Dec. 26, 1944. L. S. GILLIAM ET AL 2,366,098

CONVERTIBLE STUDIO DAVENPORT

Filed Dec. 26, 1942 2 Sheets-Sheet 1

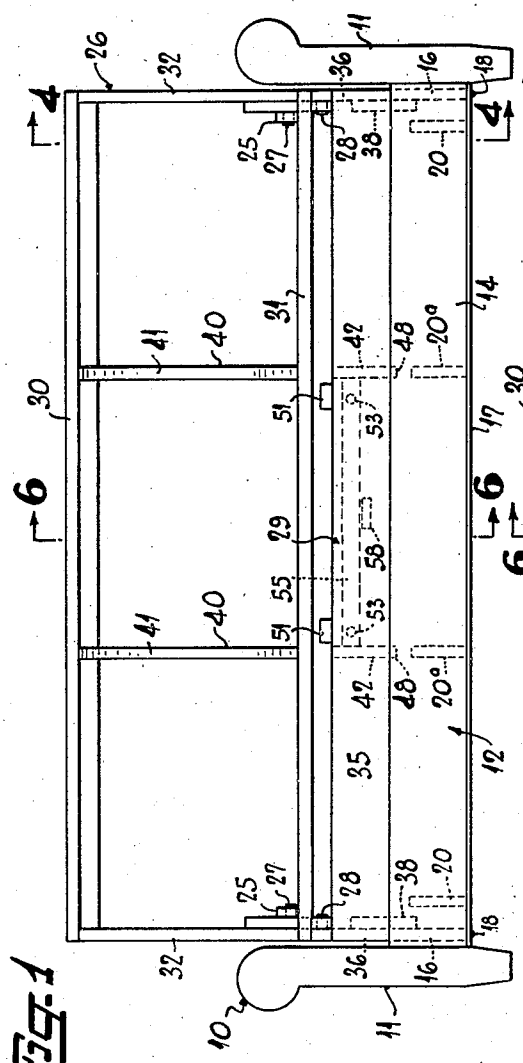


Fig. 1

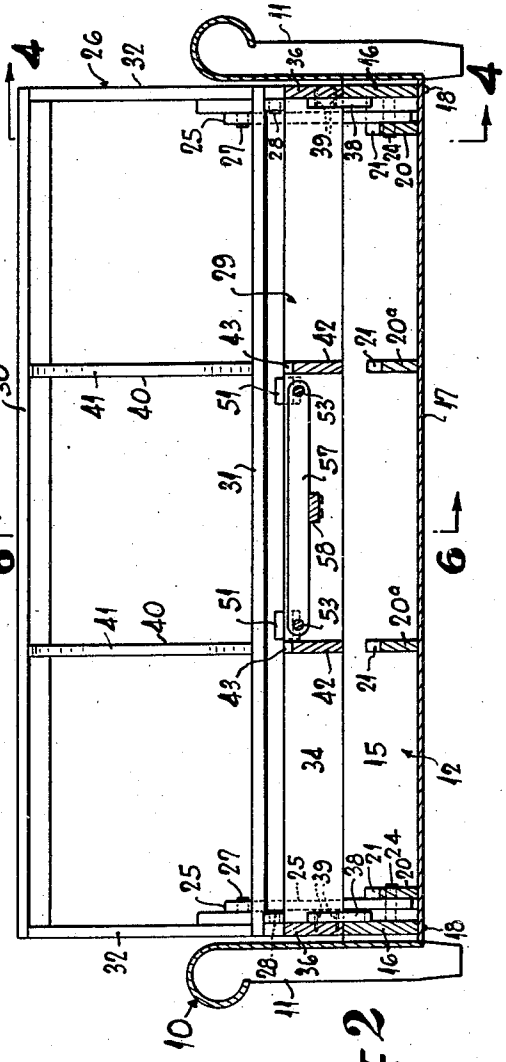


Fig. 2

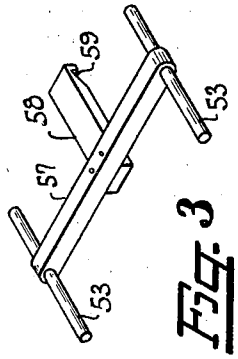


Fig. 3

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Filed Dec. 26, 1942 2 Sheets-Sheet 2

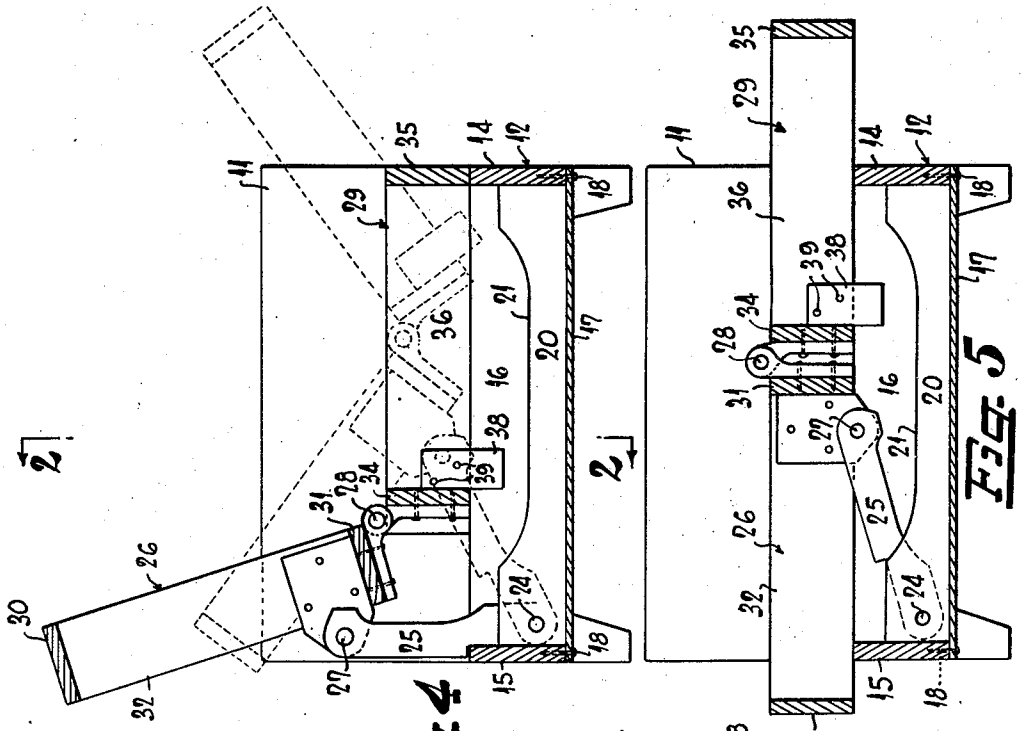


Fig. 4

Fig. 5

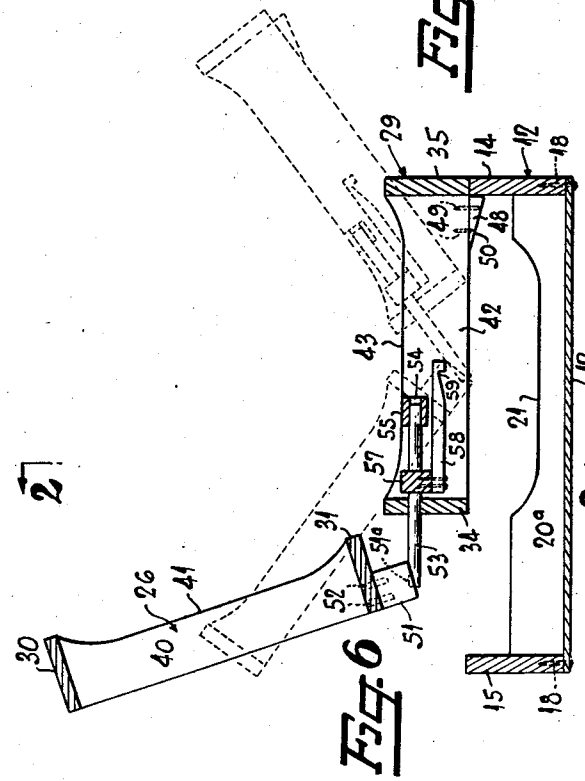


Fig. 6

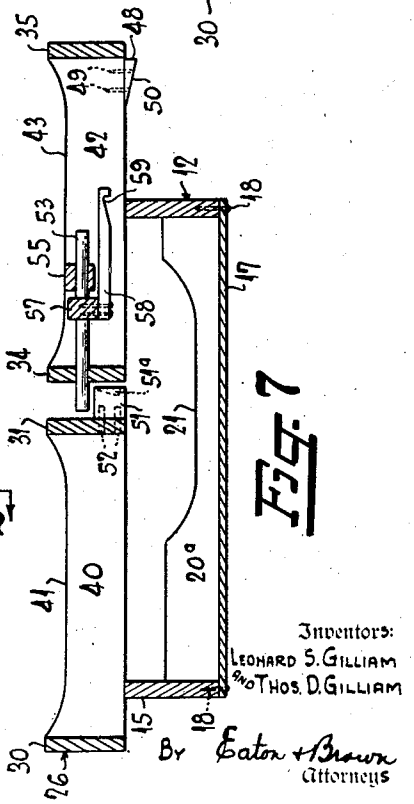


Fig. 7

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UNITED STATES PATENT OFFICE

2,366,098

CONVERTIBLE STUDIO DAVENPORT

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Application December 26, 1942, Serial No. 470,144

1 Claim. (Cl. 5—47)

This invention relates to furniture generally and more especially to a convertible studio davenport so constructed that it may be employed either as a bed or as a sofa by adjusting the relative positions of the parts accordingly.

It is an object of this invention to provide an article of furniture of the class described formed from a base member, a seat member and a back member, in association with a novel latching device for releasably holding the back member at substantially right angles to the seat member.

It is another object of this invention to provide a pivoted connecting guide brace between the seat and back assembly and the base member, whereby the seat and back members will be positively guided when shifted relative to the base member during a conversion of the structure from a sofa to a bed or vice versa. This brace also assists the latching device in holding the back member in angular relation to the seat member when the structure serves as a couch.

It is still another object of this invention to provide a convertible studio davenport that is simple in construction, easy to convert from a sofa to a bed or vice versa, and economical to manufacture. In fact, the construction is so simple that practically every part can be made of wood without materially affecting the durability.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds when taken in connection with the accompanying drawings, in which:

Figure 1 is a front elevation of the skeleton framework of an improved convertible studio davenport;

Figure 2 is a view similar to Figure 1, but showing certain parts in section and taken along the lines 2—2 in Figures 4 and 6;

Figure 3 is an isometric view of a portion of the specific latching device for holding the back and seat portions in angular relation to each other;

Figure 4 is a transverse vertical sectional view taken along the lines 4—4 in Figures 1 and 2;

Figure 5 is a vertical sectional view similar to Figure 4, but showing the article of furniture after it has been converted into a bed;

Figure 6 is a transverse vertical sectional view taken along the lines 6—6 in Figures 1 and 2;

Figure 7 is a vertical transverse sectional view similar to Figure 6 but showing the article of furniture after it has been converted into a bed.

Referring more specifically to the drawings, the numeral 10 broadly designates the skeleton framework of a convertible studio davenport. This davenport comprises, in part, a pair of end supports or arm rests 11 which have disposed therebetween a rectangular framework 12, said framework serving as a base member for the seat and back structures to be hereinafter described.

The base member 12 has a front wall 14, a back wall 15, and end walls 16. These side and end walls are flush bottom and flush top, and a suitable bottom 17 is secured in position on the base member by any suitable means such as nails, or screws 18. Also disposed inside the base member 12 at spaced intervals are suitable transversely disposed ribs or braces 20 and 20a, the bottoms of which rest upon the bottom portion 17 and the tops of which have cut away portions 21 therein. These braces serve to rigidly support the base framework.

It will be noted by observing Figures 2, 3, and 5 that each end brace 20 has pivotally secured thereto as at 24 the lower end of a link 25, said link extending upwardly and having its upper end pivotally secured to a back framework 26 as at 27. This back framework 26 is also pivoted as at 28 to a seat framework 29, said frameworks 26 and 29 being rectangular in shape and each having substantially the same length as the base member 12 upon which these members rest.

The back framework 26 has parallel top and bottom side pieces 30 and 31 respectively, which are joined together at their ends by pieces 32. (Figures 4 and 6.) The end pieces 32 of framework 26 are disposed immediately above the end pieces 16 of the base framework 12, therefore when the back framework 26 is lowered to horizontal position as shown in Figures 5 and 7, the end pieces 32 of the framework 26 will be supported by the end pieces 16 of the base 12.

Likewise, the seat framework 29 has parallel side pieces 34 and 35 which are joined together at their ends by end pieces 36. The members 34 and 35 are of substantially the same length as the base member 12 and therefore, when the seat structure has been converted into a bed structure as shown in Figures 5 and 7, the end members 36 of the framework 29 will be supported by the end pieces 16 of the base.

As a means for holding the seat framework 29 upon the base member 16, and for preventing movement laterally of the seat, suitable projections or plates 38 are secured to the inner proximate faces of end pieces 36 as at 39. The lower ends of these plate members extend downwardly adjacent the inside proximate faces of end members 16.

It can be seen by observing Figures 1 and 6 that the back framework **26** has suitable transversely disposed braces **40**, each of which has a cut-away portion **41** in the forward edge thereof. Similar transversely disposed braces **42** are disposed in the seat framework **29**, and each of these braces has a cut away portion **43** in its upper edge.

When the seat structure is in the position shown in Figures 1, 2, 4, and 6, the intermediate back portions of the links **25** are disposed adjacent the interior vertical face of side base piece **15**, and therefore, the seat and back assembly is prevented from shifting any farther to the left in Figures 4 and 6. As a means for preventing the seat and back assembly from shifting forwardly, that is to the right in Figures 4 and 6, a suitable projection **48** has been secured to the bottom of each brace **42** by any suitable means such as nails, or screws **49**. The forward vertical edge of the projection **48** fits against the interior vertical face of the front side piece **14** of the base member **12** when the parts are erected to serve as a sofa; and thus any forward shifting of the seat member and its companion back member is prevented.

Each of these projections **48** has a cam surface **50** on its lower face, which surface extends upwardly and rearwardly from its front end. This cam surface serves an important function when converting the structure from a bed to a seat. When the article of furniture is arranged to serve as a bed, the front end of the seat framework **29** is cantilevered over the front end of the base member **12**, and therefore, the projection **48** is disposed on the outside of the base member. (See Figure 7.) When converting the bed structure as shown in Figure 7 to the seat or sofa structure as shown in Figure 6, it is necessary for this projection **48** to be moved to the interior of the base member. The cam surface **50** will prevent hanging of this projection with the outside of the front side piece **14** when the framework **29** and projection **48** are moved rearwardly during the conversion. Therefore, it is seen that the links **25** cooperate with the projections **48** (Figures 4 and 6) to prevent forward and backward shifting of the seat and back structure relative to the base member.

Means are also provided for releasably latching the seat and back members in angular relation to each other. Usually the back structure is latched at substantially right angles to the seat structure; however, the angularity may be varied to suit conditions. The back member **26** has secured to its bottom side piece **31** a pair of blocks **51** by any suitable means such as dowel pins or screws **52**. Each block has a cavity **51***a* in its lower face in Figure 6, or in its right-hand face in Figure 7, each of said cavities being adapted to receive the projecting end of a rod or bar **53**. In the drawings, there is a pair of rods or bars **53** and also a pair of blocks **51**, together with the associated cavities **51***a*, for receiving the ends of these rods or bars.

Members **53** are slidably mounted in side piece **34** of the seat framework **29**. The rods or bars are also slidably mounted in suitable holes **54** in a longitudinally disposed strut **55**, which strut is secured between the central transversely disposed braces **42**, previously described.

As a means for uniting the rods **53**, a suitable bar **57** has been provided, and the central portion of this bar has a handle **58** extending forwardly therefrom and beneath the struts **55**. The forward end of handle **58** has a notch **59** in the lower portion thereof which is adapted to be engaged by one's fingers when it is desired to unlatch the seat framework **29** from the back framework **26**. It is evident that when the members **57**, **58**, and **53** are pulled forwardly that the projecting ends of the rods or bars **53** will be released from notches **51***a* to thereby permit relative rotation between the seat and back.

Let us assume that it is desired to convert the sofa structure as shown in bold lines in Figures 4 and 6 to a bed structure as shown in Figures 5 and 7. The operator or user first grasps the front side piece **35** and then rotates the seat and back structures in a counterclockwise manner, and at the same time, pulls or slides the seat and back assembly forwardly on top of base member **12**. In Figures 4 and 6, the intermediate position assumed by the seat and back structure is shown in dotted lines. When the seat and back structures have been rotated sufficiently for the back framework **26** to rest in a substantially horizontal position and for the seat framework **29** to be disposed substantially in a vertical position, the operator then engages the notch **59** of the latch structure and pulls the projecting ends of bars or rods **53** out of notches **51***a*. Then the seat framework will be unlatched from the back framework, and thereafter, the back framework may be lowered to horizontal position where it is disposed alongside the seat framework and substantially in the same plane.

In the drawings and specification, there has been set forth a preferred embodiment of the invention, and although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation, the scope of the invention being defined in the claim.

We claim:

A convertible studio davenport comprising a base member, a seat member, a back member pivotally secured at its front lower edge to the upper rear edge of the seat member, a link having its lower end pivotally secured to said base member and having its upper end pivotally secured to the rear lower edge of said back member, the intermediate portion of said link having a shoulder thereon and being adapted to rest against a portion of said base member to limit the backward movement of said seat and back members, a projection carried by the lower front portion of said seat member and engageable with the front portion of said base member for limiting the forward movement of said seat and back members when the back member is in raised position, and a bar slidably mounted in the rear portion of said seat member and having the rear end thereof adapted to be slid into the path of the rear lower edge of rotation of said back member whereby the seat and back members may be releasably held in angular position relative to each other.

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