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J. C. CHRISTINGER.

SOFA-BEDSTEAD.

No. 192,110. Patented June 19, 1877.

Fig. 1.

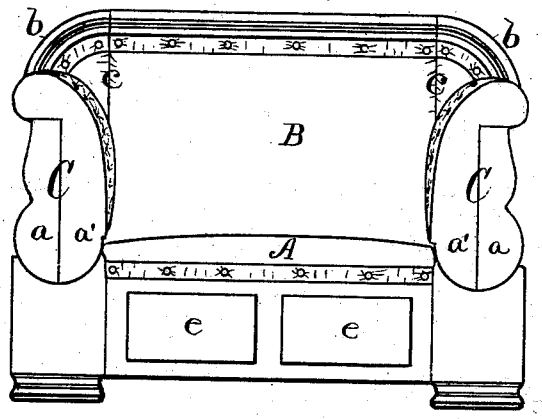
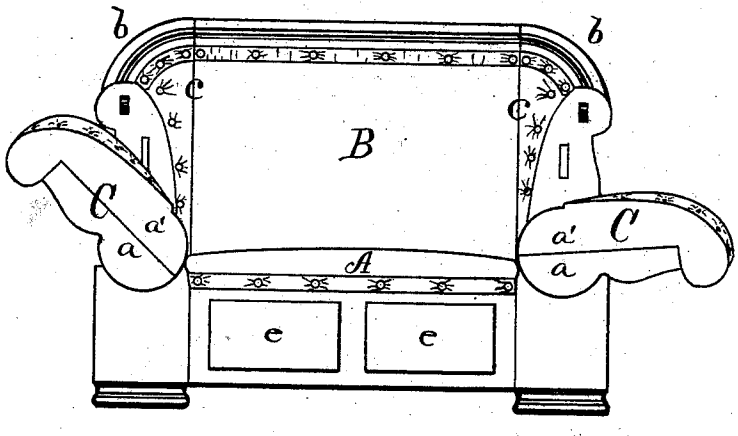


Fig. 2.



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Fig. 3

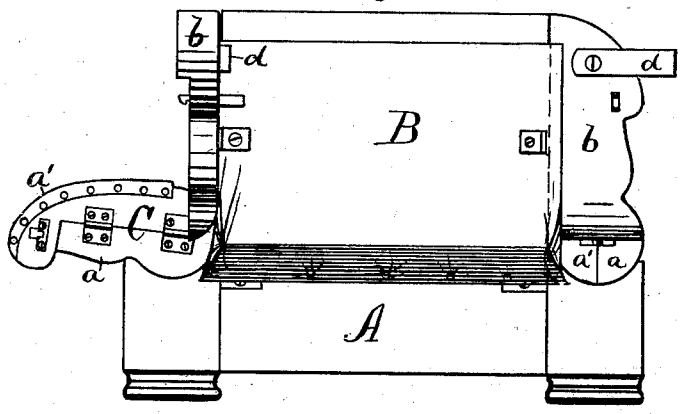
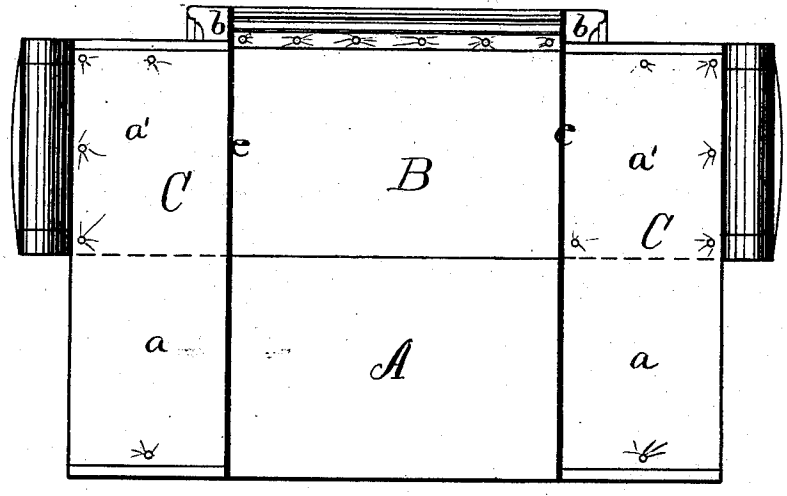


Fig. 4.



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Fig. 5.

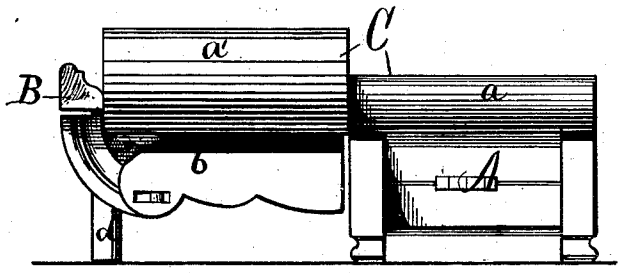


Fig. 6.

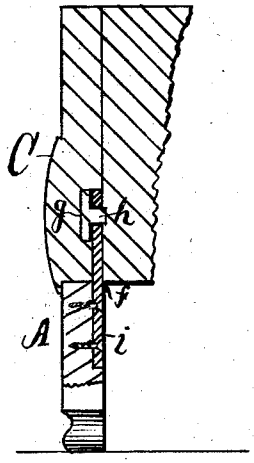


Fig. 7.

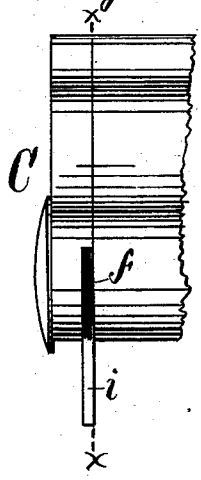
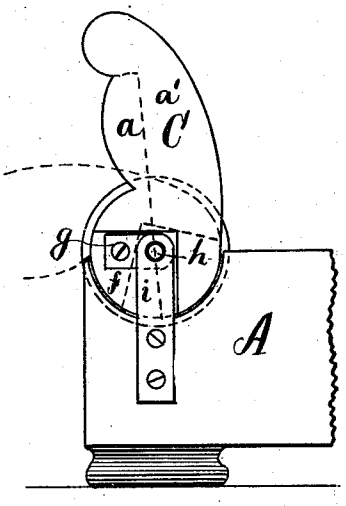


Fig. 8.



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UNITED STATES PATENT OFFICE.

JOHN C. CHRISTINGER, OF BRISTOL, CONNECTICUT.

IMPROVEMENT IN SOFA-BEDSTEADS.

Specification forming part of Letters Patent No. **192,110**, dated June 19, 1877; application filed February 10, 1877.

To all whom it may concern:

Be it known that I, JOHN C. CHRISTINGER, of Bristol, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Sofa-Beds, of which the following is a specification:

My invention consists in the peculiar construction, combination, and arrangement of parts hereinafter described.

In the accompanying drawing, Figure 1 is a front elevation of a sofa-bed which embodies my invention, the same being represented as arranged for a sofa. Fig. 2 is a like view of the same, but represented in a different position. Fig. 3 is rear elevation of the same represented as partially unfolded. Fig. 4 is a plan view of the same represented as wholly unfolded, ready for use as a bed. Fig. 5 is an end view of the sofa-bed shown in Figs. 1, 2, 3, and 4, the same being represented as wholly unfolded. Fig. 6 is a partial vertical section taken through the center of the hinge. Fig. 7 is a view showing a portion of one of the arms detached; and Fig. 8 is a sectional view on line *x x* of Fig. 7, showing the manner of hinging the arms, the same being the front portion of the arm and seat as viewed from the rear.

A designates the seat, B the back, and C C the arms. These arms are divided into halves *a a'*, the same being connected at the rear end by any suitable hinges. The base of the arms, when folded together, as shown in Figs. 1, 2, and 3, is circular, and these are fitted within a semicircular socket in the end of the seat A, and hinged concentrically in said socket, by reason of which the arms may be set in an upright position, or proper position to match the end of the back, as shown in Fig. 1, or let down into a horizontal position, or fixed at any point between an upright and horizontal, as shown in Fig. 2, by any suitable mechanism. I hang these arms by means of hidden hinges. By this arrangement a rosette may be placed on the front of the arms at the base, as shown in Figs. 6, 7, 8, in order to cover the edges of the semicircular socket and give the arms, when adjusted for use as a sofa, the appearance of solid unhinged arms. I construct this hinge (shown only in Figs. 6, 7, 8) as follows: The arms C, just back of their face-board, are provided with a slot, *f*, an edge view of which is shown in Figs. 6 and 7, and a side view, with one side wall cut away, is shown in Fig. 8, the latter showing the depth and right angular form of said slot. Within this slot, before the face-board and body of the arms are put together, a plate, *g*, is secured, the same bearing a pin or pivot, *h*, and so secured that the pin is concentric with the circular base of the arms. In case the arms C C are divided, then the plate *g* must be secured to the lower half, *a*, only, as shown in Fig. 8; but in an undivided arm it may be secured upon both sides of the pin *h*. A plain strap of metal, *i*, with a hole near its end, is hung upon the pin *h* when the parts of the arm C are secured together in any ordinary manner, the strap *i* being long enough to project therefrom, as shown in Fig. 7, and the slot *f* being of such form that the arm may make nearly a quarter-turn on the hinge when the strap is in a vertical position without being stopped by contact with said strap, as clearly shown in Fig. 8. The back of the front rail of the frame of the seat A is recessed to receive the strap *i*, where it is secured by screws, as shown. Thus a very cheap, durable, and efficient hinge is provided which is wholly back of the front face of the arms, so that no pin, bolt, or other part of a hinge is visible at the front, and thereby the seams of the concentric base and socket may be covered by a rosette, as shown in Figs. 6, 7, 8. At the back it is immaterial whether any part of the hinge shows or not, so that a common wood-screw may be passed through the rear rail into the base of the arms for a hinge at the back end of the arm; or, if desired, a hinge like the one shown and described may be employed.

The position of the arm C, when let down, is indicated by broken lines in Fig. 8. The two broken lines, which stand at right angles to each other, indicate the edges of the slot *f* when the arm is thus dropped. When the arms C are divided into halves the socket in which they are hinged is so set as to bring the division-line of the halves, when let down, about level with the seat, as shown in Fig. 2. The lower edge of the back B is hinged to the seat A, and at each end of the back is a wing, *b*, hinged thereto on the lines *c c*, so that said wings may be turned backward at right angles to the back

B, as shown at the left of Fig. 3. Upon the back of each wing *b* there is a leg, *d*, Fig. 3, hung on a screw, so as to be turned outward, as shown, for use as a leg, and turned inward, as indicated in broken lines, when not required for use.

Any ordinary device may be employed to fasten the parts together when folded up for use as a sofa. In the construction shown only two such fastenings are necessary—to wit, one at each end of the back—to secure the wings *b b* to the arms C C, and thus retain the parts in the postion shown in Fig. 1. By unlocking the fastening the arms C C may be let down from their upright position, the wings *b b* turned outward at right angles to the back, the leg *d* turned outward, the back let down into the same plane as the seat, when the legs will come in contact with the floor and support the back in place. In case the wings *b b* are made long enough to rest upon the floor when the back is let down, the legs herein shown to lengthen said wings may be dispensed with. The upper half, *a'*, of the arms C C is then opened from its fellow, folded over backward, and rested at the end of the back, where it is supported in position by the hinged ends of the wings *b b*, when the parts are ready for use as a bed, as shown in Figs. 4 and 5.

If desired, one arm may be stopped on an incline and fastened in the desired position by any suitable mechanism. By refolding the parts the device is again converted into a sofa. Drawers *e e* may be placed under the seat for storing bed-clothes, &c., and cupboards or drawers may be formed in the ends under the arms C C.

I claim as my invention—

1. In a sofa-bed, the arms C C, concentrically hinged in the sockets of the seat, and divided into hinged halves *a a'*, substantially as described, and for the purpose set forth.

2. In a sofa-bed, the back B, hinged to the seat A, and provided at each end with wings *b b*, hinged for folding outward at right angles to the back, substantially as described, and for the purpose set forth.

3. The combination of the arms C C, divided into hinged halves, the seat A, and back B, provided with wings *b b*, substantially as described, and for the purpose set forth.

4. In a sofa-bed, the plate *g*, bearing the pin or pivot *h*, and the strap *i*, hung on said pivot, in combination with the arm C, having semicircular base and slotted at *f*, and the seat A, having semicircular socket at the end, the parts *g*, *h*, and *i* being applied wholly back of the front face of the arm, all operating together, substantially as described, and for the purpose specified.

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