

No. 612,816.

Patented Oct. 25, 1898.

M. BRILLIANT.
FOLDING SOFA BED.

(Application filed Dec. 3, 1897.)

(No Model.)

Fig. 1.

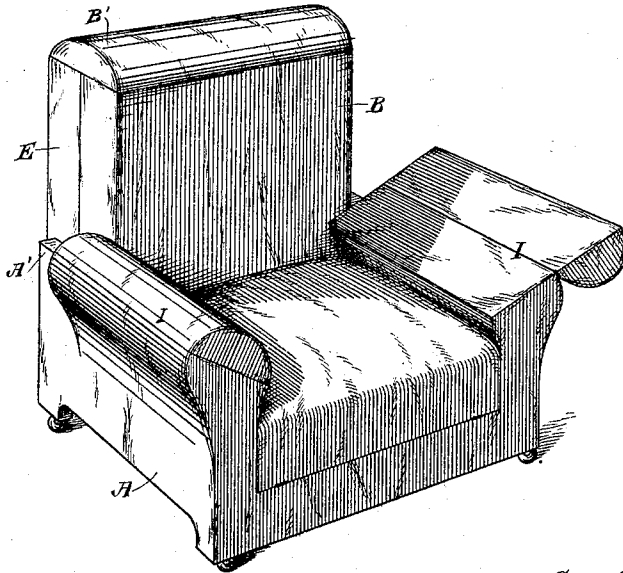


Fig. 5.

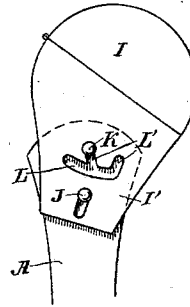


Fig. 2.

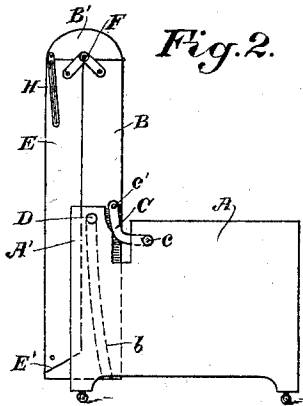


Fig. 3.

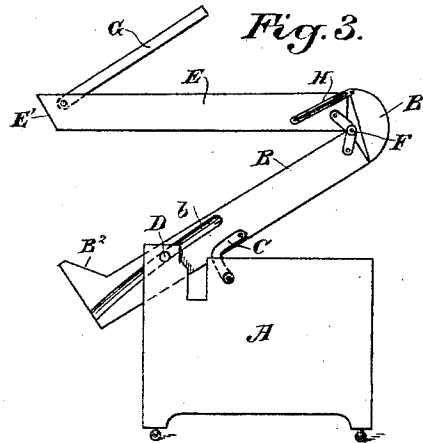
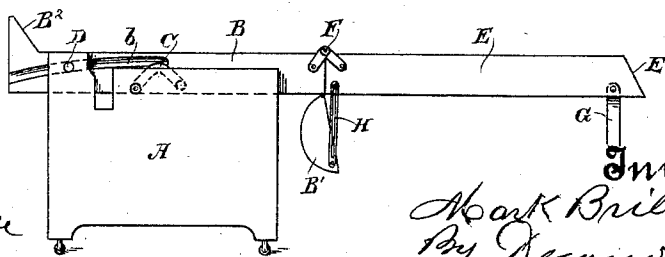


Fig. 4.



Witnesses,
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UNITED STATES PATENT OFFICE.

MARK BRILLIANT, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF ONE-HALF TO F. A. PLAISTED, OF SAME PLACE.

FOLDING SOFA-BED.

SPECIFICATION forming part of Letters Patent No. 612,816, dated October 25, 1898.

Application filed December 3, 1897. Serial No. 660,652. (No model.)

To all whom it may concern:

Be it known that I, MARK BRILLIANT, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Folding Sofa-Beds; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to furniture of that class known as folding beds, sofas, chairs, or couches.

It consists, essentially, in the novel combination of parts whereby the apparatus may be folded so as to provide a chair, sofa, or couch of ordinary description for day use and which may be opened out so as to form a bed convenient for reclining purposes.

It also consists in details of construction, all of which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a view of the chair when used as a seat only. Fig. 2 is a side elevation of the frame of the chair, being folded up. Fig. 3 shows the bed in the process of being extended. Fig. 4 shows the bed fully extended. Fig. 5 is a front view of the arm-frame, showing its operation.

A is the frame which forms the seat portion or support of the apparatus. It will be manifest that this seat may be made of any suitable or desired length to form a chair, as here shown, or, by elongating it, to form a sofa or settee, the connection of the various parts being essentially the same in either case. It is here shown in the form of an easy chair.

B is the back, which ordinarily stands in an approximately vertical position, as shown in Fig. 2, and this back is hinged and connected with the seat as follows:

C is a link bent approximately at right angles in the center and having one end pivoted to the frame A, as shown at *c*, and the other end to the back portion B, as shown at *c'*. The lower part of the back-frame is slotted on each side, as shown at *b*, and this slot extends a considerable distance from the lower end of the back. The slots on each side of the frame B fit and are slidable upon pins D, which extend through the rear and elevated portion

A' of the seat-frame A. The object of this construction is to provide for the folding of the part B upon the part A and to so control it while it is being thus folded as to prevent such an overbalancing of the weight as to cause it to drop suddenly.

It will be seen by the illustration that when the part B is pulled forward it first commences to pivot upon the curved links C and the slotted portions *b* begin to slide upon the pivot-pins D on each side of the frame A', and this guide allows the portion B to move forward until it is in the proper relative position to the rear portion of the seat and the part which is thus below lies horizontally upon the seat.

This construction may be employed for any folding bed by making the part B of sufficient length; but when used for a chair or other seat the part B need be only long enough for a back, and the necessary length for a bed will be obtained by an extension.

The extension-section E is hinged or pivoted to the top of the back B by links F, so that it may be unfolded after the back B has been brought into a horizontal position and turned outwardly in line with the part B. G represents legs by which the outer end of the part E is supported when it is extended. When these parts E and B are closed together and the device is in its form of a sofa or chair, the top, where the parts E and B are connected, is covered by a cap B', which forms a complete finish of the same character and upholstery as the back of the chair. This cap-piece is connected with the part E by a hinge-link H, so that when the part E is unfolded and extended into line with the part B this cap-piece will drop down about the hinge-link and will occupy a position below the parts B and E, from which it is then suspended, as shown in Fig. 4.

The side frames of the back B are beveled at the lower end, as shown at B², forming an elevation which serves as the head of the bed when the device is opened out as a bed, and the sides E of the extension portion are hinged in the same plane with the sides B and have the ends beveled, as shown at E', so that when closed in upon the part B the beveled portions E' and B² fit together and the sides E

and B lie essentially in the same plane and so fit that when closed they occupy a minimum of space.

The arms I of the chair are made in halves, 5 as shown, so that when closed they form cylindrical rolls; but when it is desired they may be extended transversely by opening them out, so as to present a transverse extension upon either or both sides of the chair. 10 These rolls, which are of considerable size, are adapted to fold inwardly and narrow the seat of the chair when the device is folded up as follows: Each of the rolls has a projecting extension I', which is connected with the side 15 rail A of the chair by a pivot-pin J, about which it is turnable. A second pivot-pin K enters a slot L, which has branches L' extending to one side thereof. The arm or rail I is turnable about the pivot J when the pin K is in 20 line with the slot L, so that the arm may either be turned inwardly and not project beyond the sides of the chair, or it may be turned outwardly when the back is to be folded in and the device extended to form a bed by 25 simply rotating it upon the pivot-pin J, the slot L sliding upon a pin K to allow of these movements of the arm I. At either point where it is desired to hold the arm I the arm is allowed to drop, so that the pin K slides 30 into either one of the slots L', while the slot through which the pin J passes also slides upon the pin and the two hold the arm in any desired position.

By this construction I provide an exceedingly 35 convenient and easily-converted chair or sofa-bed.

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

40 1. In a combined seat and bed, the permanent seat portion, a back adapted to stand essentially vertical or to fold forward and rest upon the seat portion, in combination with the curved pivoted rigid connecting-links by 45 which the seat and back are united at a point above the center of the latter, pins fixed in the back of the seat portion and longitudinal slots formed in the lower part of the back and slidable upon said pins when the back is fold- 50 ed forward upon the seat.

2. In a combination seat and bed, a stationary seat-frame having pivot-pins in the rear portion, a back adapted to stand essentially vertical with the seat and to fold forward 55 so as to lie horizontally upon said seat, slots made longitudinally in the lower part of said back and slidable upon the pivot-pins of the seat portion and curved rigid links connecting the upper portion of the back with 60 the seat portion in front of the aforesaid pivot-pins whereby the back is balanced when folded down upon the seat.

3. In a combined seat and bed, a stationary seat-frame, a back connected therewith, 65 a slidable pivot and a curved pivoted rigid link connecting the back and seat-frame whereby the back may be moved from an essentially

vertical to an essentially horizontal position with relation to the seat-frame, a folding extension fitting upon the back, hinged to the 70 upper end thereof and adapted to be turned about said hinge and extended into line with the back when the latter is in its horizontal position, and a means for supporting the outer end of said extension. 75

4. In a combined seat and bed, a stationary seat-frame, a back connected therewith by separated and balancing points of support about which the back is turnable from an essentially vertical to an essentially horizontal 80 position, an extension hinged to the upper end of the back and folding thereinto when the device is used as a seat, and a cap-piece hinged to said extension fitting over the top of the back portion and forming a finish 85 therefor.

5. In a combined seat and bed, a permanent seat-frame, a back having separated pivotal and slidable supports about which it is turn- 90 able from an approximately vertical to an approximately horizontal position, an extension-section hinged to the upper end of the back adapted to be unfolded into line therewith when the parts are in a horizontal position, a cap-piece, links by which it is hinged to the 95 extension-section so that it fits over and forms a finish for the upper end of the back and the extension-section when the two are in a vertical position, said cap-piece swinging about the connecting-links so as to drop below and 100 out of the way when the extension is unfolded.

6. A seat-frame, a back supported therefrom by pivoted links having a second slidable point of support whereby the back is 105 balanced when turned from a vertical to a horizontal position, an extension hinged to the upper end of the back and adapted to be opened outside into line therewith when the parts are unfolded, the sides of said extension standing in the same plane with the sides of 110 the back portion having the ends beveled and fitting when closed into a correspondingly-beveled portion at the bottom of the back-frame, said beveled portion of the back-frame forming a head for the bed when the parts 115 are unfolded and extended.

7. In a combined seat and bed having a back with a plurality of connections between itself and the seat-frame, about which it is turnable from an approximately vertical to a 120 horizontal position, and an extension foldable upon the back and capable of extending into line therewith when the back lies upon the seat portion, arms upon each side between which the back swings, said arms having up- 125 holstered rolls centrally longitudinally divided, the sections being hinged together upon the outer edges and adapted to open outwardly so as to form an extended support transversely. 130

8. In a combined seat and bed, the combination of the seat portion and the side rails thereof, the rolls divided from end to end and hinged at their outer edges so that they may

be opened outwardly to form extension-supports transversely from the seat, one member of each roll having a downward extension overlapping the adjacent side rail and pivotally secured thereto, and means engaging and locking the extensions in different positions.

9. In a combined seat and bed of the character described, cylindrical rolls having extensions at the ends, overlapping portions of the seat-frame, said extensions being slotted to form locking-notches and guides, and pins

passing through said slots about which the rolls are turnable so as to fold inwardly or outwardly with relation to the fixed portions of the seat.

In witness whereof I have hereunto set my hand.

MARK BRILLIANT.

Witnesses:

S. H. NOURSE,

JESSIE C. BRODIE.