May 24, 1960 G. W. REHFELD 2,937,383

COMBINATION DAVENPORT AND BED

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Fig. 1.

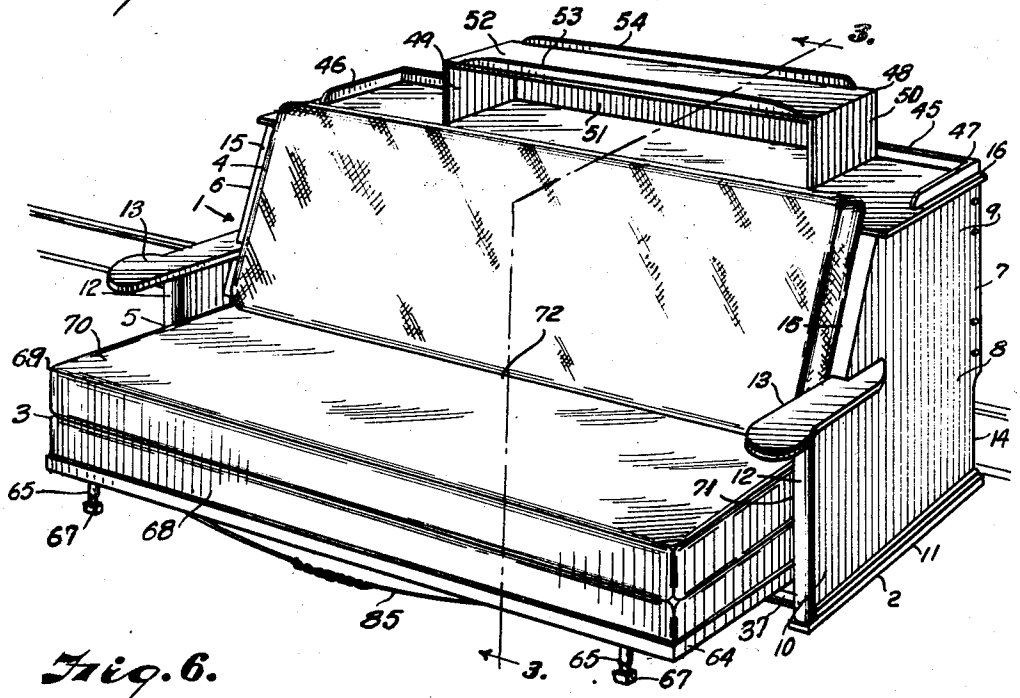
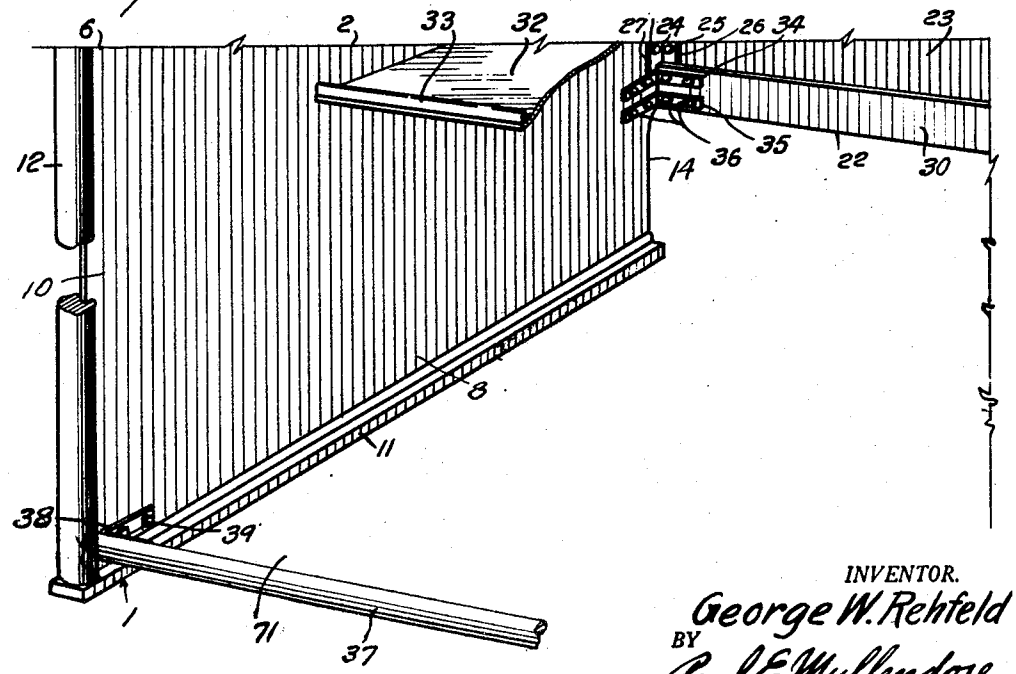


Fig. 6.



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Fig. 3.

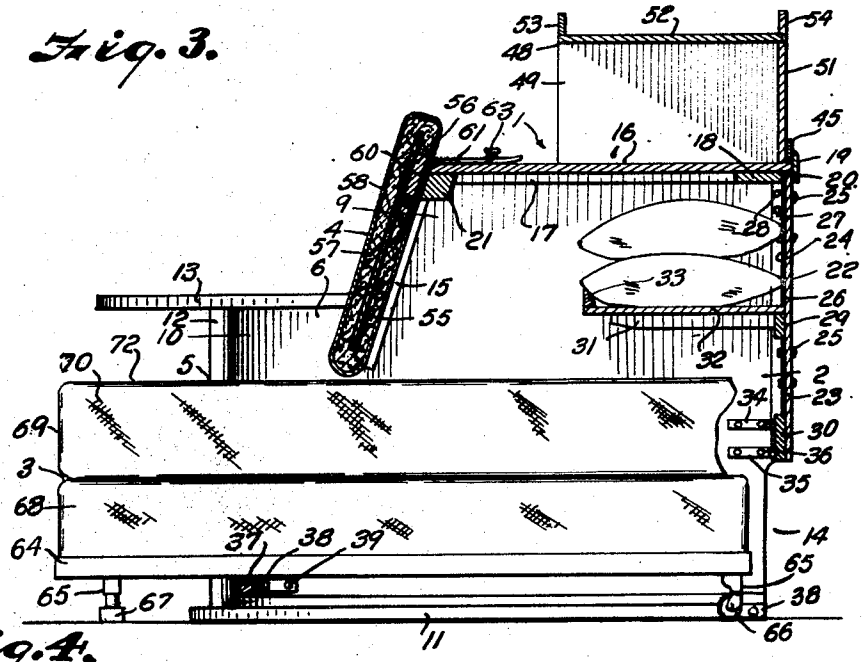


Fig. 4.

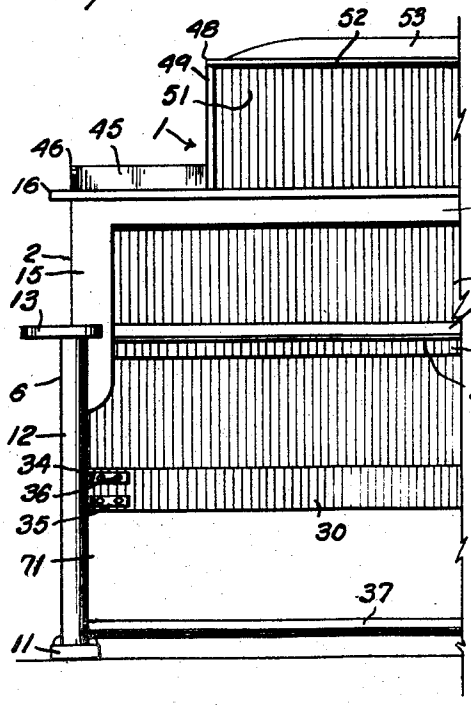
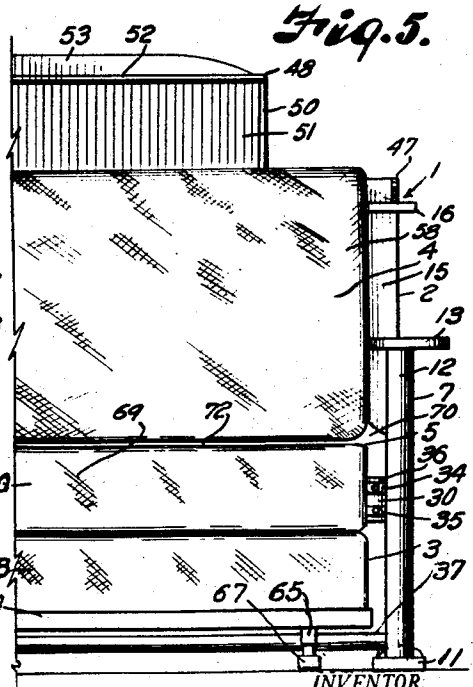


Fig. 5.



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Fig. 2.

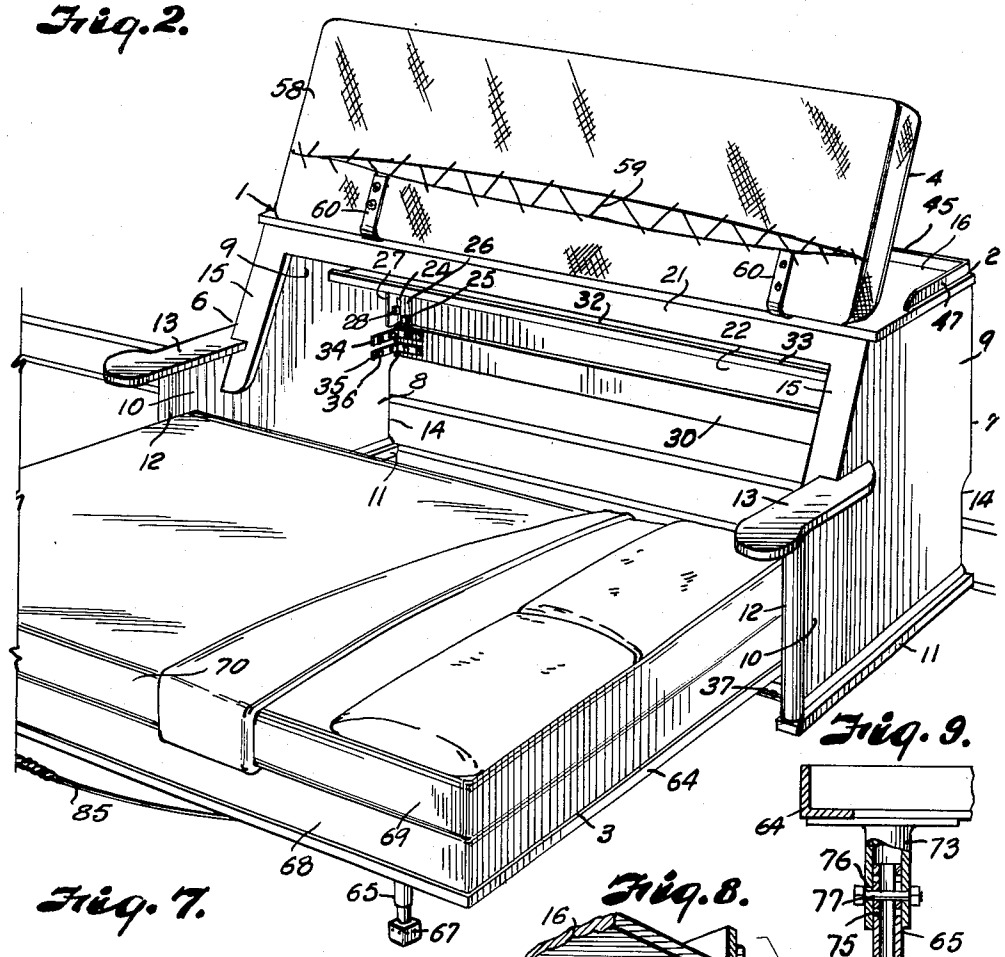


Fig. 9.

Fig. 7.

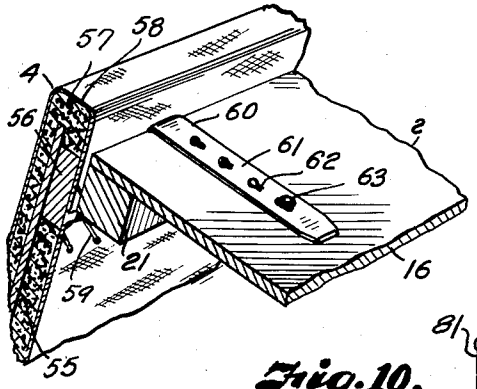
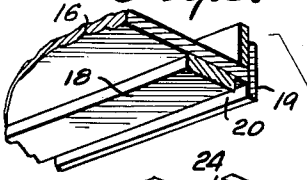


Fig. 8.



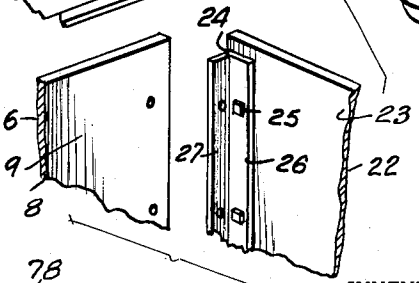
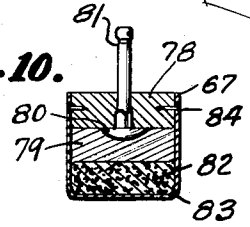


Fig. 10.



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COMBINATION DAVENPORT AND BED

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5 Claims. (Cl. 5—17)

This invention relates to a combination davenport and bed, and has for its principal object to provide a device of this character which forms a full size standard bed and a comfortable davenport of standard depth.

For example, hotel guests and tenants of small apartments often require the convenience of a living room as well as sleeping accommodations in a single room.

Various devices have previously been provided, such as davenports, studio couches, and the like, that can be used as seats in the daytime and at night made into beds, but they do not furnish full size comfortable beds. They are also not popular because of difficulty in handling and storing the bedding. Such beds are only partially made up when they are converted into a davenport and, therefore, additional work is required to make up the bed before retiring. Also, make up of the bed is complicated and is often so difficult that most persons do not like such beds.

The present invention provides a combination davenport and bed which is simple to convert from a davenport to a bed.

Other objects of the invention are to provide a simple inexpensive structure which utilizes any "Hollywood" type bed; to provide a structure which is made up of sections that are readily transportable and easily set up; to provide a structure from which a bed can be withdrawn and moved to any location in a room and returned when making up the davenport or divan; and to provide a structure wherein the bed may be withdrawn or adjusted to the depth of a seat and held without movement.

It is also an object to provide a combination bed and davenport with shelves and storage space for pillows and extra bedding when not in use.

In accomplishing these and other objects of the invention as hereinafter pointed out, improved structure is provided, the preferred form of which is illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a combination davenport and bed constructed in accordance with the present invention and showing set-up thereof to provide a davenport or divan.

Fig. 2 is a similar view showing a set-up to provide a full size bed.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is a front elevational view at one end of the device showing the bed and back member removed therefrom.

Fig. 5 is a similar view of the opposite end, when the bed and back member are in place to form a davenport or divan.

Fig. 6 is a fragmentary view of one side and the rear section of the casing.

Fig. 7 is a fragmentary perspective view, partially in section, illustrating support for the part forming the back of the divan.

Fig. 8 is portions of the top, end and rear sections of the casing to illustrate the connection thereof.

Fig. 9 is a section through the bed portion of the device to illustrate adjustment of the legs to compensate for thickness of the springs and mattress which may be used, a rear leg being shown.

Fig. 10 is an enlarged section of one of the front leg pads to prevent sliding of the bed.

Referring more in detail to the drawings:

1 designates a combination davenport and bed constructed in accordance with the present invention and which includes a casing 2 for containing a bed 3 and for supporting a back member 4 in cooperation with a part of the bed to provide a davenport or divan 5. To facilitate shipping and transport, the casing is preferably composed of sections that may be easily connected together.

The casing 2 includes side walls or sections 6 and 7 that are spaced apart to accommodate the length of the bed 3 therebetween. Each comprises a panel 8 having a back or rear portion 9 and a forward portion or extension 10 which is of less height than the back portion 9. Each panel 8 is supported on a longitudinal base 11 adapted to seat upon the floor of the room. The front of the forward portions 10 each carry a post or column 12 that cooperates with the upper edge of the forward portions 10 to support an arm rest 13 that projects forwardly over the column. The panel portions 9, with the columns 12 and arm rests 13 thereon, constitute forward portions of the side walls and provide the ends and arms of the davenport. The rear edge of each panel has a notch 14 of sufficient depth and height to accommodate the base shoe and baseboard when the casing is placed against the wall of a room. The forward edge of the portion 9 above the upper edges of the forward portions 10 of each panel slopes upwardly and rearwardly from the arm rests 13, and fixed thereto and projecting inwardly beyond the inner face of the panel is a facing strip 15, the lower end of which extends below the arm rest 13 but terminates short of the bed 3 to provide back supports between front and back portions of the side walls, to be later described. The front to back depths of the end walls are such as to include the major width of the bed 3. Inspection of the drawings will show that the side walls have a depth from front to back to include the major width of the bed 3, and that the portion 10 and portion 9 provide forward portions of less height than the back portions, and that the facing strips 15 provide back supports therebetween.

The casing also includes a top comprising a section 16 of a width substantially corresponding to the width of the panel portions 9 of the side walls or sections 6 and of a length to overlap and project from the side wall sections.

Extending across the under side at each end of the top section 16 are cleats 17 (Fig. 3) for abutting against the panel portions 9 of the side wall sections 6. Extending along the under marginal portion at the rear of the top section 16 is a similar cleat 18 (Figs. 3 and 8) that cooperates with an outer strip 19 to provide a groove 20 therebetween. Also connected to the under side of the top section 16 and extending along the front edge portion thereof is a cross member 21 that cooperates with the facing strips 15 of the side wall sections to support the back member 4 of the davenport.

The casing further includes a back wall section 22 having a panel 23 with ends thereof adapted to abut against inner faces of the panels of the end wall sections 6. Fixed to the inner face of the back wall at the ends thereof are angles 24, the angles being fastened to the panel 23 by fastening devices such as bolts 25 that extend through flanges 26 of the angles. The other flanges 27 of the angles 24 are connected with the side wall sections 6 of the casing by fastening devices such as bolts 28. The panel 23 is reinforced along the length thereof

by transverse members 29 and 30, the lower member 30 being fixed along the lower edge of the panel 23 and the upper member 29 is spaced thereabove, as shown in Fig. 3. The member 30 constitutes a stop for the bed 3 when the bed is moved into the casing. The ends of the upper transverse member 29 register with cleats 31 on the inner faces of the panels of the end wall sections to support a shelf 32 that extends entirely across the inside of the casing. The shelf 32 preferably has a guard strip 33 extending along the front edge thereof to prevent articles placed on the shelf from falling off onto the bed or floor. The ends of the lower transverse member 30 are connected to the side wall sections 6 and 7 by angle brackets 34 and 35 and fastening devices 36, as best shown in Fig. 6.

The longitudinal base portions 11 of the side wall sections 6 and 7 of the casing are interconnected by a transverse tie bar 37 that is spaced inwardly from the columns 12 at points just above the bases 11, as best shown in Figs. 3 and 6, the ends being secured to the panels 8 of the side walls 6 and 7 by angle brackets 38 and fastening devices 39, as shown in Fig. 6. The tie bar 37 forms an abutment for the legs of the bed, as later described.

Extending along the rear edge of the top is a guard rail 45 that cooperates with guard rails 46 and 47 to guidedly support a rack 48 that is movably positioned on the top section 16.

The rack 48 includes ends 49—50, a back 51, and a top 52, the top 52 being preferably provided with front and back guard rails 53 and 54 to better retain articles that may be placed on the rack. The rack 48 is of less width than the top section 16 to allow space in the front thereof for propping the back of the davenport against the rack when the bed is to be used, as shown in Fig. 2.

The back member 4 which constitutes the back for the davenport includes a panel 55 of ample length to extend across the space between the arm rests and so that the ends of the back member are slidable vertically upon the facing strips 15. The panel 55 is stiffened along the upper rear side thereof by a bar 56. The panel is covered by a cushioning material 57 which in turn is covered by a fabric cover 58, preferably corresponding to the fabric that composes the spread for the bed later described. For this reason the cover 58 is preferably removable and is secured at the rear sides of the back by lacing 59. Fixed to the back along the bar 56 are straps 60 having ends 61 provided with a series of apertures or holes 62 adapted to engage fasteners such as knobs 63 that are fixed to and project from the top section 16, as best shown in Figs. 3 and 7. The straps 60 thus suspend the back 4 for rest upon the facing strip 15, and by adjusting the straps on the knobs 63 the lower transverse edge of the back member is adjusted relatively to the height of the bed. The straps also provide flexible hinge connections on which the back may be swung upwardly and backwardly over the top section 16 to be propped against the rack 48.

The bed 3 is any standard sized bed of the "Hollywood" type and includes a rectangular frame 64 supported near the corners thereof on legs 65. The rear legs have rollers 66 (Fig. 3) whereby the bed may be rolled over the floor into and out of the open front 71 of the casing. The front legs 65 have resilient pads 67, later to be described.

The frame 64 carries the usual box springs 68 and mattress 69 on which the bedding is applied and covered by the usual spread 70.

The bed is positioned so that it moves sidewise into the open front 71 of the casing 2 when the side thereof is lifted to allow the rollers 66 at that side to clear the cross bar 37. After clearing the bar 37, the side of the bed is lowered to the floor and is pushed into the casing with the rollers 66 rolling on the floor. A sufficient portion of the bed then projects from the casing to provide the seat 72.

The legs 65 are preferably adjustable and, therefore, include telescoping tubular sections 73 and 74 (Fig. 9) with each of the sections having a series of openings 75 adapted to register with openings 76 in opposite sides of the other section to pass a bolt 77 for securing the movable section in an adjusted position.

The pads 67 for the front legs are best illustrated in Fig. 10, and each includes clamping blocks 78 and 79 adapted to clamp the head 80 of a shank 81 therebetween, the shank 81 being engageable within the tubular section 74 of the front legs. Secured to the under face of the block 79 is a resilient material 82, and covering the resilient material 82 is a pliable cover 83, such as leather, and which has the sides drawn upwardly over the blocks and secured by fastening devices 84. The pads, when resting on the floor, prevent any rolling movement of the bed by reason of the rollers 66, however, when the front side of the bed is lifted to clear the pads from the floor, the bed is readily moved relatively to the casing. In order to facilitate picking up and moving the bed on the rollers, the front of the frame is provided with a pull in the form of a rope 85.

Assuming that the device is constructed as described, the casing 2 is shipped disassembled, but the casing is readily set up for use.

The side sections 6 and 7 or side walls are placed in spaced apart relation with the bases 11 thereof resting on the floor. The side sections 6 and 7 are then interconnected by the tie bar 37, the ends of which are attached to the panels of the side sections by inserting the fastening devices 39 to connect the angle braces 38 with the side sections. The back section 22 is then placed in position across the rear edges of the side sections and connected thereto by applying the fastening devices 28. The transverse member 30 which forms a bumper or stop for the bed 3 is connected with the side sections by inserting the fastening devices 36 through the angle braces 34 and 35. The shelf 32 is then applied so that it is supported on the cleats 31 and transverse member 29. The top section 16 is then applied so that the ends thereof are supported on upper edges of the portions 9 of the side walls, and the upper edge of the rear section 22 is engaged in the groove 20. The rack 48 is then placed upon the top section 16, to complete assembly of the casing.

The bed 3 is assembled with the springs 68 supported on the frame 64 and the mattress 69 supported on the springs. The bed is easily trundled over the floor by raising the pad supported side from the floor. This is effected by grasping the pull 85 and lifting the bed sufficiently to clear the pads 67 and pushing the bed into position where the rollers 66 may be lifted over the tie bar 37.

The bedding, which usually includes two sheets, a blanket and a bed spread, is preferably placed over the mattress, however, the blanket and sheets may be rolled back upon the rear side of the bed and the spread may be drawn thereover to cover the seat side of the bed. The bed is then pushed into position between the side sections, with the back side of the bed engaging or substantially engaging the transverse member 30. When the front side of the bed is lowered, the pads 67 make contact with the floor and prevent further rolling movement of the bed. The back member 4 is then placed between the arm rests so that the ends are supported upon the facing and cross members 15 and 21. The straps 61 are then attached to the knobs 63. The device now forms a davenport or seat, as shown in Fig. 1.

When it is desired to use the bed, the back member 4 is gripped under the lower edge thereof and swung upwardly and over the top section 16 with the upper portion rocking over the forward edge of the top section until the bottom portion of the back member is stopped by the rack 48. The rack 48 thus serves as a prop for the back member 4. The bed 3 is then pulled outwardly from the open front 71 of the casing 2 until the rear legs 65 engage the tie bar 37. This is easily accomplished by grasping the pull 85 to lift the front edge of the bed.

When the rear legs 65 have engaged the tie bar 37, the raised side of the bed is lowered to again engage the pads 67 with the floor to resist further movement of the bed. If the bed has been fully made up, it is only necessary to turn down the cover, remove the pillows from the shelf 32, and place them on the bed, as shown in Fig. 2. If the bedding is rolled back from the portion of the bed which forms the seat, then it is unrolled over the spread to cover the portion of the bed which has formed the seat, or, if desired, the spread may be removed and then the bedding is unrolled upon the mattress. It is obvious that the side walls of the casing have forward portions of less height than the back portions thereof by reason of the shape of the panels 8 and that the greater height of the back portions provide back supports on which the ends of the back member 4 may slide during any adjustment that may be required to accommodate the height of a bed or the thickness of the bed covers thereon.

From the foregoing, it is obvious that I have provided a combination davenport and bed which is of simple and inexpensive construction and provides a comfortable, full sized bed.

What I claim and desire to secure by Letters Patent is:

1. In a combination davenport and bed of the type wherein the seat of the davenport constitutes a pullout bed, a casing having spaced apart side walls to accommodate the length of the bed therebetween and of a depth from the front to the back to include the major width of the bed, said side walls having forward portions of less height than back portions thereof to provide the arms of the davenport and provide back supports between said forward and back portions, a top interconnecting the back portions of the side walls, a back member for the davenport and extending transversely between said side walls and having ends slidable on the back supports, straps fixed to the back member and having ends provided with a series of apertures, and knobs fixed to said top for engagement by any one of the apertures in said straps for suspending the back member on the back supports to adjust the lower transverse edge of the back member relatively to the height of the bed.

2. In a combination davenport and bed of the type wherein the seat of the davenport constitutes a pullout bed, a casing having spaced apart side walls to accommodate the length of the bed therebetween and of a depth from the front to the back to include the major width of the bed, said side walls having forward portions of less height than back portions to provide the arms of the davenport and provide back supports between said forward and back portions, a top connecting the back portions of the side walls, a back member extending transversely between said side walls and having ends adapted to rest upon the back supports, means for adjustably hinging the back member to said top for adjusting the lower transverse edge of the back member relatively to the height of the bed, and a rack on the top of the casing and spaced rearwardly from the back supports to provide for supporting the back member in rearwardly inclined position when the back member is swung upwardly and rearwardly to permit withdrawal and use of the bed.

3. In a combination davenport and bed of the type wherein the seat of the davenport constitutes a pullout bed having rolling support on the floor, a casing having spaced apart side walls to accommodate the length of the bed therebetween and of a depth from the front to the back to include the major width of the bed, said side walls having forward portions of less height than back portions thereof to provide the arms of the davenport and provide back supports between said forward and back portions, a transverse tie bar interconnecting the forward portions of the sides and engagable with parts of the bed to limit withdrawal of the bed, a top connecting the back portions of the sides and cooperating with the transverse bar to support the side walls in said spaced relation, a back member for the davenport and extending transversely between said side walls and having ends slidable on the back supports, straps fixed to the back member and having ends provided with a series of apertures, and knobs fixed to said top for engagement by any one of the apertures in said straps for suspending the back member on the back supports to adjust the lower transverse edge of the back member relatively to the height of the bed, said straps also providing flexible means on which the back member hinges from the position on said back supports to a position for support on said top when the bed is withdrawn to stopped engagement with the transverse tie bar.

4. In a combination davenport and bed of the type wherein the seat of the davenport constitutes a pullout bed, a casing having spaced apart side walls to accommodate the length of the bed therebetween and of a depth from the front to the back to include the major width of the bed, said sides having forward portions of less height than back portions thereof to provide the arms of the davenport and provide back supports between said forward and back portions, a top interconnecting the back portions of the side walls, a back member for the davenport and extending transversely between said side walls and having ends slidable on the back supports, straps fixed to the back member and having ends provided with a series of apertures, knobs fixed to said top for engagement by any of the apertures in said straps for suspending the back member on the back supports to adjust the lower transverse edge of the back member relatively to the height of the bed, and a rack on the top of the casing and spaced rearwardly from the back supports to provide a portion on said top for supporting the back in rearwardly inclined position when the back member is swung upwardly and rearwardly to permit withdrawal and use of the bed.

5. In a combination davenport and bed of the type wherein the seat of the davenport constitutes a pullout bed having front and rear legs for movable support on the floor, a casing having spaced apart side walls to accommodate the length of the bed therebetween and of a depth from the front to the back thereof to include the major width of the bed, said side walls having forward portions of less height than back portions thereof to provide the arms of the davenport and provide back supports between said forward and back portions, a transverse tie bar interconnecting the forward portions of the side walls and adapted to be engaged by the rear legs of the bed to limit withdrawal of the bed, a top connecting the back portions of the side walls and cooperating with the transverse tie bar to support the side walls in said spaced relation, and a back member for the davenport and extending transversely between said sides and having ends carried on the back supports.

References Cited in the file of this patent

UNITED STATES PATENTS

520,635	Conant	May 29, 1894
1,078,909	Fischrupp	Nov. 18, 1913
1,374,961	Shumsky	Apr. 19, 1921
1,409,421	Spengler	Mar. 14, 1922
1,689,737	Matheson	Oct. 30, 1928
2,341,307	Aronson	Feb. 8, 1944
2,377,958	Mann	June 12, 1945
2,394,969	Robinson	Feb. 12, 1946
2,412,628	McKeown et al.	Dec. 17, 1946
2,436,546	Binenkorb	Feb. 24, 1948
2,532,355	Brown	Dec. 5, 1950
2,557,734	Fox	June 19, 1951
2,602,937	Frey	July 15, 1952
2,694,207	MacEachron	Nov. 16, 1954

FOREIGN PATENTS

180,374	Austria	Dec. 10, 1954