture usually called "sofa-bed," "bed-lounge," or "ottoman-bed;" and it consists in making the body of the bed in three longitudinal divisions, the two side divisions swinging upon hinged joints, while the central division is stationary.

My invention also consists in placing the pivots upon which the side divisions swing nearly on a level with the top of the mattress; also, in sustaining the swinging end pieces of the back division by means of automatic latches of peculiar construction; also, in making a tuck-pocket preferably between the wadded part of the mattress and the spring part; also, in some minor details, which may be best understood by reference to the specification and drawings.

In the drawings, Figure 1 is a perspective view of my invention, exclusive of the mattress, as applied to a sofa-bed, the back being up, as when it is to be used as a sofa. Fig. 2 is a plan of the same, the back being down to serve as the rear longitudinal side section of the bed. Fig. 3 is a vertical section taken through the line $x x$ of Fig. 2, to show the automatic latch device for holding up the end parts of the back division. Fig. 4 is a cross vertical section taken on line $y y$ of Fig. 2, and shows more particularly the method of hinging the sections of the bed together. Fig. 5 is a cross-section to show the divisions of the mattress or bed, the front division from the left, together with the middle division, forming the seat of the sofa or lounge, the right-hand or last division forming the back of the sofa or lounge, all three of the divisions, when horizontal, forming the bed. Fig. 6 is a section showing the swinging parts of the mattress—that is, the part that forms the seat and back—turned up. Fig. 7 is a perspective sketch, showing the tucking device in the mattress. Fig. 8 is a plan showing the method of arranging the wire frame of the mattress and tucking device.

The form of my invention which I have shown in the drawings and propose to describe

applies to a sofa, although it requires but slight modification to adapt it to a lounge or divan.

A B B' in Figs. 1, 2, and 4 represent the body of the sofa, which can be built after any design and of any size.

D D' D² represent the back of the sofa. In Fig. 1, I have shown the back turned up, as it is when in use as a sofa. In Figs. 2 and 4, I have shown the back D D' turned down, as it is when in use as a bed. The end pieces, D' D², of the back are hinged to the part D by the hinges $d d d d$, Figs. 1, 2, and 4. The end pieces, D' D², of the back form a continuation of the same when the back is used as a sofa, as shown in Fig. 1; but when the device is to be used as a bed, then the end pieces are turned up to form, with the arms, a head and a foot board, as shown in Fig. 3, in which case the piece D' is shown as being held up by the latch-hook C. (See Figs. 1, 2, and 3.) This latch-hook C is pivoted to the back at C', and is provided with a hook, C², Fig. 3, which engages with a metallic plate, C⁴, set in the part D'. The end C³ of the latch serves as a handle for lifting the latch, when it is desirable to disengage it from the plate C⁴, in order to allow the part D' to turn to the position indicated by dotted lines in Fig. 3. In upholstering, this latch, including the handle C³, is entirely concealed from view, though easily found by the hand. This latch is automatic in its action of engaging with the plate C⁴, as in lifting the part D' up, as soon as it reaches the desired position, the latch falls into place and firmly holds it. When the back D D' D² is turned down, the leg or legs—one of which is shown in Fig. 5—falls into place and becomes a support for that part.

An examination of Figs. 5 and 6 will show that the mattress H, H', and H² and the corresponding supporting parts E, E', and D are divided into three longitudinal divisions. The two side divisions, E and D—one forming the seat, the other the back—are pivoted on hinges at K and K', (see Fig. 4,) while the central division, H' and E', Figs. 2, 4, 5, and 6, is stationary, its base E' being firmly bolted to the frame of the sofa or lounge.

The hinges upon which the side divisions turn are shown at K K', Figs. 2 and 4. These hinges are firmly attached to the buttresses

E² E⁴ E³. (See Figs. 1, 2, and 4.) These buttress-pieces stand so far above the base of the mattress, as shown in Fig. 4 and indicated in Fig. 6, that the axial lines upon which the mattress bends are very near the upper surface of the mattress, so that in bending or turning up the side divisions of the mattress, as shown in Fig. 6, it is only the padding of the mattress that has to be crowded at all, and that but slightly. The object of keeping these axial lines so high up—that is, so near the top of the mattress—is to prevent wrinkling and displacement of the parts of the mattress that are near the said axial lines. This arrangement also enables me to make a sofa-seat plain, while the back is tufted.

Heretofore sofa-beds have been so constructed that there has been no opportunity to do what is usually called “tucking up”—that is, the covering part of the bed would have to lie loosely over the edges; but I have so constructed mine that the clothing can be as readily tucked as in an ordinary bed. I accomplish this by leaving the edges of the padding free from the burlap, as shown at M N, Figs. 5 and 7. The particular device by which I accomplish this is to make a frame of wire, M M' M', Figs. 7 and 8, and to line it with burlap or any suitable material, and to attach the padding to this frame and burlap, the inner ends of the wires M' M' M' being attached directly to the burlap that covers the springs, as indicated at N', Fig. 7. The tufts near the edge of the bed pass through the upper fold of the burlap that is attached to the wires M' M', while the tufts for the other part pass through and are attached to the burlap P, which covers the springs. (See Fig. 5.) This arrangement allows of tucking up, and does not injure the appearance of the article.

L, Fig. 5, is a receptacle, made as shown, and is to be used for holding bed-clothing, &c.

By the arrangement above described of placing the hinges K K' at, or nearly at, the top of the mattress, I am enabled to so stretch, confine, and tuft the burlap that forms the part of the mattress in the back of the sofa that the seat will stay in place without being tufted. In other words, it may remain plain, and will not puff up and badly wrinkle when the sofa-bed is arranged for use as a sofa.

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

1. In a sofa-bed, the pivoted latch-hooks C C' C² C³, in combination with the back D and hinged slotted end pieces, D' D², substantially as described, and for the purpose set forth.

2. In a sofa-bed, the combination of the raised buttress-pieces E⁴ E² E³ and their hinges K K' with the depressed mattress-supporting parts E' E' D, whereby the mattress is caused to be bent on a line at or near its upper surface, substantially as described, and for the purpose set forth.

3. In a sofa-bed, the combination of a fixed central longitudinal division, H', of the mattress and its support E' with the side divisions, H E H² D, buttress-pieces E⁴ E⁴, and hinges K K', all operating together substantially as described, and for the purpose set forth.

4. A sofa-bed provided with a tucking-recess, M N' N, formed in the edges of the mattress, substantially as described, and for the purpose set forth.

HENRY RICHARDSON PLIMPTON.

Witnesses:

WILLIAM EDSON,
HELEN M. FEEGAN.