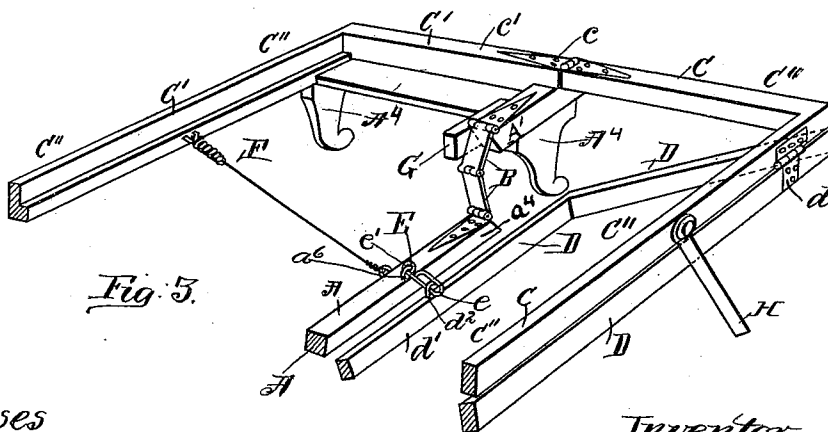
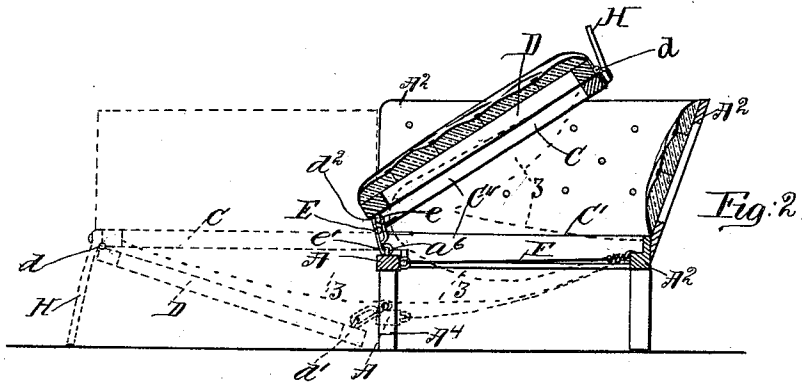
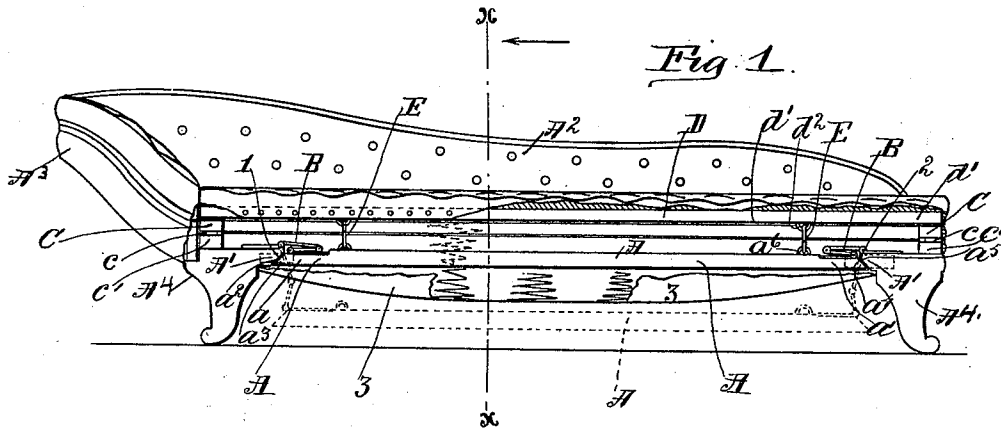


(No Model.)

A. L. GILLEN.
BED LOUNGE.

No. 480,190.

Patented Aug. 2, 1892.



Witnesses
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ALBERT LESLIE GILLEN, OF BRADFORD, MASSACHUSETTS.

BED-LOUNGE.

SPECIFICATION forming part of Letters Patent No. 480,190, dated August 2, 1892.

Application filed February 5, 1892. Serial No. 420,412. (No model.)

To all whom it may concern:

Be it known that I, ALBERT LESLIE GILLEN, of Bradford, in the county of Essex, State of Massachusetts, have invented a new Construction in Bed-Lounges, of which the following is a specification.

The objects of my invention are, first, to dispense with intermediate rails of the mattress-frame of a bed-lounge; second, to construct the framework that the intermediate framing-rail can be raised and lowered automatically when the lounge is opened or closed; third, the means to be applied to ordinary lounge construction.

Thus my invention consists, essentially, in sustaining a mattress for a bed-lounge upon a right-angled mattress-frame having its intermediate framing rail or rails designed to vertically move from their primary position when the lounge is being unfolded to permit of the mattress extending from side to side and end to end of the entire mattress-frame without having any mechanism in contact therewith other than what is required to support the mattress, as with ordinary beds. These objects I attain by the construction illustrated in the accompanying drawings, in which—

Figure 1 represents a side elevation of a bed-lounge having the upholstery partially broken away and drawn in accordance with my invention. Fig. 2 denotes a transverse section on line $x x$, Fig. 1, showing the seat partially raised in full lines and fully unfolded in dotted lines. Fig. 3 is a detail perspective drawing of the construction of my invention.

In the drawings, C'' represents the entire mattress-frame, that consists of two hinged sections joined by the hinges c , a stationary section C' , provided with a suitable back and head rest, and upholstery A^2 and A^3 and legs A^4 and the traveling rail A , and an opening or swinging section C , carrying ordinary swinging legs H and connected by hinges d to the rectangular or seat frame D . Webbing is secured to the rail c^2 of the section C' and to the rail c^3 of the other section C of the entire mattress-frame C'' , also to the respective cross-rails c' longitudinally. At the intersections of the webbing suitable springs are secured to make an efficient mattress 3.

The section C' of the right-angled mattress-frame C'' has two projections A' , to which are secured the legs A^4 , the chocks or stops G , and the respective ends of the toggle-joints E , and is beveled, as shown at 1 and 2 in Fig. 1, to prevent the traveling rail A going farther than required, which has similar inclined walls a^3 and a^4 at its extremities a and a' to engage with the other walls a^2 and a^5 on the projections A' . This traveling rail makes complete the folding action of the mattress, for as the mattress-frame is being folded the traveling rail is also rising, which comes in contact with the folded end of the mattress and causes the same to glide into the space of the frame-section C' . When the traveling rail has been brought into its primary position by the links E , loosely connected to the said rail and to the rail d' of the seat-frame D , which carries seat-upholstery thereon, it is brought to bear against the inclined walls on the projections A' vertically, also against the chocks or stops G laterally through the flexible straps F , which are connected to the rail c^2 of the section C' and to the side of the traveling rail, thus causing the said rail to be rigidly held in position and to finish the outer appearance of the lounge, for it can carry suitable decoration thereon.

The links E are designed to admit of free action of the traveling rail and of the seat-frame D in their peculiar movements when brought into action through the manipulator. They have an elliptic loop e , loosely engaging with the staple d^2 , secured to the rail d' of the seat-frame, and an ordinary round eye e' , loosely encircling the periphery of the staple a^6 , secured to the traveling rail, thus readily permitting the rail and frame working free with each other, yet the links are prevented from prying up the staples secured to the traveling rail. These links E transmit the movement of the section C and of the seat-frame D to the traveling rail, which is connected to the projections A' by the jointed means B , that permit the said rails being vertically raised and lowered in coincidence with the respective frames.

The straps F prevent the rail going outward from the side of the lounge. Thus they govern the action of the means used to vertically raise or lower the said rail A . They

can be designed in various ways to perform their function. In the drawings they consist of a strap of leather or any other suitable strap having a spring connected thereto to admit of it being flexible.

Having described my invention, I claim—

1. A sofa-bed consisting of a stationary frame and a folding section hinged together to sustain a suitable mattress, the stationary frame provided with a suitable head-rest, back-rest, and vertical sustaining-legs and with suitable stops, guide-pieces on said stops, a vertically-movable traveling rail connected by toggle-joints with said stops, straps connecting said traveling rail with the stationary frame, and the folding section provided with swinging legs, a rectangular seat-frame hinged to said folding section, and links connecting said seat-frame to the traveling rail, whereby said traveling rail is vertically raised and lowered by the movement of the folding section, substantially as set forth.

2. In a sofa-bed, the combination of a sta-

tionary and of a folding section hinged together, the front rail of the stationary section being suitably severed and engaged with the same by toggle-joints, as described, and laterally governed by suitable chocks and straps, and links connecting the folding section with the front rail, whereby said rail is vertically raised or lowered through the movement of the folding section, substantially as described.

3. In a sofa-bed, a stationary section having its front rail designed to be vertically raised and lowered, a folding section hinged to the stationary section, and links connecting the folding section with the front rail of the stationary section, whereby the said front rail is vertically raised and lowered by the movement of the folding section, substantially as described.

ALBERT LESLIE GILLEN.

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