July 27, 1948. V. ZDANAITIS ET AL 2,446,036

BRACKET SUPPORTED SUSPENDED CHAIR

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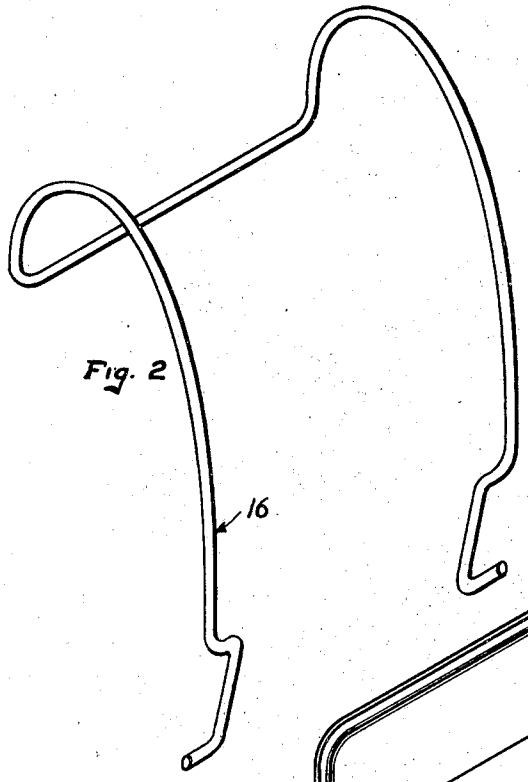


Fig. 2

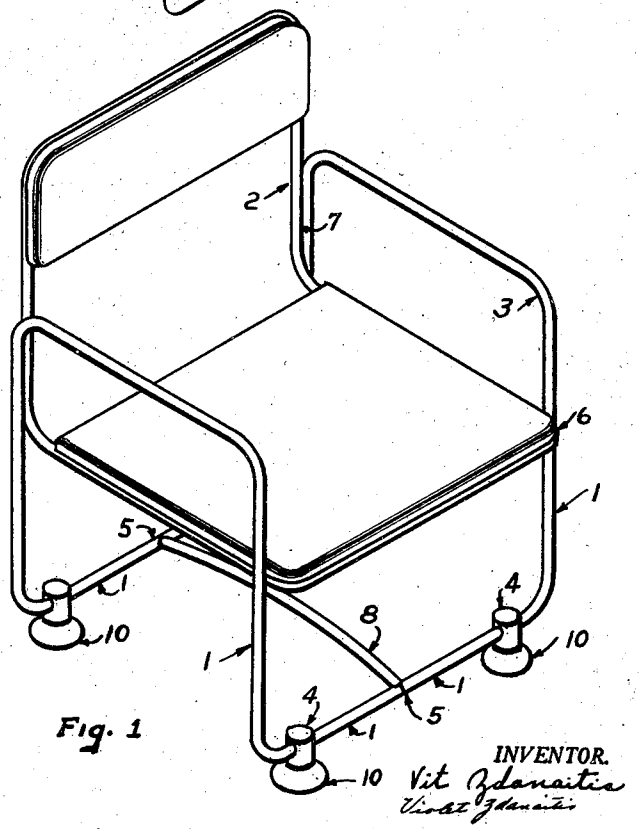


Fig. 1

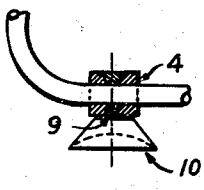


Fig. 6

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Fig. 9

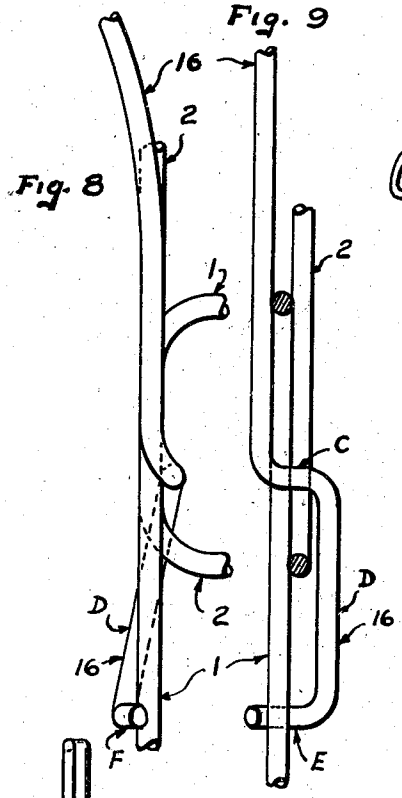


Fig. 8

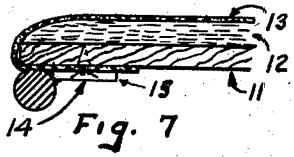


Fig. 7

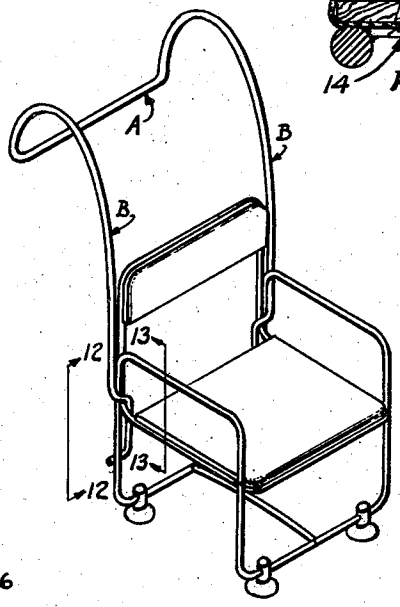


Fig. 3

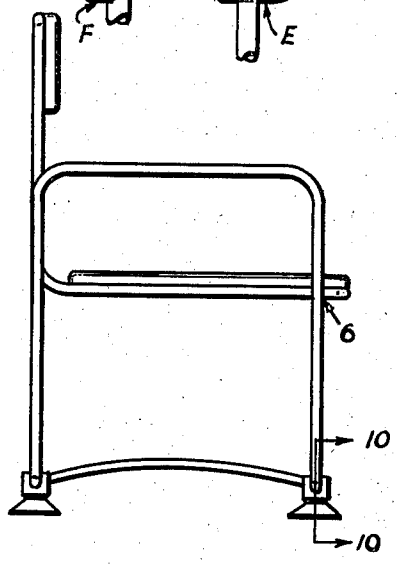


Fig. 4

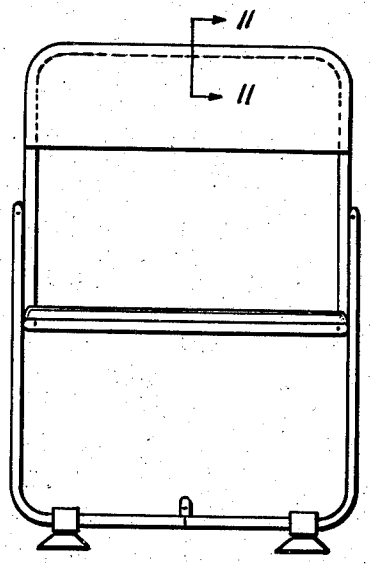


Fig. 5

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BRACKET SUPPORTED SUSPENDED CHAIR

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Application May 8, 1945, Serial No. 592,595

2 Claims. (Cl. 155—79)

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This invention relates to a convertible auxiliary chair especially adaptable for use in a passenger motor vehicle to support an infant in a sitting position and also adaptable for use as an auxiliary chair for an infant by detaching the carrier hooks which support the seating device in a passenger motor vehicle.

The primary object of the invention is the provision of a convertible auxiliary chair adaptable for supporting an infant in a sitting position in a passenger motor vehicle which is simple in design, economical to construct, and possesses advantages of detachability.

Another object of the invention is the provision of a convertible auxiliary chair for an infant which is secured to and carried on the seat of a passenger motor vehicle by means of detachable carrier hooks, and after detachment, the auxiliary chair is adaptable for use as a seating device for an infant when placed on the floor surface, on the seat of a conventional chair, or on other elevated structures, the auxiliary chair being equipped with suction cup members which prevent the seat frame from slipping or sliding relative to the surface upon which the chair may be placed.

A further object of the invention is the provision of a simplified and improved construction of a convertible auxiliary chair adaptable to supporting an infant in a sitting position, the improvement being distinguished by the detachable carrier hooks terminating in spring members which support the auxiliary chair in a passenger motor vehicle, and the auxiliary chair comprising arm rests, vertical leg members, and bottom cross members of continuous unitary construction, supporting frame for the seat and back rests of continuous unitary construction, seat and back rest members, a short spacer piece connecting the bottom cross members as an additional support, and suction cup members arranged under the seat frame to prevent slipping or sliding of the frame relative to the floor or other smooth surface upon which the auxiliary chair may be placed.

The other specific objects and advantages of the invention will become apparent upon consideration of the following detailed specifications and accompanying drawings wherein there is illustrated a preferred embodiment of the invention.

Figure 1 is a perspective view of the auxiliary chair; Figure 2 is a broken perspective view of the detachable device used for attaching the auxiliary chair to the back of the seat in a passenger motor vehicle; Figure 3 is a perspective view of the auxiliary chair and the detachable device attached to the chair; Figure 4 is an elevated side

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view of the auxiliary chair; Figure 5 is an elevated front view of the auxiliary chair; Figure 6 is a sectional view taken approximately on line 10—10 of Figure 4; Figure 7 is a sectional view taken approximately on line 11—11 of Figure 5; Figure 8 is an enlarged view taken approximately on line 12—12 of Figure 3; and Figure 9 is an enlarged view taken approximately on line 13—13 of Figure 3.

The structure of the convertible auxiliary chair comprising the detachable device for supporting the chair from the seat in a passenger motor vehicle and the auxiliary chair is clearly illustrated in Figure 3 of the drawing. The convertible auxiliary chair is constructed of such dimensions that the carrier hook members will support the chair on the seat in a passenger motor vehicle with the suction cup members resting on the seat.

Referring to the drawing, the detachable device as shown in Figure 3 is of continuous unitary construction with the parallel stems B of the carrier hooks as shown in Figure 3 being formed in an arc contour with the upper end bending inwardly and connected by horizontal bar A to fit over the back rest of a seat in a passenger motor vehicle (not shown). The carrier hooks are made of a single piece of material of tubular or rod construction with the stems being formed in the contour of the back rest. The hooks are not attached to the auxiliary seat by welding, bolts, or other such means of attachment which are commonly found in the ordinary convertible auxiliary chair. The lower extremities of the carrier hooks are constructed so as to fit inward and over parts 1 and 2 at joint 7 in Figure 1 and as more particularly illustrated by reference mark C in Figure 9 with the carrier hooks extending downward as shown by D in Figure 9 at an angle to the back of part 1. The lower portions of the carrier hooks extend rearwardly approximately at right angles to D as indicated by E in Figure 9, and then around the vertical legs of the auxiliary chair frame as shown by reference mark F in Figure 8. The detachable device is constructed in such a manner that the stems B act as spring members that urge the carrier hooks outwardly into engagement with the legs 1 and the supporting frame 2 for the seat. The construction of the terminal portions of the carrier hooks as well as the upper end of the device is clearly shown in Figure 2. The user may remove the detachable device from the frame of the auxiliary chair by manually springing the hooks out of engagement with the chair frame.

The auxiliary chair comprising four continu-

ous units is of tubular or rod construction and made from light metal, preferably aluminum. The arm rests, vertical leg members, and longitudinal bottom cross members designated by reference mark 1 in Figure 1 are constructed in two units, each unit being formed in the shape of an inverted U with an arm rest, two parallel vertical leg members and two bottom cross members bent inwardly at right angles to the vertical leg members and also to the arm rest with the bottom cross members being parallel to the floor surface. The members connecting the legs 1 constitute arm-rests 3. Suction cup members are slipped on the rods or tubes comprising the bottom cross members at reference mark 5 in Figure 1 and attached to the bottom support members by suitable means such as welding. The two units, each comprising an arm rest, vertical leg members, and longitudinal bottom supports, are connected at reference mark 5 in Figure 1 by suitable means such as welding.

The supporting frame for the seat and back rest designated by reference mark 2 in Figure 1 is of continuous unitary construction in the formation of a rectangle with the seat frame bent inwardly at right angle to the support for the back rest. The frame supporting the seat is parallel to the bottom support members and the supporting frame for the seat and back rest are formed substantially in the shape of an L. The supporting frame for the seat and back rest is connected to the frame comprising the arm rests, legs, and bottom support members at points 6 and 7 as shown in Figures 1 and 4 by suitable means such as welding, which holds the frame supporting the seat and back rest in a rigid position. This method of connecting the frames is superior to the bolts, nuts, screws, and other such means of affixation found in the ordinary chair.

The bottom support members are connected at 5 in Figure 1 by suitable means such as welding, and the short spacer rod 8 bent in the form of an arc is attached to the bottom members at reference mark 5. Suction cup members designated by reference mark 4 in Figure 1 are arranged under the seat frame to prevent the frame from slipping or sliding when placed on a smooth surface. The sides of the cylindrically formed suction cup members are drilled of such dimension that the members may be slipped on the rods or tubes forming the bottom supports for the chair at reference mark 5 and attached to the rods or tubes by suitable means such as welding as shown in Figure 6. The bottom part of each suction cup member is drilled and tapped of such dimension as shown by reference mark 9 in Figure 6 that a rubber pad of standard construction 10 may be screwed into the suction cup member. The rubber pad 10 has an annular face which rests on the floor or other smooth surface, when screwed into the suction cup member, thereby maintaining a suction grip with respect to such surface.

The structures of the seat and back rest members are similar except for dimensions, being constructed of sufficient sizes for mounting on the tubes or rods comprising the supporting frame for the seat and back rest members as shown in Figure 1. The seat and back rest members are constructed of three layers of material, the top layer of leatherette 13, the second layer of kapok or cotton 12, and the lower layer of plywood backing 11 as shown in Figure 7. The

three layers of material are fastened together by suitable means such as a screw of suitable size, said screw member being attached to a clip member 14 which is mounted upon and welded to the rods or tubes comprising the supporting frame for the seat and back rest as shown in Figure 7. The auxiliary chair is constructed of such dimensions as to be especially adaptable for supporting an infant comfortably in a sitting position either in a passenger motor vehicle or on the floor surface or on an elevated surface such as a conventional chair.

The above specifically described embodiment of the invention should be considered as illustrative only as obviously many changes may be made therein without departing from the spirit or scope of the invention.

What is claimed is:

1. A child's seating structure for use in an automobile, a chair provided with an L-shaped open frame for the back-rest and seat thereof, another frame constituting the legs and arm-rests of the chair and provided with cross members for the fore and rear legs, the sides of said frame being secured to each other, said legs overlapping and secured to the back-rest and seat frame, and a detachable support for said chair having a bent loop upper portion adapted for connection with the back-rest of an automobile seat and provided with pendent side members having inturned offsets and outturned terminal hooks by which both of said frames are embraced, thus securing the seating structure in suspended position.

2. In a detachable support for suspending a child's chair from the back-rest of an automobile seat where the chair is of a type having arm-rests, a back-rest and legs, said support consisting of a spring frame having a bent upper loop portion and pendent side members, the lower portions thereof having inturned offsets and outturned terminal hooks, said offsets having supporting engagement with said chair under the arm-rests thereof and hooked engagement with the rear legs of the chair around the backs thereof, thus to secure the chair suspended in place, when said loop portion is disposed over the back-rest for the automobile seat.

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