No. 749,307. PATENTED JAN. 12, 1904.

H. A. LINDEROTH.

BED CHAIR OR BED SOFA.

APPLICATION FILED SEPT. 16, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

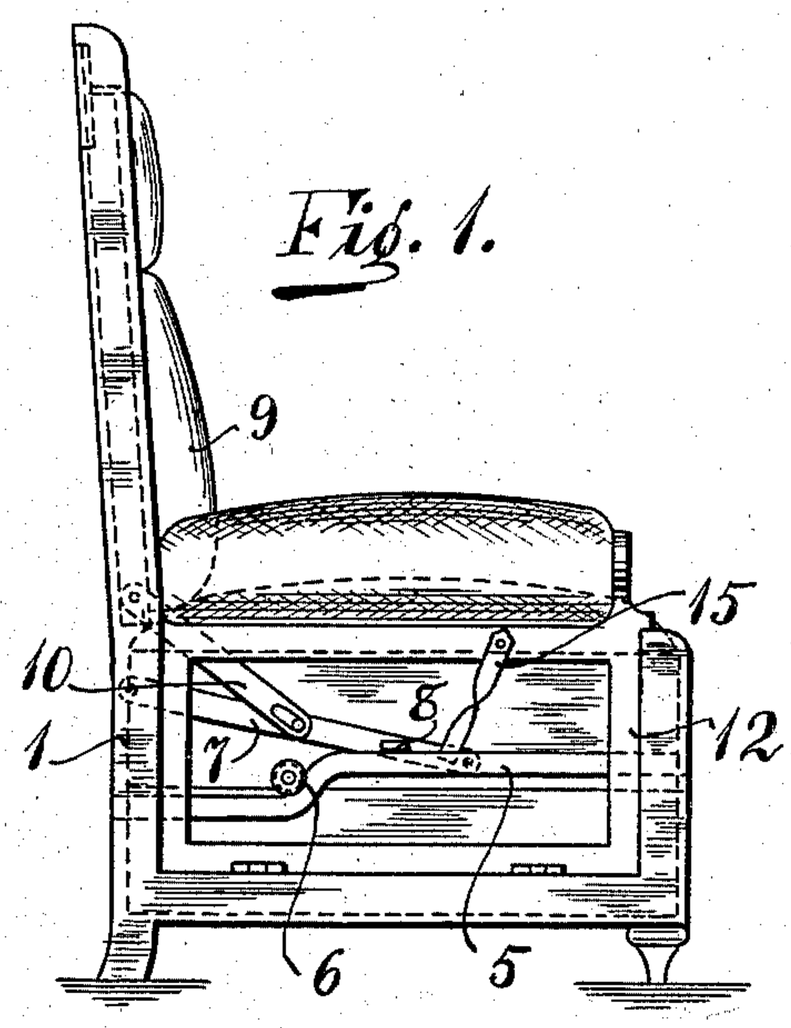


Fig. 2.

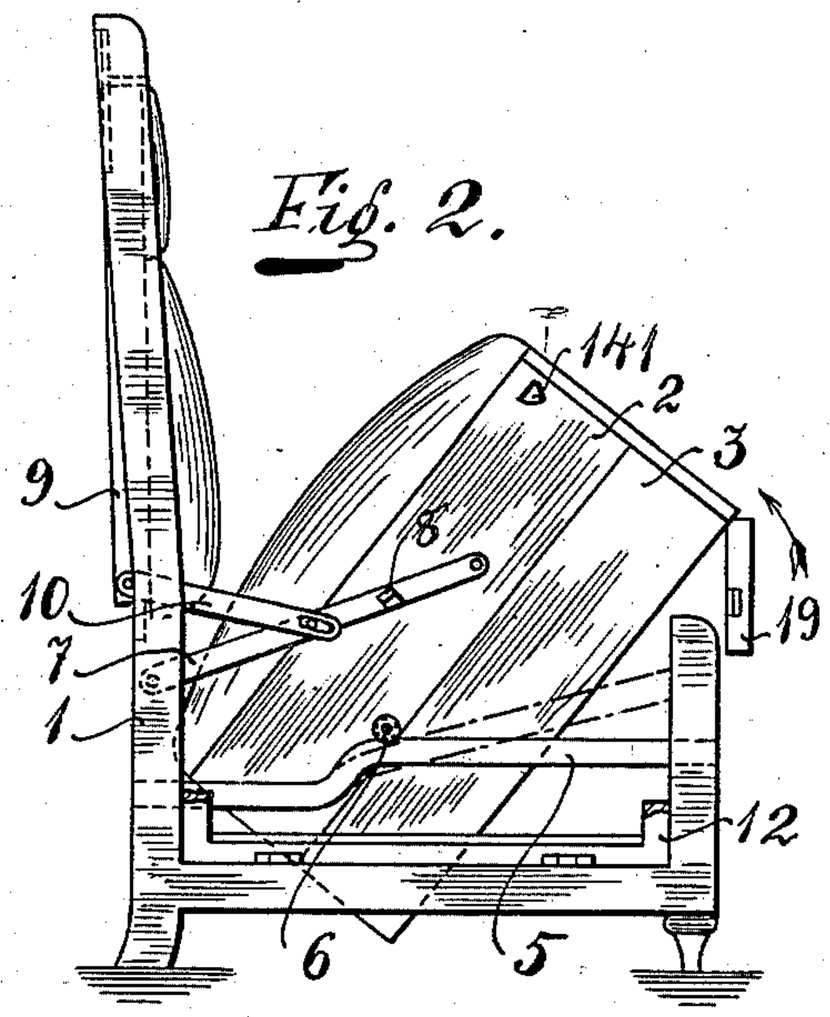
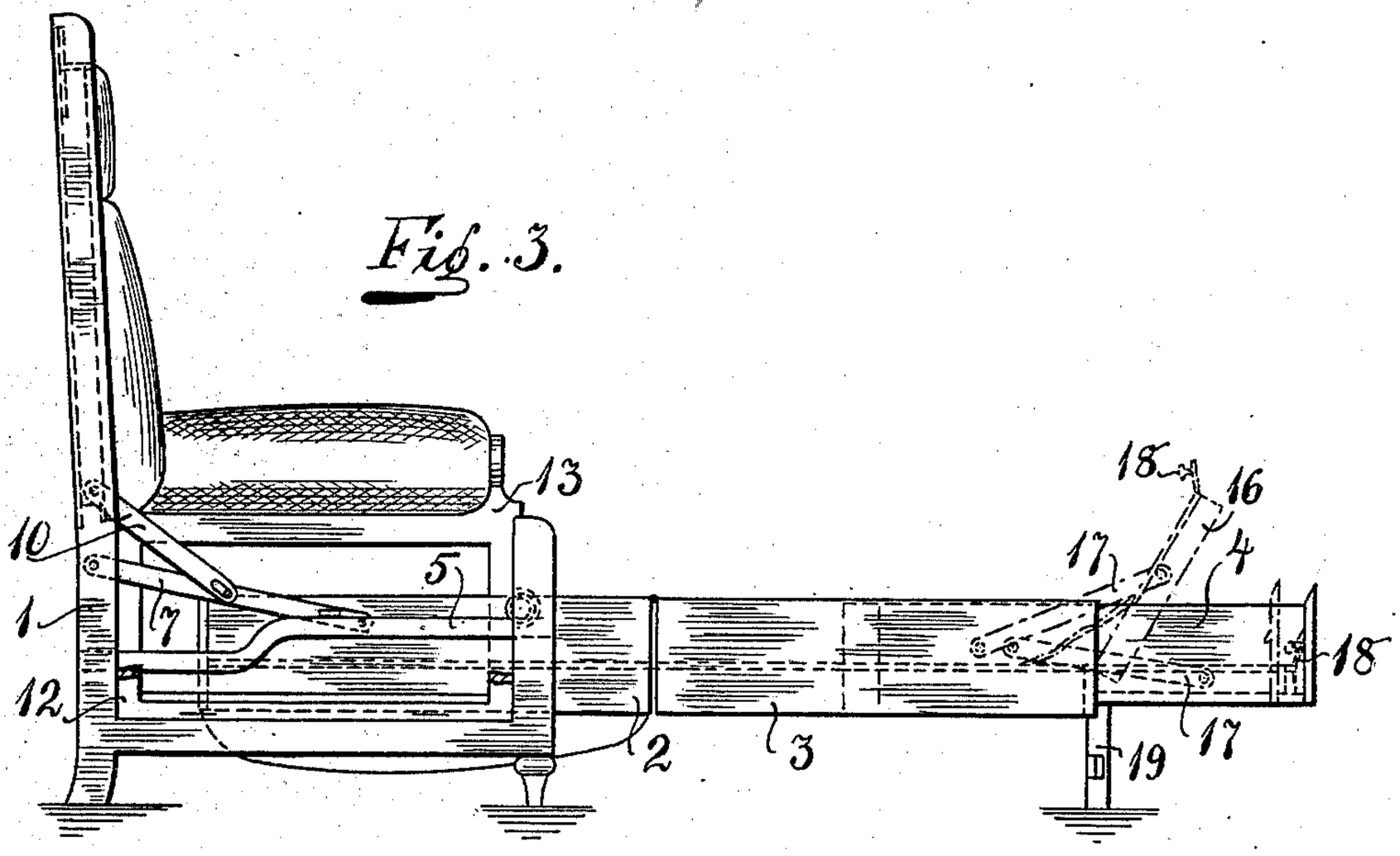


Fig. 3.



Witnesses:

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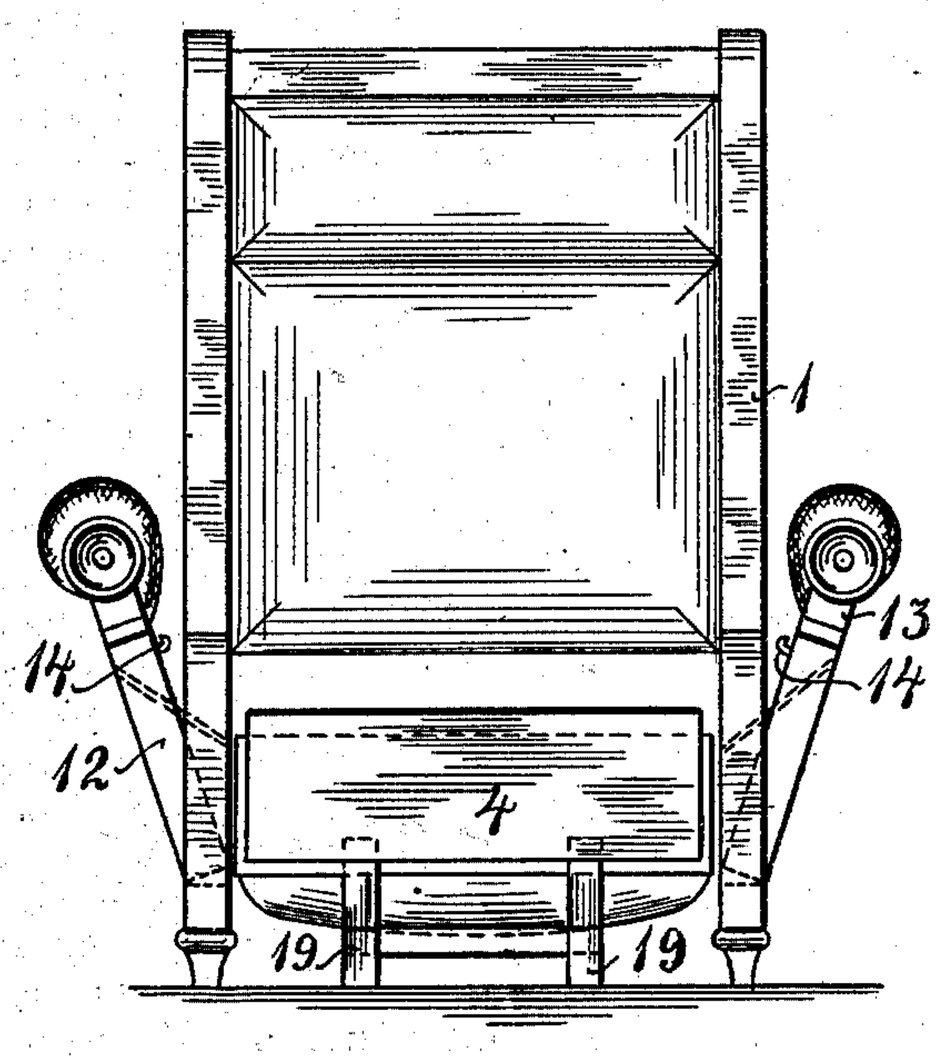
NO MODEL. 2 SHEETS—SHEET 2.

Fig. 4.



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UNITED STATES PATENT OFFICE.

HERMAN ANDERSSON LINDEROTH, OF ÖSTERBY, STJERNSUND, SWEDEN.

BED-CHAIR OR BED-SOFA.

SPECIFICATION forming part of Letters Patent No. 749,307, dated January 12, 1904.

Application filed September 16, 1902. Serial No. 123,594. (No model.)

To all whom it may concern:

Be it known that I, HERMAN ANDERSSON LINDEROTH, a subject of the King of Sweden and Norway, and a resident of Österby, Stjernsund, Sweden, have invented new and useful Improvements in Bed-Chairs or Bed-Sofas, of which the following is a specification, reference being had to the drawings accompanying and forming a part hereof.

This invention relates to improvements in bed-chairs or bed-sofas, and more especially to such bed-chairs or bed-sofas in which the member adapted to form the bed consists of a number of parts which are foldably connected to each other in well-known manner.

The object of the invention is partly to provide a cheap and simple guiding device for the member of the chair or sofa adapted to form the bed, partly to enable the application of such members to upholstered chairs or sofas without hindrance of the upholsteries.

Another object of the invention is to provide an improved arrangement of the forward bed part in order to increase its strength and also to obtain an improved device for automatically stretching the bottom of the bed.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

In the accompanying drawings I have shown a suitable constructional form of my invention applied to a chair.

Figure 1 shows a side elevation of a bed-chair constructed in accordance with my invention. Fig. 2 likewise shows a side elevation of the bed-chair with the turnable member in partly unfolded position, the greater part of the one-arm piece being broken away. Fig. 3 likewise shows a side elevation of the chair in unfolded (bed) position, and Fig. 4 a front elevation of the chair likewise unfolded.

Referring to the drawings, the bed-chair consists of four main parts—viz., the chair-frame 1, the rear bed part 2, forming the seat of the chair when the bed is folded together, Fig 1, the intermediate bed part 3, and the forward bed part 4. On each side of the chair-frame is arranged a fixed guide 5, on which a roller 6, a pin, or the like, fixed to the bed part 2, is adapted to run when the bed is folded or unfolded. The said guides 5 may preferably be somewhat bent, as illustrated in the drawings, in order to prevent the turnable part of the chair from striking the floor in being turned.

To suitable points of the part 2, on each side of the same, are pivotally-fixed links 7, the other ends of which are pivotally fixed to the rear part of the chair-frame 1. The said links 7 are provided with projections 8 or the like, adapted to bear against the said guides 5 in the chair position of the furniture. The said projections may also be arranged on the part 2 and be adapted to bear against other fixed parts of the chair or bed frame than the said guides 5. In changing the chair to a bed the turnable part of the chair will swing around the forward points of attachment of the said links 7, the roller 6 thereby running on the guides 5 and lifting the turnable part of the chair, so that the same will not strike the floor. When the said turnable part has been turned upside down, the said projections 8 will again bear against the guides 5.

In order to enable the use of upholstered arm-rests, the latter are according to my present invention pivotally connected to the frame of the chair or sofa, so that they may be turned outward in folding up the turnable part of the chair or sofa. For this purpose the arm or side pieces 12 and 13 of the chair are at their lower ends hinged to the chair-frame, so that they may be turned outward so much as not to prevent the turnable part of the chair from being turned. When the furniture is in chair position, the said arm-pieces 12 and 13 are held in position by means of hooks 14, Fig. 4, engaging corresponding holes or recesses 141, Fig. 2, in the part 2. When the bed is unfolded, the said hooks will be disengaged from the said holes or recesses, so that the side pieces 12 and 13 will be released and turn outward on account of their weight. In order to limit the outward movements of the said arm-rests, the latter may, if desired, be connected to the part 2 by means of straps 15 or the like of suitable length. The said straps 15 may preferably be arranged in such manner that the same at the end of the unfolding motion of the bed will turn the said arm-

pieces inward to a certain degree, so that the latter may constitute supports for the cushions of the bed. Also the back 9 may, if desired, be hinged, preferably at its upper end, to the frame and may in this case near its lower end be connected to suitable points of the said links 7 or the part 2 by means of suitable links 10. When the bed is unfolded, the back 9 will thereby be turned backward, Fig. 2, so that its upholstery will be brought out of the way of the part 2. The back 9 may, however, be rigidly fixed to the chair-frame if only the guides 5 be made somewhat inclined, as illustrated by dotted lines in Fig. 2.

The part 4 is slidable in the part 3 and provided with flanges or the like on the sides or on the bottom running in suitable guides in the part 3, so that the latter cannot fall out from the part 3, or vice versa. The said part 4 may be moved by means of a frame 16, pivotally connected to the end of the part 3 of which it constitutes a prolongation. The said frame is connected to the part 4 by means of links 17, and to the same is fixed the one end of the bottom of the bed, which is made of cloth or other similar material, so that the said bottom will be stretched when the frame 16 is folded down. For securing the said frame 16 in folded-down position is used a preferably spring-actuated bolt 18 or the like, engaging a suitable projection or recess or the like of the part 4. On account of the said stretching of the bottom of the bed by means of the frame 16 no feet are necessary at the ends of the parts 2 and 3, connected to each other, the said stretching of the bottom preventing the said parts from falling down. To the intermediate bed part 3 is in well-known manner hinged one or more suitable feet 19.

The operation of the above-described furniture is as follows: When the same is in chair position, as shown in Fig 1, and is to be changed to a bed, the turnable part of the chair is lifted and turned round in the direction of the arrow in Fig. 2. As soon as the said part of the chair has been slightly lifted the hooks 14 will be disengaged from the recesses 141 of the part 2 and will on account of their weight turn outward, as illustrated in Fig. 4. In the further movement of the said turnable member of the chair the same will be lifted by the guides 5, so as not to strike the floor, and thereupon the links 10 will turn the back 9 backward, as shown in Fig. 2, so that the upholstery of the same will be out of the way of the said turnable member. When the latter has been turned upside down, as shown in Fig. 3, the intermediate bed part 3 may be unfolded, so as to form a prolongation of the part 2, as shown in Fig. 4, whereupon the forward part 4 of the bed may be drawn out by folding down the frame 16, the latter simultaneously stretching the bottom of the bed.

Having now described my invention, what I claim, and desire to secure by United States Letters Patent, is—

1. The combination with a bed-chair having the bed member composed of a number of parts foldably connected to each other, of links between the turnable member of the chair and the chair-frame, fixed guides in said frame, rollers on said turnable member adapted to run on said guides, projections on said links adapted to bear against said guides, a swinging back hinged to the chair-frame, and turnable arm-pieces hinged to said frame, for the purpose set forth.

2. The combination with a bed-chair having the bed member composed of a number of parts foldably connected to each other, links between the turnable member of the chair and the chair-frame, fixed guides in said frame, rollers on said turnable member adapted to run on said guides, projections on said links adapted to bear against said guides, a swinging back hinged to the chair-frame, links between the above-mentioned links and the said back, turning arm-pieces hinged to the chair-frame, and connections between the said arm-pieces and the turnable member of the chair, substantially as and for the purpose set forth.

3. In bed-chairs having the bed member composed of a number of parts foldably connected to each other the combination of links between the turnable member of the chair and the chair-frame, fixed guides in said frame, rollers on said turnable member adapted to run on said guides, a swingable back hinged to the chair-frame, links between the latter and the said back, arm-pieces hinged to the chair-frame, connections between the latter and the said arm-pieces, a frame hinged to the intermediate part of the bed member, and links between the said frame and the forward part of the bed member, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERMAN ANDERSSON LINDEROTH.

Witnesses:
GERDA LINDKVIST,
JOHN DELMAR.