Aug. 15, 1944. E. MOUNT 2,356,077

COMBINATION COUCH AND BED

Filed Nov. 10, 1941

Fig. 1

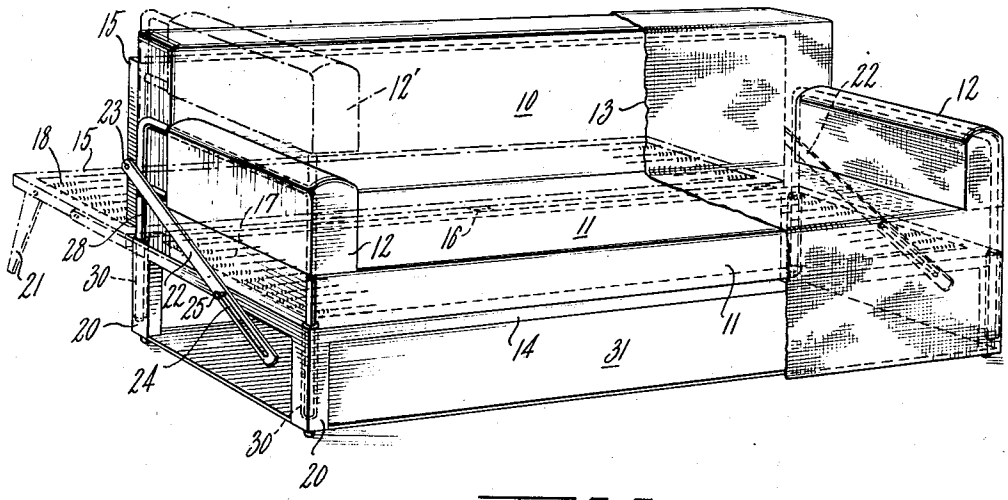


Fig. 2

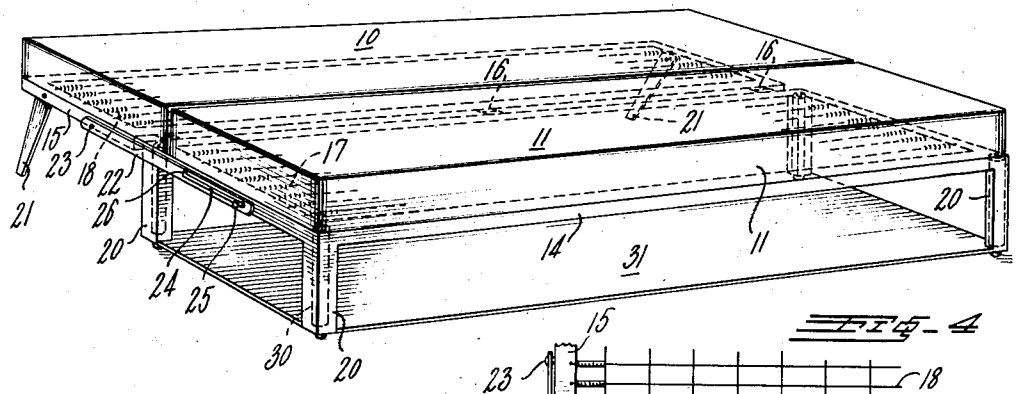


Fig. 3

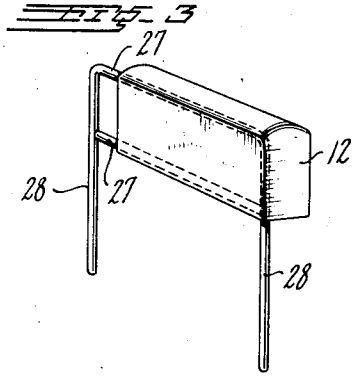
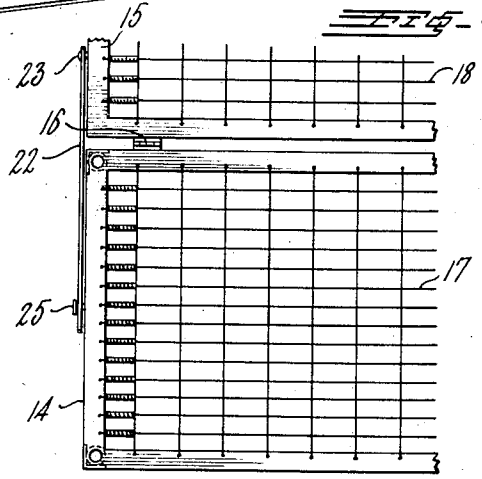


Fig. 4



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COMBINATION COUCH AND BED

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5 Claims. (Cl. 5—37)

This invention relates to a novel combination couch and bed construction.

In accordance with the present invention I provide a simplified folding bed or cot structure including two mattress sections, which can be set-up to form a normal-type couch or sofa. An important feature of my present invention is to provide a combination couch and bed which is relatively inexpensive to manufacture, and which is readily kept sanitary.

In the preferred form of my invention, the two mattress sections are preferably of the same size and shape. The folding supports for the mattresses are so arranged that in the couch position one of the mattresses is held vertically to constitute a back rest. Two removable arm rest units are used to complete the couch structure and to lock the back mattress in a vertical position. The resulting couch set-up appears as a normal three-seat couch, with the usual back and arm rests. The preferred dimensions for the combination couch and bed of the invention are such as to result in normal dimensions for both the corresponding couch or bed, and to provide the normal comfort in their use.

The foregoing and further advantages, capabilities and objects of the present invention will become apparent in the following description of a preferred embodiment, taken in connection with the drawing in which:

Fig. 1 is a perspective illustration of the combination couch and bed unit, shown set-up as a couch, and with a diagrammatic showing of the opened up or bed position.

Fig. 2 is a perspective illustration of the invention, opened-up as a double bed.

Fig. 3 is a perspective illustration of an arm rest unit used for the couch set-up.

Fig. 4 is a plan view of a detail of the invention construction.

Referring now to Fig. 1, we note the set-up condition of the combination assembly of the invention, for use as a couch or sofa. The assembly comprises a back section 10 and a seat section 11 which are similar upholstered mattresses of equal size, and two arm rest units 12, 12, supported by a folding frame structure to be described. The couch set-up is preferably covered over by a slip cover 13, as partially shown in Fig. 1. The couch of the invention corresponds to a normal couch or sofa construction, and in the preferred form embodies dimensions which correspond to an average sofa.

The supporting frame of the assembly consists of two horizontal sections 14 and 15 which are pivotally connected by hinges 16. Front frame section 14 contains a spring 17; rear frame section 15, a spring 18. Springs 17 and 18 are of a resilient construction for supporting the mattresses 10 and 11. Frame section 14 contains depending legs 20 which are the main support for the combination assembly of the invention. Rear frame section 15 contains hinged legs 21, 21 at its end corners. Legs 21, 21 are extended to the supporting position when back section 15 is opened horizontally, as shown by the dotted lines in Fig. 1, and in Fig. 2. The length of legs 21, 21 when extended are such as to maintain rear section 15 in the same horizontal plane as front section 14.

A pair of links 22, 22 are attached between frame sections 14 and 15 at opposite ends of the couch-bed unit. One end of each link 22 is pivotally supported to frame 15 by respective pins 23. The opposite end of each link 22 contains a slot 24 that coacts with a pin 25 extending from the side of frame section 14. A notch 26 at the inner end of slot 24 is arranged to engage pin 25 when the rear frame section 15 is in the vertical position shown in Fig. 1. One may readily lock the rear frame section in the vertical or couch position by simply lifting it up; links 22, 22 keeping it locked therein. Hinged legs 21, 21, are then moved into the plane of frame 15.

An important feature of the present invention is the stable locking of the back rest mattress 10 in its vertical position. It will be noted that front or seating mattress 11 is narrower in width than frame section 14. This difference in width is equal to the thickness of the mattresses. Vertically held mattress 10 is fitted into the channel formed between the rear edge of mattress 11 and the vertically held back frame 15, as shown in Fig. 1.

Removable arm rest units 12, 12 are inserted in position on the outer edges of mattress 11 and against vertical mattress 10. Fig. 3 is a perspective illustration of the left arm rest unit 12. The units comprise a rectangular upholstered section mounted in a frame-work consisting of horizontal rods 27, 27 and vertical rods 28, 28. Vertical rods 28, 28 are inserted in recesses 30 within legs 20 of the frame 14. The horizontal rods 27, 27 extend beyond the upholstered section of each unit 12, so that the rear end of each unit 12 presses against or is otherwise juxtaposed with the vertically held mattress 10. The bottom surface of each arm rest unit 12 rests on the horizontal mattress 11. The couch or sofa assembly of the

invention unit is then complete. When slip cover 13 is placed thereon it appears and functions as a normal sofa. A shelf 31 is supported beneath frame 14, by legs 20 to provide a storage space for pillows, blankets, etc., used with the assembly as a bed.

The combination assembly of the invention is readily varied from the couch or sofa set-up illustrated in Fig. 1 to the double bed set-up illustrated in Fig. 2. This is accomplished by first removing arm rest units 12, 12 from sockets 30 after slip cover 13 is taken off. Links 22, 22 are then unlatched from pins 25, 25 and rear frame section 14 moved to the horizontal position. Legs 21, 21 of section 15 are extended. Rear mattress 10 falls into its horizontal position shown in Fig. 2. The bedding stored on shelf 31, also, is readily available.

Preferred commercial dimensions for the combination couch and bed assembly of the invention are as follows: full length, 72"; height of frame 14 and spring 17 from the ground, 10"; width of frame 14, 29"; width of rear frame 15, 17"; width of each mattress section 10, 11, 23"; height or thickness of each mattress section 10, 11, 6"; width of each arm rest unit, 23"; height of each arm rest unit, 10"; thickness of each arm rest unit, 6"; width of horizontal rods 27, 29"; height of each vertical rod 28, 25". With these dimensions the assembly is most practical and comfortable for an average person to use either as a bed or as a couch. When used as a couch the vertical or back rest mattress 10 is stably locked and held in the vertical position by the channel formed between the vertical back frame 15, the rear edge of mattress 11, and the rear edges of arm rest units 12 as hereinbefore described. While the indicated dimensions are preferred, it is to be understood that they may be varied for commercial reasons.

Although I have shown and described a preferred embodiment which my invention may assume in practice, it is to be understood that modifications thereof may be made by those skilled in the art without departing from the broader spirit and scope of the invention as defined in the following claims.

What I claim is:

1. An article of manufacture of the class described comprising a first frame section with depending legs, a second frame section hingedly connected with said first frame section, links joining said sections for holding said second frame section in a vertical position with respect to said first frame section, a pair of similar removable mattresses of equal size for said sections, said first frame section being wider than said second frame section by an amount corresponding to the thickness of said mattresses, whereby, when said frame sections are perpendicular and one mattress is placed on the forward part of said first frame section, a channel is formed between the rear edge of said one mattress and said second frame section, and removable arm rests units each comprising a body having an undersurface arranged to press upon and hold in a horizontal position the mattress placed on said first frame section, and an end surface arranged to press against and hold in a substantially vertical position the other mattress against said second frame section, rods projecting from each body insertable in said first frame section to hold said units and said other mattress in stable relationship, said other mattress being stably locked in a vertical position against said second frame section and along such channel formed between the rear edge of said one mattress and said second frame section.

2. An article of manufacture of the class described comprising a first frame section with depending legs; a second frame section hingedly connected with said first frame section; mechanism permanently interconnecting said sections, said mechanism being pivotally connected to one section and slidably and pivotally connected to the other and including means for locking said sections in perpendicular relationship; a pair of similar equal size removable mattresses for said sections; said first frame section being wider than said second frame section by an amount corresponding to the thickness of said mattresses, whereby, when said frame sections are perpendicular and one mattress is placed on the forward part of said first frame section, a channel is formed between the rear edge of said one mattress and said second frame section; and removable arm rest units each comprising a body having an undersurface arranged to press upon and hold in a horizontal position the mattress placed on said first frame section and a flat surface arranged to press against and hold in a substantially vertical position the other mattress against said second frame section, and rods projecting from each body insertable in said first frame section to hold said units and said other mattress in stable relationship; said other mattress being stably locked against said second frame section and resting in such channel formed between the rear edge of said one mattress and said second frame section.

3. An article of manufacture of the class described comprising a first frame section with depending legs; a second frame section hingedly connected with said first frame section; a pair of links each pivotally connected to one of said sections and having a slot slidably cooperating with a pin on the other section, said slot terminating at its inner end in a notch adapted to receive said pin to hold said sections in perpendicular relationship; a pair of similar equal size removable mattresses for said sections; said first frame section being wider than said second frame section by an amount corresponding to the thickness of said mattresses, whereby, when said frame sections are perpendicular and one mattress is placed on the forward part of said first frame section, a channel is formed between the rear edge of said one mattress and said second frame section; and removable arm rest units each comprising a body having an undersurface arranged to press upon and hold in a horizontal position the mattress placed on said first frame section and a flat surface arranged to press against and hold in a substantially vertical position the other mattress against said second frame section, and rods projecting from each body insertable in said first frame section to hold said units and said other mattress in stable relationship; said other mattress being stably locked against said second frame section and resting in such channel formed between the rear edge of said one mattress and said second frame section.

4. An article of manufacture of the class described comprising a first frame section with depending legs; a second frame section hingedly connected with said first frame section; mechanism permanently interconnecting said sections, said mechanism being pivotally connected to one section and slidably and pivotally connected

to the other section and including means for locking said sections in perpendicular relationship; a pair of similar equal size removable mattresses for said sections; said first frame section being wider than said second frame section by an amount corresponding to the thickness of said mattresses, whereby, when said frame sections are perpendicular and one mattress is placed on the forward part of said first frame section, a channel is formed between the rear edge of said one mattress and said second frame section; and removable arm rest units each comprising a frame having a length equal to the width of said first frame section, an upholstered body secured to said frame and having a length equal to the width of said mattresses, said body having an undersurface arranged to press upon and hold in a horizontal position the mattress placed on said first frame section and a flat end surface arranged to press against and hold in a substantially vertical position the other mattress against said second frame section, and rods projecting from each frame insertable in said first frame section to hold said units and said other mattress in stable relationship; said other mattress being stably locked against said second frame section and resting in the pocket formed by such channel between the rear edge of said one mattress and said second frame section and the portions of said frames projecting rearwardly beyond said upholstered bodies.

5. An article of manufacture of the class described comprising a first frame section with depending legs; a second frame section hingedly connected with said first frame section; a pair of links each pivotally connected to one of said sections and having a slot slidably cooperating with a pin on the other section, said slot terminating at its inner end in a notch adapted to receive said pin to hold said sections in perpendicular relationship; a pair of similar equal size removable mattresses for said sections; said first frame section being wider than said second frame section by an amount corresponding to the thickness of said mattresses, whereby, when said frame sections are perpendicular and one mattress is placed on the forward part of said first frame section, a channel is formed between the rear edge of said one mattress and said second frame section; and removable arm rest units each comprising a frame having a length equal to the width of said first frame section, an upholstered body secured to said frame and having a length equal to the width of said mattresses, said body having an undersurface arranged to press upon and hold in a horizontal position the mattress placed on said first frame section and a flat end surface arranged to press against and hold in a substantially vertical position the other mattress against said second frame section, and rods projecting from each frame insertable in said first frame section to hold said units and said other mattress in stable relationship; said other mattress being stably locked against said second frame section and resting in the pocket formed by such channel between the rear edge of said one mattress and said second frame section and the portions of said frames projecting rearwardly beyond said upholstered bodies.

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