Nov. 3, 1936. H. A. ROBINSON, SR 2,059,397

CONVERTIBLE CHAIR

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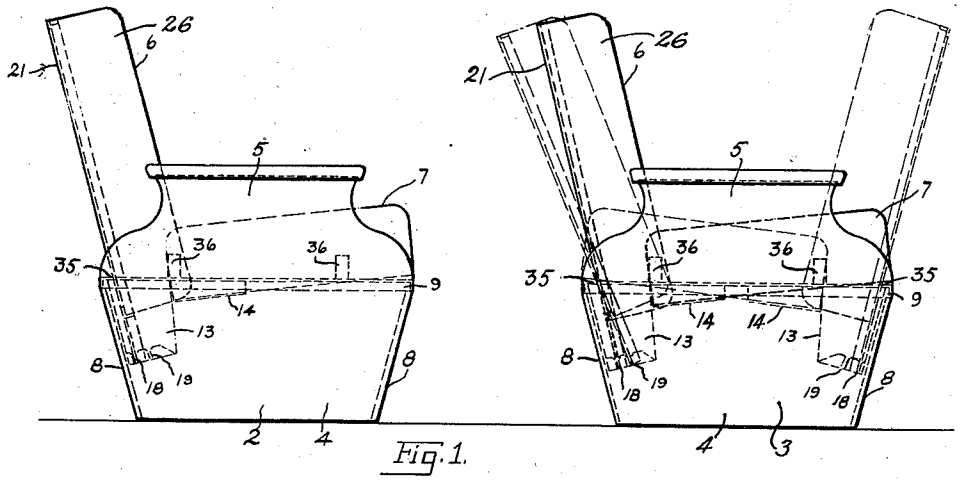


Fig. 1.

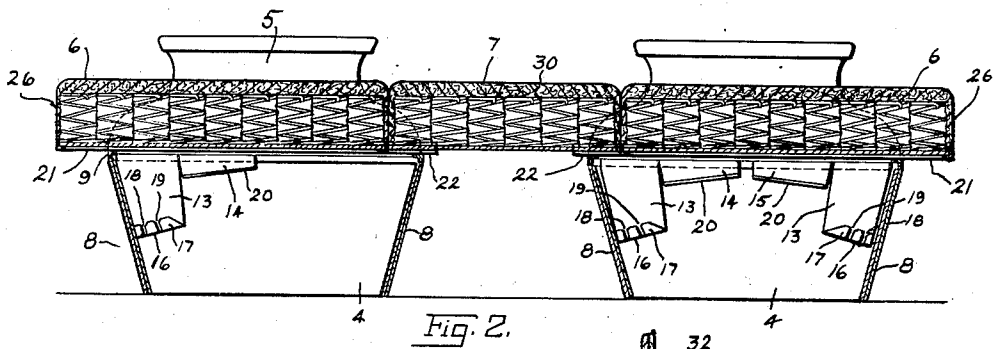


Fig. 2.

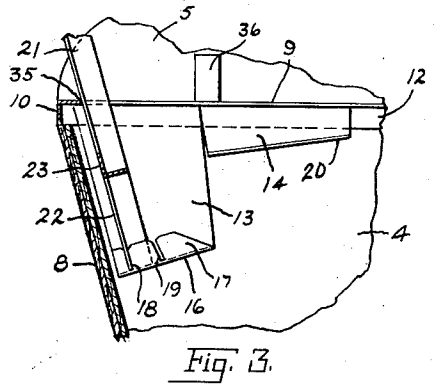


Fig. 3.

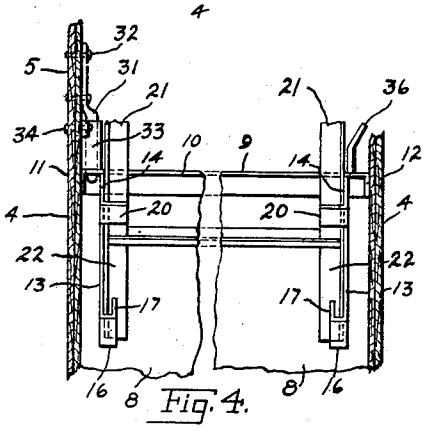


Fig. 4.

INVENTOR

BY Hugh A. Robinson, Sr.

Clapin & Neal ATTORNEYS

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CONVERTIBLE CHAIR

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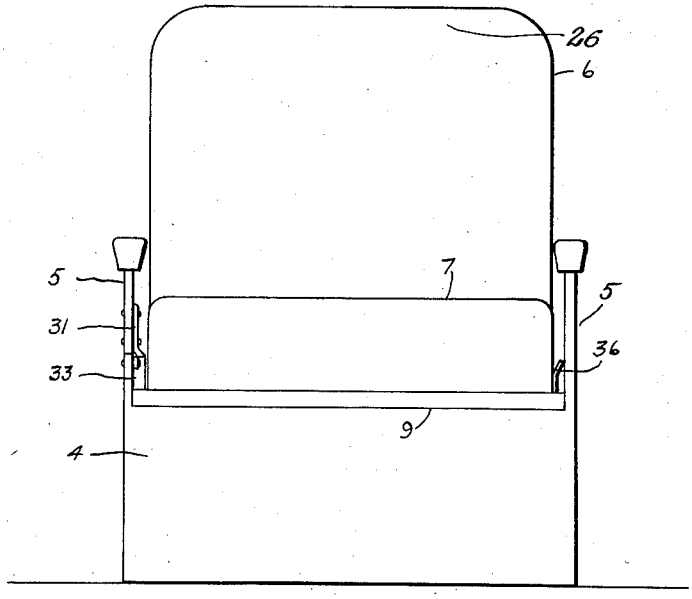


Fig. 5

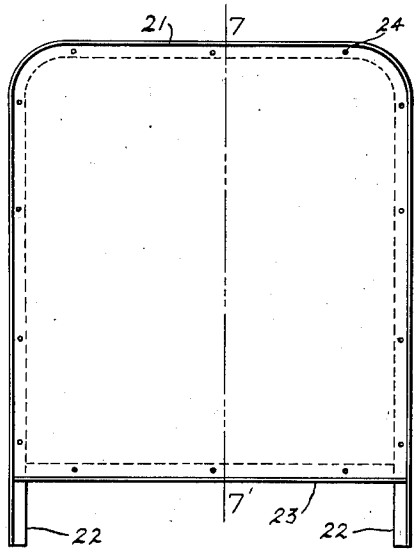


Fig. 6

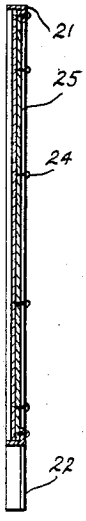


Fig. 7

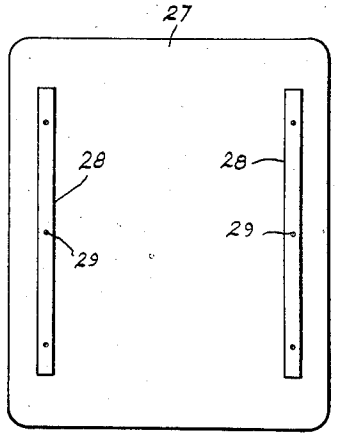


Fig. 8

Fig. 9

INVENTOR

BY Hugh A. Robinson, SR.

Clarke & Neal ATTORNEYS

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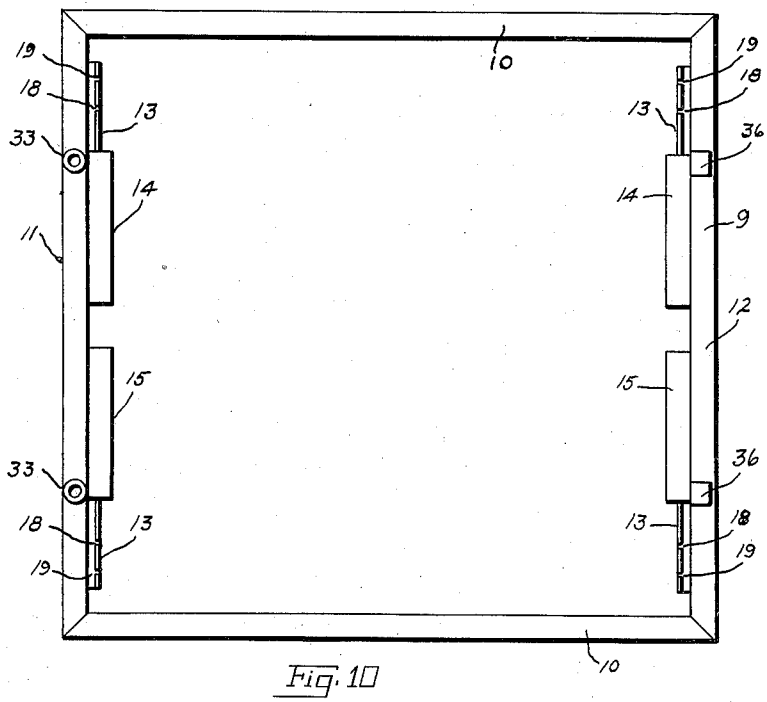


Fig. 10

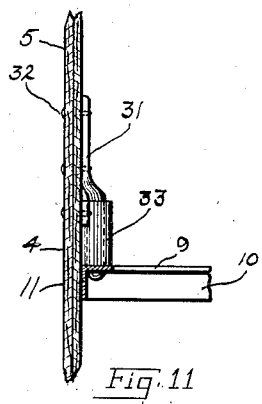


Fig. 11

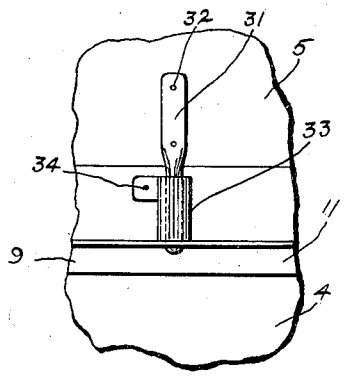


Fig. 12

INVENTOR
Hugh A. Robinson, SR.

BY Clapin & Neal ATTORNEYS

Patented Nov. 3, 1936 2,059,397

UNITED STATES PATENT OFFICE

2,059,397

CONVERTIBLE CHAIR

Hugh A. Robinson, Sr., Coral Gables, Fla., assignor to Curtiss Aerocar Company, Inc., Coral Gables, Fla., a corporation of Florida

Application October 16, 1934, Serial No. 748,483

3 Claims. (Cl. 155—7)

This invention relates to an improved berth seat combination, and has as its principal object simplicity of construction and manipulation with resulting economies in manufacture, together with improved appearance and a more efficient utilization of space.

In the accompanying drawings, which illustrate one embodiment of the invention,

Fig. 1 is a side elevation of a two chair unit transformable into a berth;

Fig. 2 is a sectional side view with the parts in berth forming position;

Fig. 3 is a fragmentary side view in section showing the supporting means for the chair back when the latter is in chair forming position;

Fig. 4 is a front sectional view of the structure shown in Fig. 3;

Fig. 5 is a front view of one of the chair units;

Fig. 6 is a front elevation of one of the movable chair backs showing certain structural details;

Fig. 7 is a sectional view substantially on line 7—7 of Fig. 6;

Fig. 8 is a view of the under side of the chair seat;

Fig. 9 is an end view of the structure shown in Fig. 8;

Fig. 10 is a plan view of the seat base;

Fig. 11 is a detail front view showing the manner of attaching one of the chair arms; and

Fig. 12 is a side view of the structure shown in Fig. 11.

Referring to the drawings the two chairs which together form a berth unit are generally indicated at 2 and 3, and are shown as comprising a base having front and back members 8, side members 4 and arms 5. Movable backs 6 and seats 7 complete the general chair assembly. The seat bases are preferably formed of ply wood and the front and back members 8 are inwardly inclined for the purpose of increasing the foot room between adjacent chairs.

The base carries, at a suitable height above the floor, a rectangular metal seat frame 9 composed of rear and front angles 10 and side angles 11 and 12 preferably formed of steel. The members 10, 11 and 12 are mitered and welded at the corners to form a unitary frame.

Welded to the side members 11 and 12 are steel back supports 13 (best shown in Fig. 3) formed of steel plates the lower ends being bent inwardly at 16 and upwardly at 17. The upwardly bent portions are provided with slots 18 and 19 to receive the lower ends of the chair back frame as later described. Seat supports 14 are also welded to side members 11 and 12. These seat supports are formed of steel plate and are provided with rearwardly inclined flanges 20. As will be clear from Fig. 1 the rear portion of the seat 7 is carried by the flanges 20 of supports 14 while the front of the seat rests at slightly higher elevation on the front member 10 of the frame 9.

The back member 6 of the chairs comprises a frame 21 formed from a length of steel angle stock bent into U-shape as best shown in Fig. 6, the sides of the U being connected adjacent their free ends by a cross piece 23 to leave extending portions 22 adapted to be inserted in slots 18 or 19 of the supports 13 as shown in Figs. 1 and 3 to give the desired inclination of the chair back when the parts are in chair forming position. As will be clear from Fig. 3 the lower portion of the chair back is inserted within frame 9 and engages the rear member 10 of said frame at 35. All joints of the back frame are welded and members 21 and 23 are provided with drilled holes 24 for the attachment, by means of screws, of a ply wood base 25 to which suitable upholstery 26 may be secured in any suitable manner.

The chair seats 7 comprise a ply wood base member 27 to the under side of which cleats 28 are secured as by screws 29 to prevent sidewise or longitudinal displacement of the seat when in chair forming position. The upholstery 30 of the seat, which is secured in any suitable manner to the base member 27, is of the same depth as the back upholstery 26.

Since the chair units are usually placed next to a wall, arm 5 of the side adjacent to the wall may be continuous with side 4 but arm 5 on the opposite or outer side is removable and is held in position by pins 31 attached to arm 5 by bolts 32. Pins 31 are insertable in sockets 33 which are welded to angle 11 and bolted to side 4 at 34.

When used as a couch or divan the outer arms 5 are removed, the seats and backs of both chair units are removed and the backs laid horizontally on their respective seat frames 9, as shown in Fig. 2, with their projecting portion 22 toward each other. One seat member 7 is then placed on the extensions 22 as shown, the extra seat member 7 being temporarily stored in available storage space in the vehicle. For purposes of easy alignment of the backs and seat members angled guides 36 are welded to frame angle 12.

As shown in chair 3 of Figs. 1 and 2, members 13 and 14 may be provided at both the front and back of the chair base so that the chairs may be arranged to face each other as indicated in dotted lines in Fig. 1. In vehicles such as busses, trailers and airplanes which always travel in the

same direction it may be desirable to make only one chair member thus reversible in direction but it will be understood that both chairs may be so constructed if desired.

I claim:

1. A convertible chair combination which comprises two spaced chair units each comprising a box-like base member, chair arms secured at the sides of said base, at least one of said arms being removable, removable back and seat members, the back member being provided at its lower corners with extending members, slotted members secured within the base in which said extending members are selectively engageable to vary the inclination of the back, the back members of the two chair units adapted to be supported in horizontal position by their respective bases with said extending members toward each other, the latter forming, when the backs are in the last named position, supports for one of the seat members to convert the two chairs into a couch.

2. A convertible chair combination which comprises two spaced chair units each comprising a box-like base member open at the top and having its front and rear faces inwardly inclined to decrease the bottom width of the base, a removable back member provided with angle iron extensions at its lower corners, back supporting brackets positioned against the inside faces of the ends of the base adjacent the rear corners thereof, said brackets being in the form of plates having inwardly and upwardly turned flanges along their lower edges, a plurality of slots formed in the upwardly turned flanges of the brackets to receive the ends of the extensions of the back members, removable seat members, and seat supporting brackets, having rearwardly and downwardly inclined flanges, positioned against the inside faces of the ends of the base to support the rear portion of the seat member when the latter is in chair forming position, the back members of the two chair units adapted to be supported in horizontal position by their respective bases with their corner extensions toward each other, the latter forming, when the backs are in the last named position, supports for one of the seat members to convert the two chair units into a couch.

3. In a convertible chair construction, an adjustable and removable back member having projections at its lower corners, a box-like base member, supporting brackets for said back member secured within the base member and comprising vertical plates provided at their lower edges with horizontally and upwardly turned flanges, and a plurality of slots formed in the upwardly turned flanges to selectively receive the free ends of said projections to support said back member in desired inclined position.

HUGH A. ROBINSON, SR.