Jan. 17, 1967 K. RADEL 3,298,040

ROUND DOUBLE BED OF THE TYPE CONVERTIBLE INTO A SINGLE OR DOUBLE COUCH

Filed June 3, 1965 3 Sheets-Sheet 1

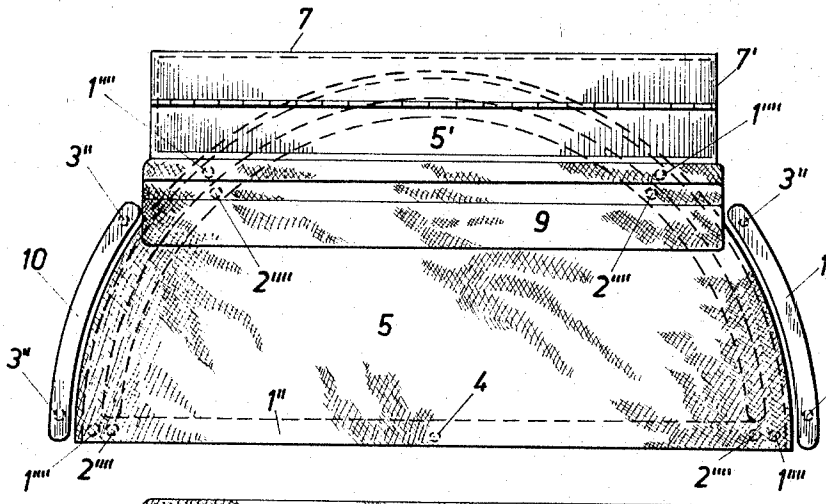


FIG. 1

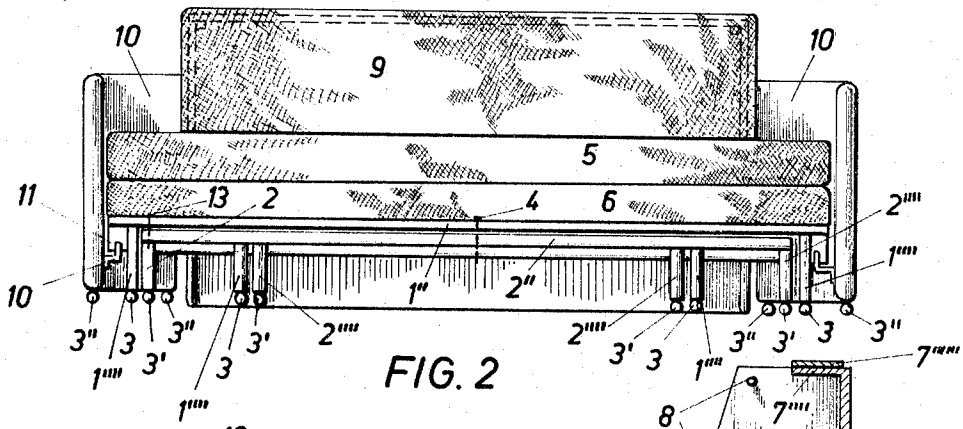


FIG. 2

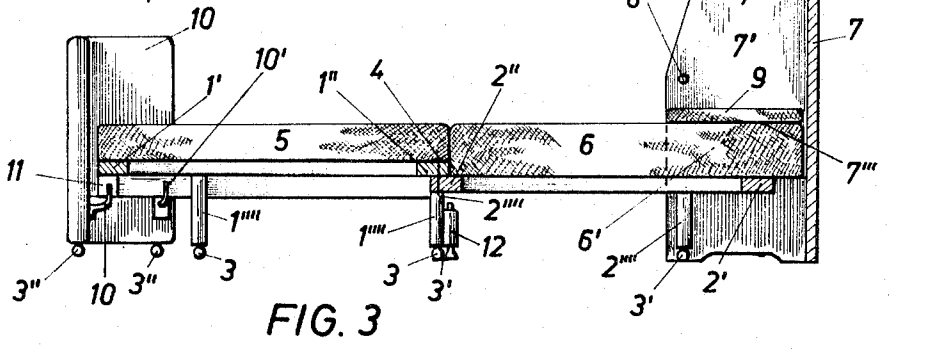


FIG. 3

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FIG. 4

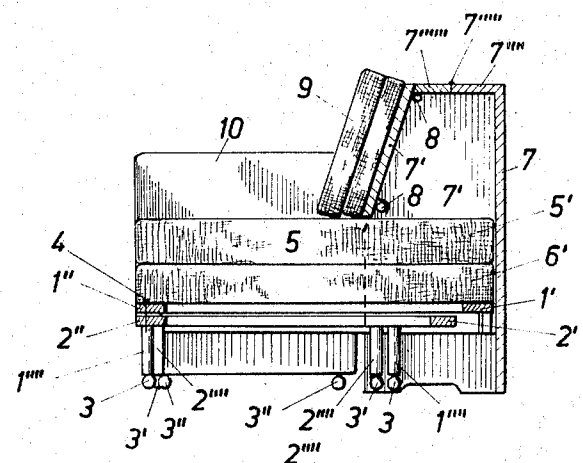
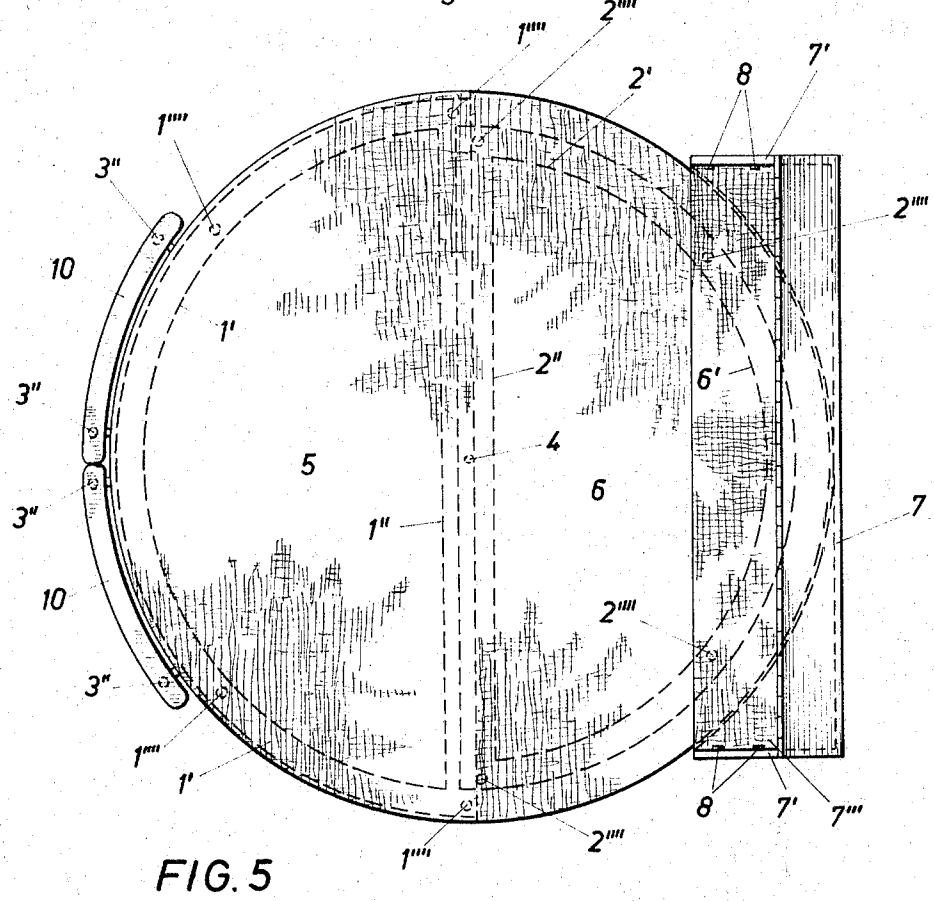


FIG. 5



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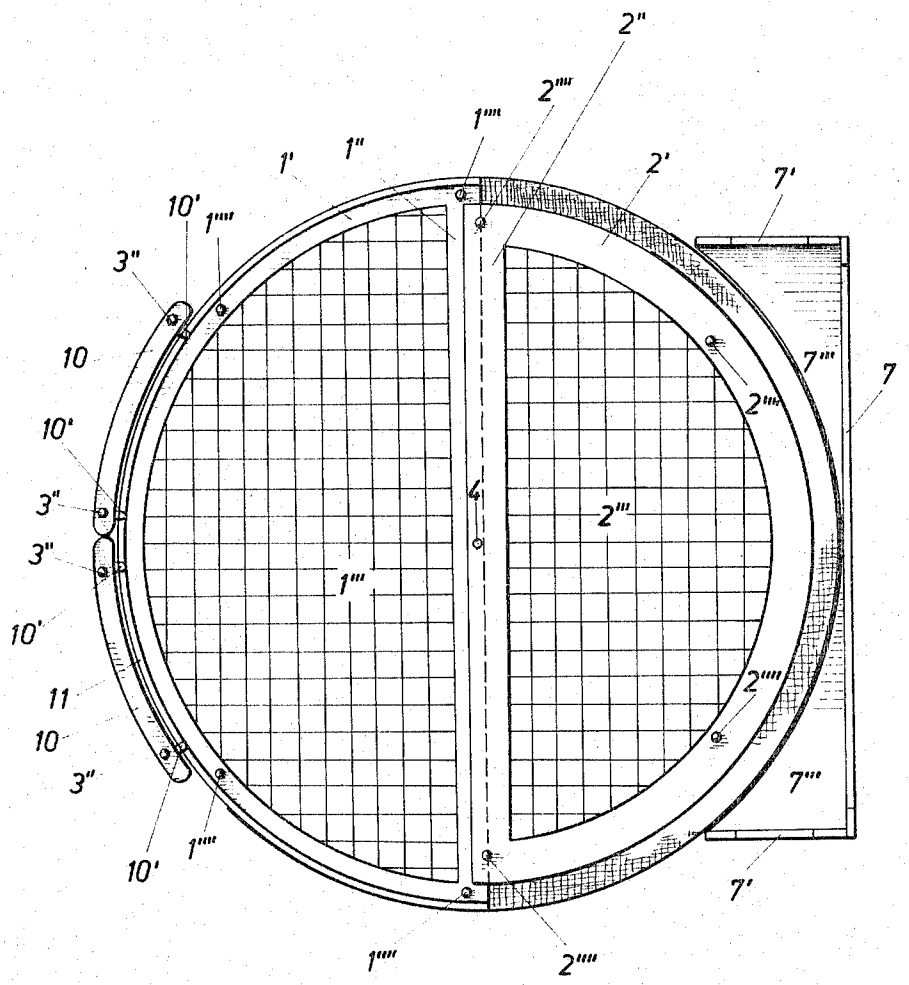


FIG. 6

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ROUND DOUBLE BED OF THE TYPE CONVERTIBLE INTO A SINGLE OR DOUBLE COUCH

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6 Claims. (Cl. 5—12)

This invention relates to double beds, and more specifically to a round double bed of the type convertible into a single or double couch.

According to a previous proposal, a round bed which could also serve as a double couch was comprised of a pair of semicircular identical frames which had legs of equal length so that the frames could not be placed over one another and, when using the round bed as a single couch, the second half had to be accommodated in another place and no substantial saving in space was obtained. Furthermore, a sofa-bed of rectangular form has been suggested which had a substructure extensible to the double substantially square basal surface, on which substructure an upper part was turnable by 90 degrees which in turn was to be brought to the double quadrangular basal surface by swinging it open, and this construction was complicated and caused difficulties due to the numerous fitting parts any time the troublesome conversion was carried out and, moreover, did not prove stable for long.

It is the object of the present inventon to provide a round double bed of the above-identified type which is comprised of two semicircular lying surfaces supported at their circumference by legs provided with rollers and is of much more simple construction while requiring the least space and is substantially easier to handle in the daily conversion from the sleeping furniture to the sitting furniture.

This object is achieved according to the invention by providing a round double bed of the type convertible into a single or double couch, which comprises a pair of semicircular lying surfaces, legs provided on the circumference of said lying surfaces for supporting said lying surfaces, one of said lying surfaces having a slightly larger radius and slightly longer legs than the other of said lying surfaces, rollers provided on said legs, a vertical pin connecting said pair of lying surfaces in their common center of curvature and serving as pivot permitting the round double bed to be converted into a semicircular couch through rotation of said higher lying surface over said smaller lying surface, and pads of different thickness adapted to be placed over one another when converting the double bed into a couch.

In a particularly advantageous embodiment a desk- or shelf-like add-on bed box for receiving the bedding is associated with the double bed and when converting the double bed into a couch a segmental portion of the semicircular lying surfaces which is not needed as sitting surface can be accommodated in the bed box which has a front wall serving to support cushions for supporting the backs of persons sitting on the couch.

Rests of arcuate shape may be provided externally on a larger semicircular frame of the higher lying surface of the double bed, which rests are shiftable by hand along the semicircular circumference of this frame in such a manner that, on the one hand, upon conversion of the double bed into a couch they constitute armrests on the couch and, on the other hand, upon reconversion of the couch into the double bed they constitute footrests on the foot-end of the double bed against which the two persons sleeping in the bed can place their feet. To attain this, the two rests are each equipped at their lower ends with two rollers by means of which the rests are supported on the floor but can also be easily shifted along

the semicircular circumference of the higher larger frame, each of the rests being held in vertical position by two guide hooks screwed to the inner side of the rest and capable of sliding, when the rest is being shifted, in appropriately high guide rails screwed to the underside of the semicircular rim of the larger frame, so as to be positively guided therein.

One embodiment of the invention will now be described by way of example and with reference to the accompanying drawings, in which:

FIG. 1 is a diagrammatic top plan view showing a couch after conversion of a double bed according to the invention into such a couch;

FIG. 2 is a diagrammatic front elevational view of the couch;

FIG. 3 is a diagrammatic longitudinal section through the double bed after reconversion of the couch into the double bed, the upper larger semicircular frame having been swung out by simple rotation and the rests shifted to the foot-end of the bed;

FIG. 4 is a diagrammatic longitudinal section through the converted couch;

FIG. 5 is a diagrammatic top plan view of the double bed, and

FIG. 6 is a diagrammatic view of the double bed from below.

Referring to the drawings, a double bed which is convertible into a single or double couch includes two semicircular bedstead frames of different radii each consisting of a wooden semicircular annular member 1′ and 2′, respectively, and a rigid strip of wood 1″ and 2″, respectively, and having webbings 1‴ and 2‴, respectively, the annular member 1′ having a slightly larger radius than the annular member 2′. The semicircular annular member 1′ of larger radius has four legs 1⁗ provided at their lower ends with rollers 3 and being of somewhat greater length than four legs 2⁗ provided on the semicircular annular member 2″ of smaller radius, the legs 2⁗ also being equipped with rollers 3′ at their lower ends. The two semicircular bedstead frames are connected together in their common center of curvature at their superimposed strips of wood 1″ and 2″ by a vertical pin 4 about which the bedstead frames can be turned so that e.g. the larger and higher bedstead frame consisting of the annular member 1′ and the strip 1″ can be turned completely over the lower smaller bedstead frame consisting of the annular member 2′ and the strip 2″, whereby the latter frame no longer occupies a separate space in the room upon conversion of the double bed into a couch (see FIGS. 1, 2 and 4) but a space-saving couch is formed.

The difference in height between the two bedstead frames when forming the double bed (FIG. 3) is compensated by pads 5 and 6 of correspondingly different thickness so that a plane lying surface for two persons is constituted. When forming the couch (FIGS. 1, 2, 4) the rear segmental portions 5′ and 6′ of the two semicircular, now superimposed pads 5 and 6, which are not needed for sitting, will be accommodated in a desk- or shelf-like add-on bed box 7 having a removable slightly inclined front wall 7″ which rests on abutments 8 on lateral walls 7′ of the bed box and serves to support cushions 9 (FIG. 4) for supporting the backs of persons sitting on the couch, which cushions when forming the bed (FIGS. 3, 5) are used as pillows which then rest on the segmental portion 6′ of the pad 6 and are additionally supported by substantially triangular horizontal board pieces 7‴ (FIGS. 3, 5, 6) secured in the corners of the bed box 7. The simple desk- or shelf-like add-on bed box also includes a horizontal fixed cover board 7⁗ and a further cover board 7⁗′ turntable about a flap hinge 7⁗″. Both on the couch and on the double bed

the same two rests **10** are used. These serve when forming the couch (FIGS. 1, 2, 4) as armrests and when forming the double bed (FIGS. 3, 5, 6) as footrests against which two persons sleeping in the double bed can place their feet. To this end the two rests **10** of arcuate shape are hingedly connected externally to the semicircular larger annular member **1'** of the couch or double bed and each have at their lower ends two rollers **3''** by means of which the rests are supported on the floor but can also roll thereon when pushed by hand along the circumference of the larger annular member, each of the rests **10** being held in vertical position by two guide hooks **10'** screwed to the inner side of the rest and capable of sliding, when the rest is being pushed by hand, in appropriately high guide rails **11** screwed to the underside of the semicircular annular member **1'** of the larger bedstead frame, so as to be positively guided therein. Fixing means **12** known per se can serve for arresting the bedstead frames on the floor at any time. Moreover, coupling pins **13** or other coupling members which can be easily loosened, such as hooks and eyes or the like, can be provided for easily releasably securing the rests **10** against unintentional movement along the circumference of the annular member **1'** and for the easily detachable additional connection of the two bedstead frames.

The invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The present embodiment is therefore to be considered in all respects as illustrative and not restrictive, the scope of the invention being indicated by the appended claims rather than by the foregoing description and all changes which come within the meaning and range of equivalency of the claims are therefore intended to be embraced therein.

I claim:

1. In a double round bed convertible into a single or double couch, the combination comprising a first semicircular section and a second semicircular section, said first section having a larger diameter than said second section; a plurality of support legs situated about the underside of said first and second sections to support said convertible bed, the legs on said first section being longer than the legs on said second section; pivot means about which said first section is moved relative to said section to convert from a single couch to a double round bed, said pivot means being situated along a diameter of said first section and a diameter of said second section, said diameter of said first section overlying said diameter of said second section when said combination comprises a single couch, said diameter of said first section and said diameter of said second section being in the same vertical plane when said combination comprises a single couch, said diameter of said first section and said diameter of said second section being in mating, side-by-side relationship when said combination comprises a double round bed; and pads of different thicknesses to be placed over said first and second section when said combination comprises a double round bed so as to present a single horizontal plane.

2. In a double round bed convertible into a single or double couch as defined in claim **1**, an arcuate substantially U-shaped channel positioned along the circumference of at least one of said first and second sections.

3. In a double round bed convertible into a single or double couch as defined in claim **2**, at least one rest member, said rest member being situated along the circumference of at least one of said first and second sections, said rest member having means thereon which mate

with the substantially U-shaped channel, said rest member being freely movable along said substantially U-shaped channel, such that said rest member can be positioned anywhere along said channel and serve as either an arm rest or a foot rest.

4. In a double round bed convertible into a single or double couch as defined in claim **1**, adjustable lock means on at least one of said first and second sections to lock said sections against relative movement whenever said sections are in use.

5. A round double bed of the type convertible into a single or double couch, comprising a pair of semicircular lying surfaces, legs provided on the circumference of said lyings surfaces for supporting said lying surfaces, one of said lying surfaces having a slightly larger radius and slightly longer legs than the other of said lying surfaces, rollers provided on said legs, a vertical pin connecting said pair of lying surfaces in their common center of curvature and serving as pivot permitting the round double bed to be converted into a semicircular couch through rotation of said higher lying surface over said smaller lying surface, and pads of different thicknesses to be placed over one another when converting the double bed into a couch, wherein a desk or shelf-like add-on bed box for receiving the bedding is associated with the double bed and when converting the double bed into a couch a segmental portion of the semicircular lying surfaces can be accommodated in the bed box which has a front wall serving to support cushions for supporting the backs of persons sitting on the couch.

6. A round double bed of the type convertible into a single or double couch, comprising a pair of semicircular lying surfaces, legs provided on the circumference of said lying surfaces for supporting said lying surfaces, one of said lying surfaces having a slightly larger radius and slightly longer legs than the other of said lying surfaces, rollers provided on said legs, a vertical pin connecting said pair of lying surfaces in their common center of curvature and serving as pivot permitting the round double bed to be converted into a semicircular couch through rotation of said higher lying surface over said smaller lying surface, and pads of different thicknesses to be placed over one another when converting the double bed into a couch, wherein a desk or shelf-like add-on bed box for receiving the bedding is associated with the double bed and when converting the double bed into a couch a segmental portion of the semicircular lying surfaces can be accommodated in the bed box which has a front wall serving to support cushions for supporting the backs of persons sitting on the couch, wherein horizontal substantially triangular board pieces in the corners of the desk- or shelf-like add-on bed box, which are complementary to the segmental portion of the semicircular lying surfaces, are provided for additionally supporting the pillows on one of the pads of the double bed and simultaneously serve to reinforce the bed box.

References Cited by the Examiner

UNITED STATES PATENTS

2,993,216	7/1961	Casey	5—362
3,069,698	12/1962	Miller	5—17

FOREIGN PATENTS

697,303	11/1964	Canada.
266,862	5/1950	Switzerland.

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