

Sept. 24, 1935.

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2,015,335

ADJUSTABLE CHAIR

Filed Oct. 10, 1934

2 Sheets-Sheet 1

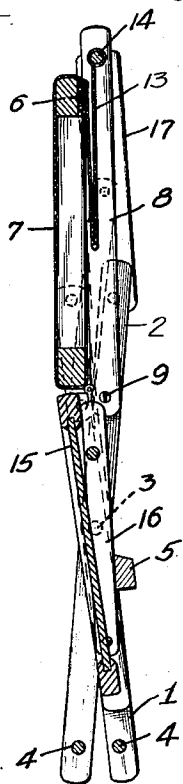
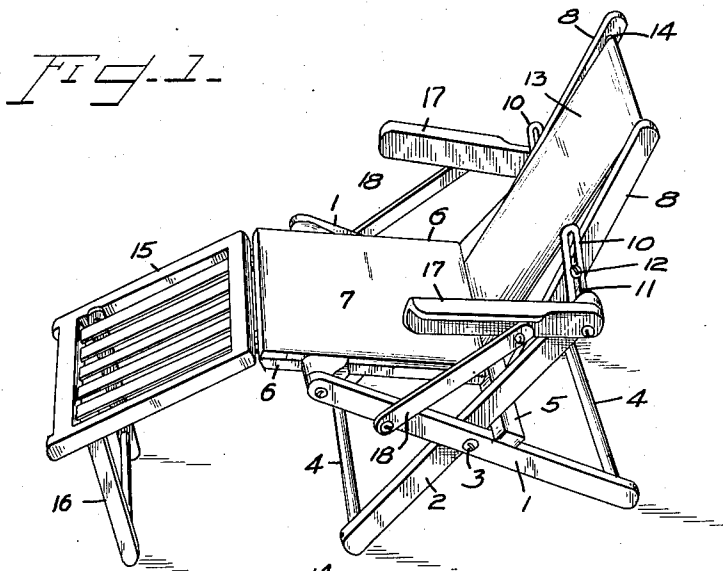


Fig-4.

Louis Blumenthal
INVENTOR

BY *Lauffe Warland*
ATTORNEY

Sept. 24, 1935.

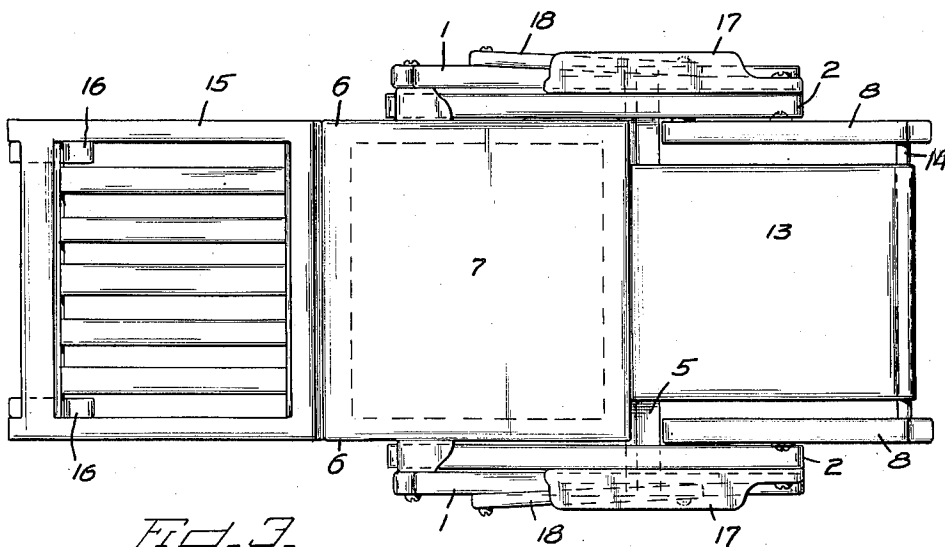
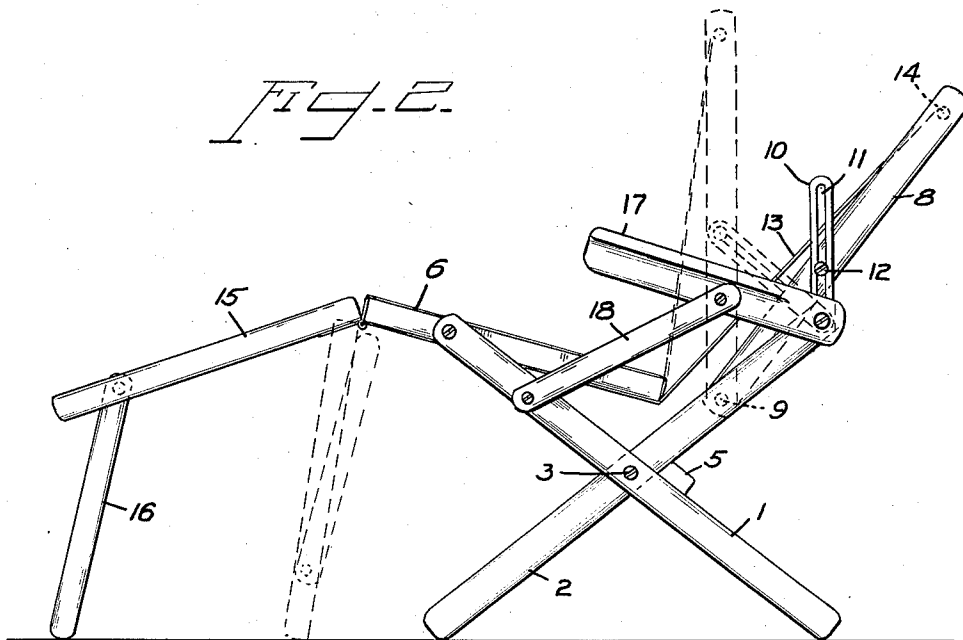
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2 Sheets-Sheet 2



Louis Blumenthal
INVENTOR

BY *Lauff Warland*
ATTORNEY

UNITED STATES PATENT OFFICE

2,015,335

ADJUSTABLE CHAIR

Louis Blumenthal, Brooklyn, N. Y.

Application October 10, 1934, Serial No. 747,675

7 Claims. (Cl. 155-117)

My invention relates to chairs which are capable of several positions varying from sitting to reclining and particularly to folding chairs of the type known as beach chairs.

5 The main object of my invention is the provision of a chair of the type referred to which will automatically adjust itself to any position of the body. In other words, in no matter what position the user disposes his body in the chair, according to my invention, the back of the chair will automatically go into position to support his back.

Another object of my invention is the provision, in a chair of the character described, of a foot-rest which may be folded under the seat when the user desires to sit in upright position.

15 A further object of my invention is the provision of a chair of the character described which can be folded into a flat, compact bundle with a minimum of effort.

Further objects and advantages of my invention will appear from the following detailed description of the accompanying drawings in which

25 Fig. 1 is a perspective view of the chair with the parts adjusted to sitting position.

Fig. 2 is a side elevation of the chair with the parts arranged in semi-reclining position shown in full lines and the parts arranged in upright sitting position shown in dotted lines.

30 Fig. 3 is a plan view of the chair with the parts arranged in the manner shown in full lines in Fig. 2.

Fig. 4 is a vertical section of the chair in folded position.

35 Referring to the drawings in detail 1 and 2 are leg members pivoted together at 3 and provided with spacing bars 4. The legs bearing numeral 1 are the outside legs and are provided with a cross piece 5 which serves to limit the movement of legs 1 and 2 with respect to each other.

40 Pivoted at the upper ends of legs 1 is a seat 6 having a rigid frame and a center 7 which can be solid, cane or a flexible material such as canvas, or any other suitable fabric and is shown in the drawings as a fabric.

45 The frame 8 of the back has its lower end pivoted on legs 2 at 9 which is a point intermediate pivot 3 and the upper ends of legs 2. The upper end of each of the legs 2 is connected to the corresponding side member of frame 8 at a point intermediate its ends by a sliding connection which, in the modification shown, consists of a strip of metal 10 having one of its ends pivoted at the upper end of a leg 2 and having a longitudinal slot 11 in which rides a pin 12 projecting from the side of a side member of frame 8.

jecting from the side of a side member of frame 8.

The back supporting portion 13 of the back in the modification shown is composed of fabric and is a continuation of the fabric of seat 6. One end of this fabric is connected to the underside of the inner end of the seat frame 6, is then drawn upwardly and forwardly over the seat frame and back under the seat frame, then upwardly to a cross piece 14 of the back frame 8 to which it is secured. The object of this construction is to provide a flexible connection between the seat and the back frame. As is apparent, this can be accomplished as readily by constructing the back of a separate piece of flexible material attached to the cross piece 14 and connected to the framework of the seat. Or the back can be a piece of solid material swingingly mounted on the cross piece 14 and connected to the rear end of the seat by flexible material. This construction would, of course, necessitate a slightly different method of folding the chair.

Hinged to the front end of framework 6 of the seat is a foot rest 15 of any desired construction. Near the outer end of the foot rest is hinged a supporting frame 16 which, as shown in dotted lines in Fig. 2, may be folded up under the foot rest which, in turn, may be folded under seat 6 and held out of the way by spacing bar 4 between the legs 2.

Pivoted at the upper end of each leg 2 is an arm 17. Pivotaly connected to each arm 17 at a point intermediate its ends and to the corresponding leg 1 at a point intermediate the pivot 3 and the upper end of the leg 1 is a link 18, the purpose of which is to support the arms 17 in position when the chair is in use and to cause the arms 17 to move in the proper direction when it is desired to fold the chair.

By reason of the novel manner in which the back is connected to the seat and to the supporting legs, the seat and the back will closely follow the movements of the body of the user. If the user is sitting in an upright position and desires to recline, the very movement of the body necessary in changing from sitting to reclining position causes the back and the seat to move relatively to each other into reclining position. In other words, the position of the parts is determined by the center of gravity of the body and will shift as that center of gravity shifts in the movements of the body from one position to another.

A very important advantage inherent in the above described chair is the ease with which it can be folded into a flat, compact bundle. With

the chair in the position shown in Fig. 2, it is merely necessary to fold supporting member 16 up against foot rest 15, then lift up the inner end of the seat frame 6 with one hand, place
5 the other hand on the upper end of leg 2 and bring the hands together.

Another way to fold the chair is to fold supporting member 16 under foot rest 15, then put one hand under the inner end of seat frame 6, the other hand under the outer end of foot rest
10 15, lift the two as a unit, tilt the chair backwardly, using the lower end of leg 1 as a fulcrum until the upper ends of the legs 2 rest on the ground together with the upper ends of the
15 legs 1, and then press downwardly with both hands, keeping foot rest 15 and seat frame 6 in the same plane. Of course, to open the chair the reverse of either of the above series of operations will suffice.

20 While I have illustrated my novel arrangement of a chair seat and back which are capable of following the movements of the body in connection with a folding chair, it is apparent that this construction can be readily adapted to non-folding chairs, so long as the particular method of
25 mounting the seat and the back and the particular relation between these parts are preserved.

Although I have described my improvements with considerable detail and with respect to a certain particular form of my invention, I do
30 not desire to be limited to such details since many changes and modifications may well be made without departing from the spirit and scope of my invention in its broadest aspect.

35 Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A folding chair comprising a pair of inner legs and a pair of outer legs, each inner leg
40 being pivoted to its adjacent outer leg at a point intermediate their ends, stop means for said legs, a seat pivotally mounted between the upper ends of one of said pairs of legs, a back frame having its lower portion fixedly pivotally connected to
45 the other of said pairs of legs adjacent the upper portions thereof and having a portion intermediate its ends connected to said last named pair of legs by means providing for limited movement of said back frame relative to said last
50 named legs and means running from the rear

portion of said seat to the upper portion of said back frame comprising a flexible member whereby movement of one of the said seat or back frame causes movement of the other.

2. A folding chair comprising a pair of inner legs and a pair of outer legs, each inner leg being pivoted to its adjacent outer leg at a point intermediate their ends, stop means for said legs, a seat having the portion adjacent its front end pivotally mounted on the upper ends of the outer
10 legs, a back frame having its lower end pivotally connected to said inner legs at a point between their upper ends and the point where they are pivoted to the outer legs, a sliding connection between the upper ends of said inner legs and
15 the back frame at a point intermediate its ends and a flexible connection between the rear portion of said seat and the upper portion of said back frame.

3. A folding chair according to the preceding
20 claim in which the flexible connection between the seat and the back frame is a strip of fabric.

4. A folding chair according to claim 2 in which the flexible connection between the seat and the back frame is connected to the rear end of the
25 seat and the upper end of the back frame.

5. A folding chair according to claim 2 in which the sliding connection between the inner legs and the back frame comprises on each side of said back frame a strip of metal having one of
30 its ends pivoted to the upper end of one of said legs, a slot in said strip of metal and a stud projecting from said back frame and adapted to ride in said slot.

6. A folding chair according to claim 2 having
35 a foot rest swingably connected to the front end of the seat and having supporting means whereby said foot rest may be moved from a position in continuation of the seat to a position underneath the seat.
40

7. A folding chair according to claim 2 having a pair of arms each of which has one of its ends pivotally connected to the upper end of one of the inner legs and a link having one of its ends pivotally connected to said arm at a point
45 intermediate its ends and its other end pivotally connected to one of said outer legs at a point between its upper end and the point at which it is pivoted to the adjacent inner leg.

LOUIS BLUMENTHAL. 50