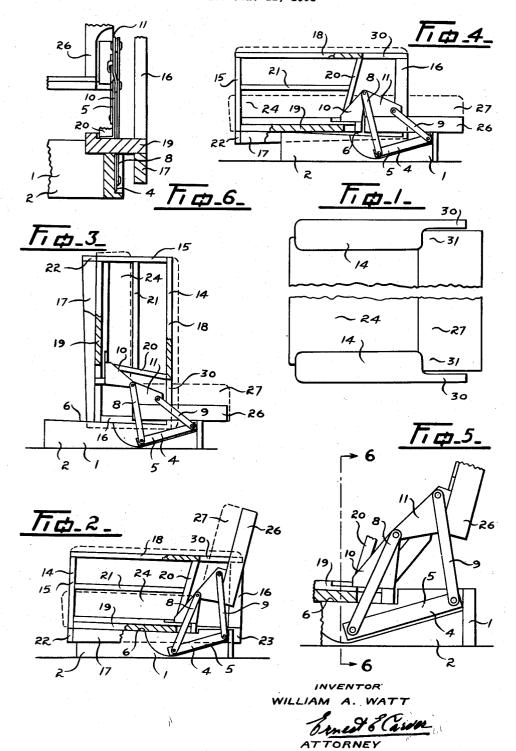
BED COUCH WITH HINGE CONCEALING ARMS

Filed June 11, 1951



UNITED STATES PATENT OFFICE

2,672,626

BED COUCH WITH HINGE CONCEALING ARMS

William A. Watt, Vancouver, British Columbia, Canada, assignor to Hammond Furniture Co. Ltd., Vancouver, British Columbia, Canada

Application June 11, 1951, Serial No. 230,918

2 Claims. (Cl. 5—47)

13

My invention relates to improvements in bed couches wherein the seat and back of the couch are mounted on separate members of a pair of compound hinges to form the bed spring or box mattress.

In bed couches now regularly made, end arms are provided which are bolted to the ends of a box member and the bases of the hinges are secured to the arms and the arms are the members which support the whole structure. In this type of construction, the connection between the boxmember is by bolts disposed along a straight line, which makes a mechanically unsound job insofar as the arms become somewhat loose. The hinges being mounted inside each of the arms 15renders them to some extent exposed and some of the components of each of the hinges rub against the upholstery of the inside surfaces of the arms and cause scuffing damage to the fabric.

sirable that the back shall be wider than the seat, or shall extend beyond the inner faces of the arms, and also that the front edge of the seat shall likewise extend beyond the inside faces of the arms.

The above desirable features have in the past been unobtainable in a bed couch and it is amongst the objects of the present invention to provide a bed couch which has both these features.

All of the above objections to the conventional 30 bed couch have been overcome in the present invention, and a bed couch as here described has its seat and arms formed as a solid unit hingedly mounted upon the box member which forms the entire support for the structure.

Referring to the drawings:

Figure 1 is a plan view of the invention disposed as a couch.

Figure 2 is an end elevational view of the framework of the invention shown part in section.

Figure 3 is an end elevation of the framework tilted to change it from one position to another.

Figure 4 is an end elevational view of the framework disposed as a bed.

Figure 5 is an enlarged detail view showing the mounting of the hinge to the several frame parts.

Figure 6 is a view taken on the line 6-6 of Figure 5.

In the drawings like characters of reference indicate corresponding parts in each figure.

The numeral I indicates generally a base which is normally in the form of a box in which to place bed linen and blankets when the device is to be 55 position, the front end of the seat or the bearers

used as a couch. Secured to each end wall 2 of the base is the base member 4 of a compound hinge 5, such as is usually employed in bed couches of this general type. The end walls 2 are each formed with a slope 6 extending downwardly from the front to a point intermediate the length of the hinge base 4, see Figures 2 and 4. Each hinge has a forward strut 8 and a rearward strut 9, and pivotally connected to the upper end of the strut 8 are triangular brackets 10 and 11. and the strut 9 is connected to an angle of the triangular bracket II as shown in detail in Figure 5.

The numeral 14 indicates generally two arms, each of which consists of vertical supports 15 and 16 which are connected with bottom rails 17 and arm support rails 18. A bearer 19 is secured to each of the bottom rails which is adapted to lie upon the slope 6 to give an incline to the couch In chairs and couches, it is common and de- 20 seat and the brackets 10 are secured to a rear part of said bearers. An inclined support 20 extends between the bearer 19 and the arm support 18 and a tacking rail 21 extends between said support 20 and the vertical support 15. The front 25 and rear supports 15 and 16 are connected together by runners 22 and 23 which with the bottom rails 17 complete a frame upon which to support springs and padding, not shown, to form seat and couch parts 24 as indicated in dotted line in Figures 2, 3 and 4 and in solid line as in Figure 1. The seat and arms being rigidly inarticulatedly connected together move as a unit as shown in Figure 3. A back frame member 26, adapted for padding and upholstering to form a cushion 27 as shown in dotted line, is supported by the triangular bracket 11 of each of the hinges 5 and also by the struts 9 thereof.

It will be noticed that the arms 14 are relatively broad conforming to the regular practice, but that the arm support rails are cut away to define a relatively narrow strip 30 which extends beyond the end of the seat back and also to define a corner space 31 in the width of the arm whereby the end of the back may extend beyond the inner face of the arm 14.

It will also be noticed that since the seat 24 is a single unit consisting of arms 14 and seat runners 22 and 23, that the seat spring or other structure can be extended forwardly of and overlapping the forward ends of the arm as shown in Figures 1, 3 and 4, since there is not relative movement between the seat and the arms.

When the parts have been manipulated to dispose the seat 24 and the back 27 in horizontal

is of the arms rest directly on the base i and the rear part of said seat is suspended on the triangular bracket 10 from the upper end of the strut 8 in horizontal position instead of lying upon the slope 6 as shown in Figure 2. By providing the cut away space 31 in the framing of the rear arm, it is possible to dispose each complete hinge within the width of the arm and since the entire swinging movement of the hinge parts is at all times to the rear of the inclined support 10 20 and substantially within said space 31, no part of said hinge can cause wear or scuffing of upholstered material when changing the device from bed to couch or vice versa.

What I claim as my invention is:

1. A bed couch adapted for covering with upholstery, said couch comprising a base, a seat frame having non-articulated arms secured thereto as an integral unit, a back frame member, a pair of compound hinges, said seat frame being 20 connected to one part of each of said hinges, said back frame connected to a second part of said hinges, each of said hinges including articulated struts connected to and between the base and said hinge parts and lying between planes con- 25 taining the inner and outer faces of the arms when said couch is in normal couch position, said seat frame having a forward movement as the back frame is swung on its hinges to a horizontal position.

2. A bed couch adapted for covering with up-

holstery, said couch comprising a base, a seat frame having non-articulated arms secured thereto as an integral unit, a back frame member, a pair of compound hinges secured to the base, said seat frame being connected to one part of each of said hinges, said back frame connected to a second part of said hinges, each of said hinges being mounted and adapted for movement entirely between the planes of the inside and outside faces of the arms whereby no part of the hinges may be seen between the inner upholstery covering of either arm and the normal upholstery carried by the seat frame adjacent thereto.

WILLIAM A. WATT.

References Cited in the file of this patent UNITED STATES PATENTS

	Number	Name	2000
)	102,702	Payne	May 3, 1870
	907,650	Tandy	Dec. 22, 1908
	1,031,304	Weinmann	July 2, 1912
	1.144,859	Nasca	June 29, 1915
	2,019,266	Meilves	Oct. 29, 1935
5	2.247,546	Donoho	July 1, 1941
	2,502,819	Bockhorst	Apr. 4, 1950
	2,529,451	Hoven et al	
		FOREIGN PATENTS	
0	Number	Country	Date
	439.594	Great Britain	Dec. 10, 1935