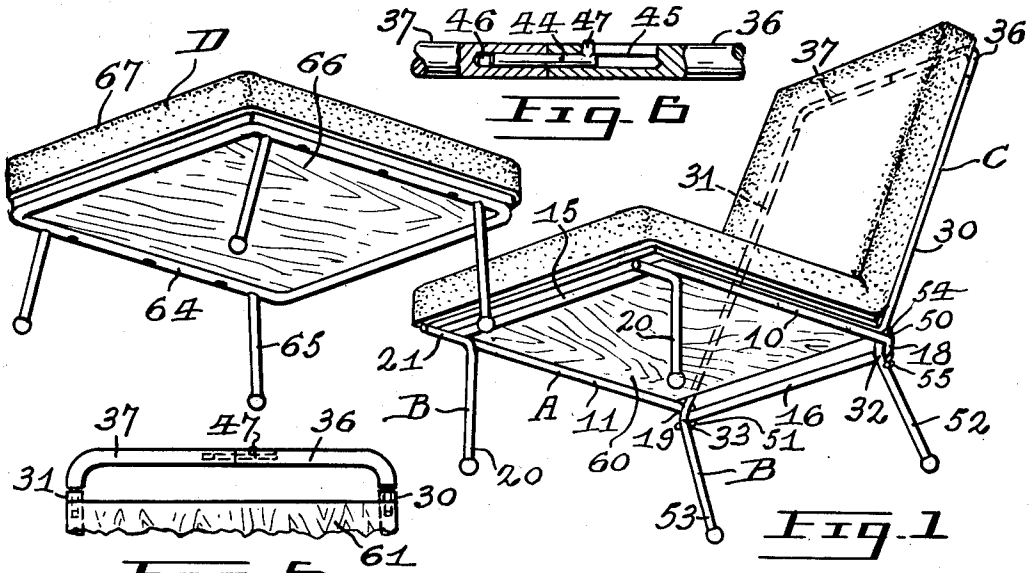
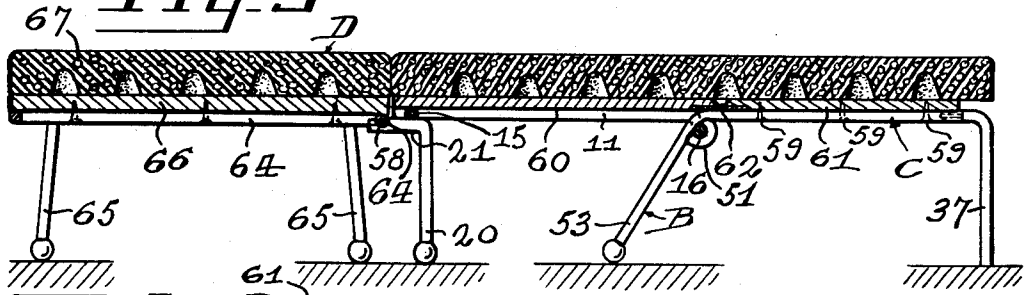
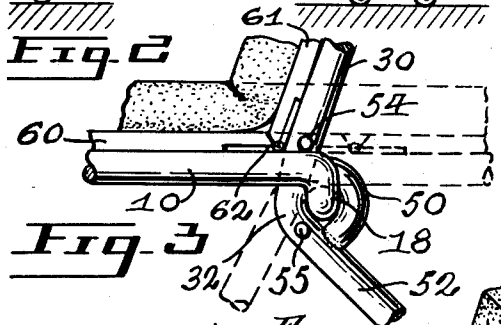
July 17, 1956 R. LA PALME 2,754,888

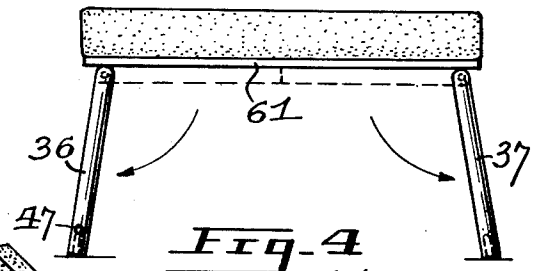
COMBINATION CHAIR AND BED

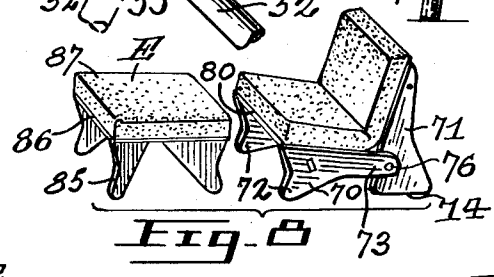
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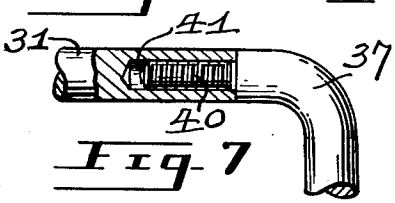


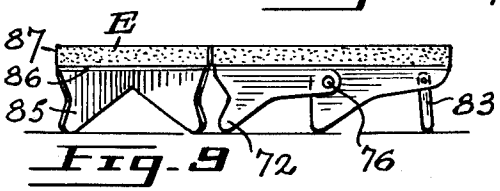












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COMBINATION CHAIR AND BED

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7 Claims. (Cl. 155—45)

This invention relates to combination furniture.

Various attempts have been made to provide furniture which can be used as a chair and can be readily converted into a couch or bed. Most of these devices are complicated and difficult to make and use.

The applicant has now devised a combination chair and bed which is simple and cheap to make and easy to use. This device is of the type which includes a seat part and a back part which are pivotally linked so that the back part can be swung down into alignment with the seat part to constitute a bed or couch.

Broadly speaking, the furniture includes a seat member and a back member pivotally connected together so that they can be swung into bed or couch position or into chair position. The seat member has a front end and a back end and the back member a front end and a back end. The back end of the seat member is pivotally connected to the front end of the back member so that the back member can be pivoted into substantially horizontal relationship with the seat member to form a bed or into transverse relationship therewith to form a chair. Front leg members form a part of the front end of the seat member. Intermediate leg members form a part of the front end of the back member. Rear leg members are pivotally related to the back end of the back member. The intermediate leg members serve to support the intermediate portion of the furniture when in chair or bed position. The back leg members are adapted to support the back end of the back member when in bed position and are adapted to be folded into stowed relationship to the back member when the furniture is in chair position.

More specifically, a preferred construction is as follows.

The seat and back parts each have frames adapted to carry the seat and back proper which are pivotally linked together. Each seat and back frame includes spaced-apart structural side members. Each side member includes an elongated supporting side and a fore-leg part extending away from the side and a rear supportable portion. Each seat side member is supported by pivotal connection to a back side member. Each back side member bears on its fore-leg part when in chair position or on said fore leg part pivoted to its supportable portion when pivoted into bed position.

The structural side members can be panels of wood which are suitably shaped to have a front leg portion and a rear supportable portion.

Or, the furniture may be made of rod or tube metal or other structural material. The seat part can be made of a continuous rod which forms both the side members and a cross member connecting these members. The back part can be made up of rods which form the front leg part and the side member and an L member pivoted to the rear part of each rod to constitute either cross members when the device is set up or leg members when the device is laid down as the bed.

The invention will be more fully understood by reference to the accompanying drawings in which preferred embodiments are shown and in which:

Figure 1 is a perspective view of the combination furniture set up as a chair with an associated stool attachment shown next to it.

Figure 2 is a horizontal cross section through the device of Figure 1 when laid out as a bed or couch.

Figure 3 is an enlarged side elevation showing the pivotal joint arrangement between the seat part and the back part of the device of Figure 1.

Figure 4 is a rear elevation showing the way in which cross rods of the back rods are rotated outwards to form legs.

Figure 5 is a rear elevation showing the connection of the cross rods and side rods of the back part.

Figure 6 is a rear elevation, partly in section, showing the connection between the respective cross rods of the back part.

Figure 7 is a rear elevation partly in section showing the connection between the cross rods and the side rods.

Figure 8 is a perspective view of an alternative form of combination furniture according to the invention, set up as a chair.

Figure 9 is a side elevation of the furniture of Figure 8 set up as a couch.

Preferred form "A"

Referring more particularly to the drawings, the device includes a rod or tube A bent to form an open seat frame including side bars **10** and **11** and a front cross bar **15** and a rear cross bar **16**. The rod A is bent, as shown in Figure 3, to provide substantially vertical side portions **18** and **19** bent from the side bars **10** and **11** and the cross bars **16**. This is for purposes to be described. At the front of the seat portion are provided inverted L-shaped rod or tubular members B including a downwardly-extending leg portion **20** and horizontal portions **21** extending forwardly therefrom. The portions **21** are held to the frame A for example, by welding.

The back portion includes an open frame C of tube or rod. This frame is made up of side pieces **30** and **31** which are bent as at **32** and **33**. To the top of each side piece **30** and **31** are connected L-members **36**, **37** each of which includes a threaded end **40** which fits into a tapped opening **41** in the respective side piece.

Cross portions of the L-members extend across the back of the device when set up as a chair. But, the L-members **36**, **37** can be rotated with respect to the side piece **31**.

Where the L-members **36** and **37** meet at the center of the back they are connected by a sliding bolt **44** which operates in a passage **45** in the member **36** and enters a passage **46** in a member **37**. The bolt can be withdrawn by sliding it from left to right (in the Figure 6) freeing these members from one another. It is prevented from leaving the passage **45** completely by a projection **47**.

The frames of the seat portion and the back portion are so related that the bends **32** and **33** in the side rods **30** and **31** are placed adjacent to the crooks formed by the bend in the rod A. Rounded retaining members **50** and **51** are welded to the rods **30** and **31** to encircle the cross bar **16**. By this construction the seat frame and the back frame are rotatably related to one another, the bar **16** being journalled in the enclosures between the members **50**, **51** and the member C.

When the seat is in set up position the legs B support the front part of the device and legs **52**, **53**, being extensions of the rods **30** and **31**, support the back portion of the device with the rods **30** and **31** in inclined upright position. Detents **54** and **55** projecting from the side rods **30** and **31** engage the rods **10** and **11** respectively limiting the rearward movement of the back.

Surmounting the frame of the seat and of the back

respectively are panels **60** and **61** constituting the actual seat and back. These are held to the frames by screws **59**. The panels **60** and **61** are joined together by a hinge **62**. A mattress of foam rubber or other suitable material covers the panels **60** and **61**.

The device is converted into the bed position shown in Figure 2 by withdrawing the bolt **44** and swinging the frame back about the bar **16** as a pivotal point, while pivoting the cross rods **36** and **37** outwards and downwards as shown in Figure 4 to constitute the rear legs of the device.

As an extension to make a longer bed, a foot stool D is provided. This is made up of a circular metal frame **64** provided with downwardly-extending legs **65**. The frame is filled in with a base **66** and covered with a foam rubber cushion **67**. The parts **21** projecting beyond the frame A include depressions **58** adapted to receive the underside of the frame **64**.

Preferred form "B"

Another preferred form of the device is shown in Figure 8. The seat portion is made up of spaced-apart vertical panels **70**. The back portion is made up of spaced-apart vertical panels **71**. Each panel **70** includes a downwardly-extending foot portion **72** and a rearwardly-extending connecting portion 73. Each back panel includes a substantially straight end **74** which serves as a foot or bearing portion when the device is set up as a chair. The panel **71** includes an upwardly-extending portion constituting a back-supporting portion.

The panels **70** and **71** are pivoted together as at **76** so that they can be swung back and forth from chair position to bed position. A seat filler **80** extends between the panels **70** and a back filler extends between the panels **71**. Leg members **83** are pivoted to each of the panels **71**. A cushion covers the back and front fillers as in the construction shown in Figures 1 to 7.

A stool E is provided to supplement the chair-bed member as in connection with the structure of Figures 1 to 7. This is made up of legs **85**, a base panel **86** and a cover or cushion **87**.

I claim:

1. Combination furniture, comprising a seat frame having spaced apart elongated structural side members, each side member secured to a seat panel and having a downwardly extending leg at one end, a back frame including spaced apart elongated side members having portions supporting a back panel and each having an integral end portion extending angularly therefrom constituting a leg, a permanent pivotal connection between the end of each seat side member remote from its leg end and in intermediate part of each related back side member at a point between the back panel supporting portion and the integral leg portion thereof providing for the back frame to be positioned either in alignment with the seat frame to form a bed or transverse to the seat frame to form a chair, and a rear leg member pivoted to each back frame side member, the back frame leg members serving to support the rear end of the back frame when the back frame is lowered to horizontal bed forming position.

2. Combination furniture, according to claim 1, in which said structural side members are panels.

3. Combination furniture, according to claim 1, in which said side members are three-sided panels, the seat panel having a top edge, a front edge and a bottom edge, the top edge of the panel constituting said supporting portion, the front and bottom edges defining the leg portion, the pivotal connection with the back panel being between a bottom edge and the top edge of the seat panel, each back panel having one edge constituting the supporting portion, said edge and the adjacent edge defining a leg portion when in chair position and said second edge and a third edge defining the leg when in bed position, the seat panel being pivoted to the back panel between the supporting portion and the leg portion, and back legs being pivoted to the back panel near the junction of the first and third edges.

4. Combination furniture, according to claim 1, wherein the seat side members are made up of rods, the back side members are made up of rods, the back side members including a seat-supporting portion and leg portion and intervening bent portion, a crossbar extending between the rear ends of the side rods of the seat portion, the back being related to the seat portion so that the bends overlie the cross bar, a retaining member connected to the back side bar and extending about said cross bar whereby the back bar is pivotally mounted to the cross bar.

5. Combination furniture, comprising, frames of tube or rod including a seat frame and a back frame pivoted thereto, the seat frame including side bars and cross bars connected to the side bars, the back frame including side bars and an L-shaped member having an arm pivoted to each side bar and an arm extending across the back to meet the companion arm and having a releasable connection therewith, the back side bars each having a bend dividing them into back supporting portions and leg portions, the seat and back frames being related so that the bends rest adjacent the rear cross bar, a retaining loop on the back side bar to constitute with the side bar a journal surrounding the rear cross bar, and projections from the side bar at the bend to engage the side bar of the seat frame and so to limit the movement of the back frame relative to the seat frame.

6. Combination furniture, comprising, a seat member having a front end and a back end and a back member having a front end and a back end, the back end of the seat member being pivotally connected to the front end of the back member whereby the back member can be pivoted into coplanar relationship with the front member to form a bed or into angular relationship therewith to form a chair, front leg members forming a part of the front end of the seat member, intermediate leg members form a part of the front end of the back member and angularly disposed thereto, and rear leg members pivotally mounted on the back end of the back member, the intermediate leg members serving to support the intermediate portion of the furniture when in chair or bed position, the back leg members being adapted to support the back end of the back member when in bed position but to be folded into stowed relationship to the back member when the furniture is in chair position.

7. Combination furniture according to claim 1 in which there is provided a flexible cover connected to and extending the entire length of the seat and back panels whereby the covering is in position as a mattress when the furniture is in bed position and as a seat cover and back cover when the furniture is in chair position.

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