

(No Model.)

R. F. COLLINS.
FURNITURE HINGE.

No. 523,304.

Patented July 17, 1894.

Fig. 1.

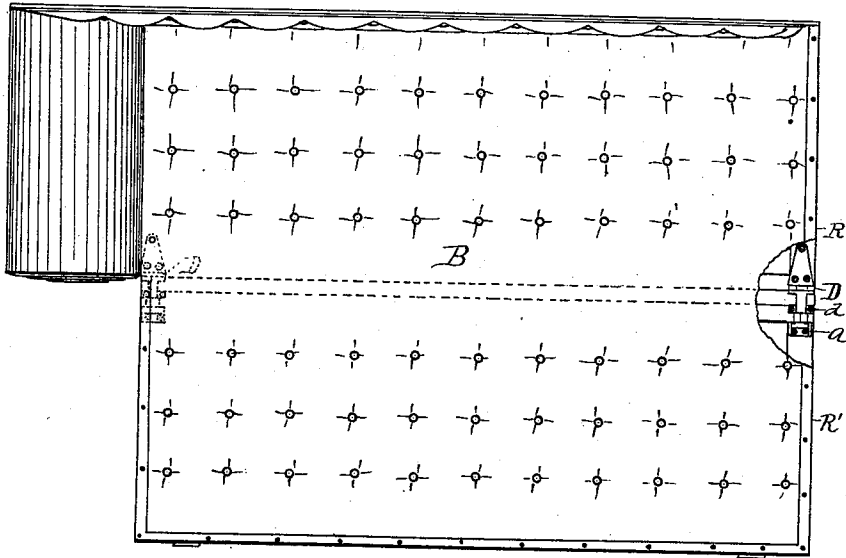


Fig. 2.

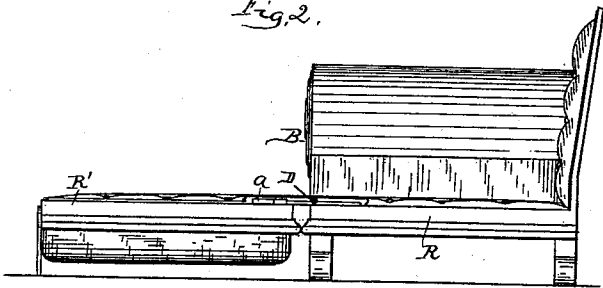


Fig. 3.

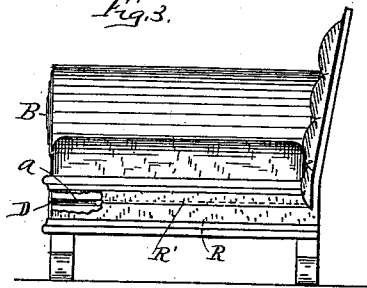


Fig. 4.

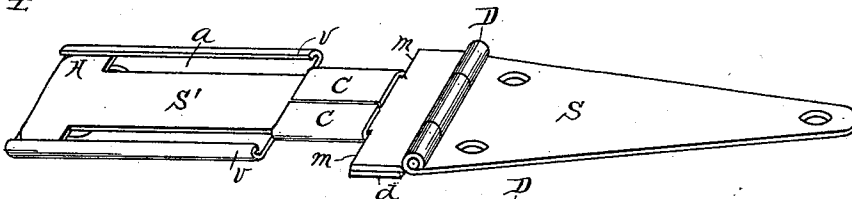
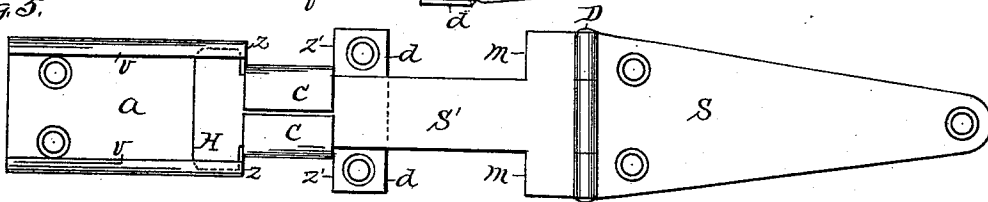


Fig. 5.



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UNITED STATES PATENT OFFICE.

ROBERT F. COLLINS, OF WICHITA, KANSAS.

FURNITURE-HINGE.

SPECIFICATION forming part of Letters Patent No. 523,304, dated July 17, 1894.

Application filed May 29, 1893. Serial No. 475,857. (No model.)

To all whom it may concern:

Be it known that I, ROBERT F. COLLINS, a citizen of the United States of America, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Furniture-Hinges, of which the following is a specification, reference being had therein to the accompanying drawings and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a top view of a bed-lounge in an extended position, representing my improved hinge applied thereto; Fig. 2, an end elevation of the same; Fig. 3, an end elevation of the lounge in a folded position; Fig. 4, a perspective view of the hinge and Fig. 5, a front view of the same.

This invention relates to certain improvements in an adjustable, or extensible, hinge for furniture, and adapted more especially for hinging together the folding parts of a bed-lounge, and consists in certain novel construction of parts, which improvements are fully set forth and explained in the following specification and pointed out in the claim.

Referring to the drawings D represents the hinge proper, and *a* a guide plate for holding and guiding one strap of the hinge.

S represents one strap of the hinge which is of the usual pattern and is adapted, in the use herein shown, to be attached to lounge rail R by means of screws in the usual manner, so the hinge joint will be even with said rail at the front of the lounge.

S' represents the opposite hinge strap and is made narrower in body than the former strap, and with parallel sides, and is provided adjacent the hinge joint with a portion equal in width with said former strap, of such form as to provide the two opposite square shoulders *m—m*, and is further provided at its extended end with a cross head H.

Plate *a* is made of flat metal of equal width with the hinge proper, and is slit laterally at its sides as shown at *z—z* and *z'—z'* in Fig. 5, and the side parts between said slits, as shown at C—C, are bent over the plate toward each other and thus form a guide way within which the neck of strap S' is arranged. The plate portion *a* extending from the slits *z—z*

is made with its sides bent up and a little distance over the plate body, as shown at *v—v*, which forms guide ways for the ends of cross-head H of strap S', as shown. The portion *d* of said plate is provided with screw holes, as shown in Fig. 5, and the plate, between the guide ways *v, v*, is further provided with screw holes, as also shown in said figure, and the plate as united with strap S' is adapted to be attached, by means of counter-sunk screws arranged through said screw holes, to the rail R' of the lounge with the end portion *d* even with the rail, as shown in Fig. 1.

In the construction of the hinge it is intended that the straps S and S' and plate *a* shall be approximately the same length, and that the portion of strap S' between the hinge joint and shoulders *m—m* shall be an equal distance with that of plate portion *d* from the plate end to slits *z'—z'*, so the plate portion *d* may slide past shoulders *m, m*, and the guide *c, c*, come against said shoulders as shown in Fig. 4, which shoulders form a stop to movement in the one direction, and the shoulders of cross head H, which are adapted to engage the opposite end of guide *c, c*, form a stop to movement in the opposite direction, and thus the hinge strap S' becomes adjustable by sliding in its guide ways of plate *a* the distance being limited by said stops.

The plate *a* besides serving as a guide for the strap S' also prevents said strap scratching or wearing the wood of the rail R' to which the plate *a* is attached.

In use when the lounge is extended for bed service the folding portion, having the rail R' and the plates *a*, is permitted to be extended a distance; the limit of the adjustability of the hinge parts; as represented in Figs. 1 and 2, which becomes necessary in order that the moldings of the lounge, which are common in lounges, may not prevent the proper letting down of said folding lounge portion; by the adjustability of the hinges, which action causes plates *a* to slide out on straps S'. In folding the lounge, the weight of the folding portion, when raised to an upright position, causes the plates *a* to slide in on straps S' so the adjoining rails of the two parts of the lounge will register to a vertical line when the folding is completed, as represented in

Fig. 3, and as the hinge joints are secured, by the straps S, so as not to extend beyond the lounge rail, there will be no parts of the hinges extending from the rails at the lounge front when the lounge is folded, and therefore there will be nothing to cause the front upholstery of the lounge to protrude when the lounge is folded.

The object in constructing the guide plate *a* of sheet metal is, to produce said plate with as little bulk as is possible so as not to interfere with the folding of the hinge, and the object in providing the differential guide is to form the stops by the lesser guide and protect the cross-head of strap *S'* by the greater guide; which protection is essential in order that portions of the lounge upholsterings and fittings may not be caught by the cross-head and prevent free operation of the hinge.

Having thus described my invention, what

I claim as new and useful, and desire to secure by Letters Patent, is as follows:

In a hinge for furniture, the combination with the strap S of the strap *S'* reduced between its ends providing the shoulders *m m* and cross head H and the sheet metal plate *a* having its edges turned over at *v v* to embrace the head H and turned up at C C to embrace the reduced portion of the strap *S'*, said plate having extensions *d d* whereby it is attached to the object to be hinged, said plate serving as a guide for the strap *S'*, and also preventing said strap wearing the rail or other piece to which the plate *a* is attached, substantially as shown and described.

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Witnesses:

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