

Jan. 21, 1930.

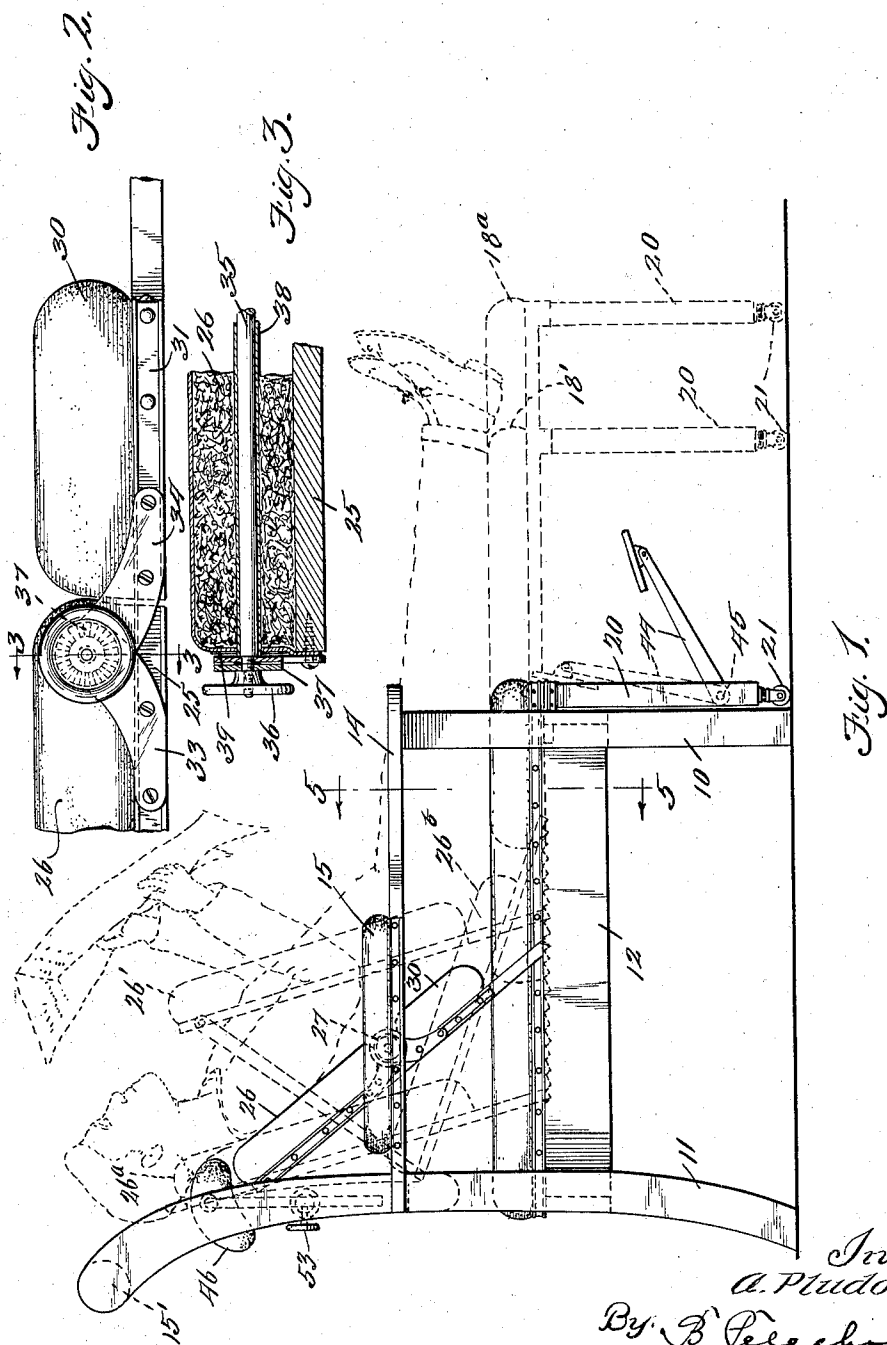
A. PLUDOWSKI

1,744,243

CHAIR

Filed Sept. 4, 1928

2 Sheets-Sheet 1



Inventor:
A. Pludowski
By B. P. Pechon
Att'y.

Jan. 21, 1930.

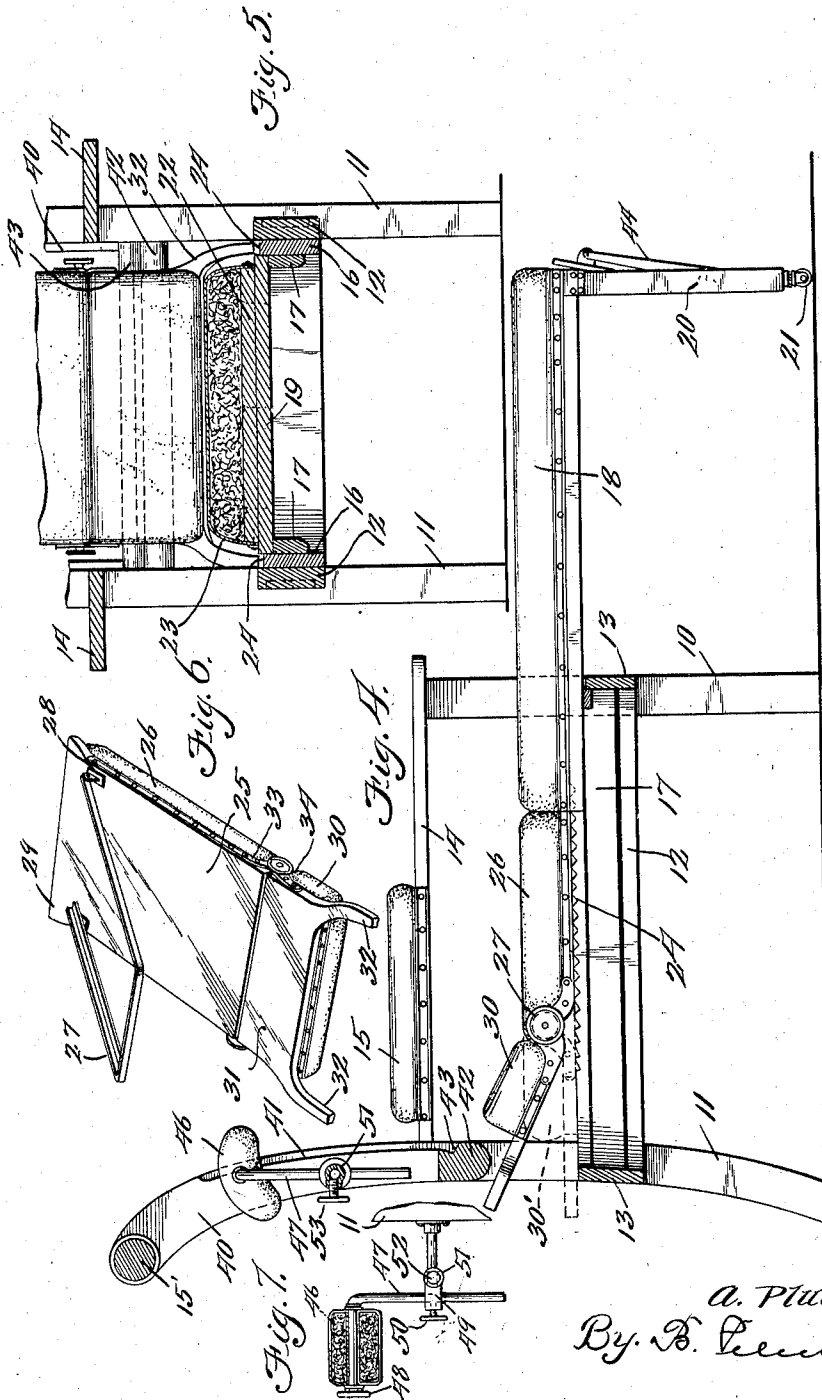
A. PLUDOWSKI

1,744,243

CHAIR

Filed Sept. 4, 1928

2 Sheets-Sheet 2



Inventor:
A. Pludowski
By: D. P. Pecher
Att'y.

UNITED STATES PATENT OFFICE

ALEXANDER PLUDOWSKI, OF CHICAGO, ILLINOIS, ASSIGNOR OF THREE-FOURTHS TO
BRONISLAW KURASIEWICZ, OF CHICAGO, ILLINOIS

CHAIR

Application filed September 4, 1928. Serial No. 303,735.

The invention relates to chairs and its main object is to provide a chair which can give maximum comfort for the user.

A further object of the invention is the provision of a chair having a back rest which can be adjusted to various inclined positions for supporting the back of the user.

A still further object of the invention is to provide a chair which may be convertible into a bed or cot, reference hereby being made to my copending application for chairs, Serial No. 250,102, filed January 28, 1928.

With the above general objects in view and others that will appear as the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings forming a part of this application, and in which like designating characters refer to corresponding parts throughout the several views,

Fig. 1 is a side elevational view of the invention showing several of the various possible adjustments of the back rest and seat portion thereof;

Fig. 2 is a side elevational fragmentary view of the hinge portion of the back rest of the chair;

Fig. 3 is a sectional view through the hinge portion taken on line 3—3 of Fig. 2;

Fig. 4 is a side view partly in elevation and partly in section illustrating the chair when used as a bed;

Fig. 5 is a transverse cross sectional view through the chair, taken on line 5—5 of Fig. 1;

Fig. 6 is a rear elevational view of the back rest of the chair; and

Fig. 7 is a view of the head rest, partly in section and partly in elevation.

Referring more in detail to the present invention the same embodies a pair of front legs 10 and a pair of rear legs or supports 11. The seat frame comprises two longitudinal braces 12 joining the opposite pairs of said legs 10 and 11, and transverse braces 13 joining the two corresponding pairs of

said legs. Arm rests 14, provided with cushioned elbow rests 15, are supported at their front ends by the upper end of front legs 10 and their rear ends are affixed to the rear supports 11. Said latter supports are braced at their upper ends by transverse brace 15'.

Attached to the inner faces of braces 12 and mounted by their ends in transverse braces 13 are planks 16. Mounted upon the inner faces of said planks 16 are ledges 17, the upper edges of which are positioned below the upper edges of planks 16 for providing seats for the seat portion 18 of the chair, within which the same with its supporting base 19 is guided for longitudinal sliding adjustment. Thus the seat portion of the chair is extensible and when in an extended position, illustrated on Fig. 4, is used as a cot, and when in that extended position the forward end thereof is supported by legs 20 which are affixed to the seat portion in any suitable manner. For facilitating the extension and adjustment of said seat portion 18 within the chair structure casters 21 are provided for legs 20.

Said seat portion 18 further comprises a board 22, which is mounted upon base 19, and an upholstered cushion 23.

The upper edges of planks 16 terminate in tooth racks 24 for the purpose hereinafter stated.

The back rest of the chair, best illustrated in Fig. 6, is composed of a larger section and a smaller section. Said larger section includes a base 25 and an upholstered cushion 26. The base on its rear face carrying a U-shaped frame support 27, which by its upper end is hingedly connected to ears 28 projecting from base 25. Said base 25 has a laterally expanded end 29 for the purpose hereinafter described.

The smaller section of the back rest embodies cushion 30 and base 31 having bifurcated projections 32 which are inclined away from the sides of base 31 and are adapted to span the seat portion 18 when it is used in connection with the chair use of the invention.

The two sections of the back rest are pivoted and the pivot point embodies hinge leaves 33 secured to the sides of base 25 and

hinge leaves 34 secured to the sides of the smaller base 31. Pintle 35 having both ends threaded for receiving hand screws 36 passes through cushion 26 of the larger section and through both series of said hinge leaves. The abutting faces of the both series of hinge leaves are provided with radial engaging ribs 37, as seen on Figs. 2 and 3, for the purpose of rigidly holding the hinge leaves and the two sections of the back rest in radial and angular adjusted positions. A metallic sheath 38 encloses pintle 35 so that the padding material of cushion 26 may not interfere with any rotary movement of the pintle. Plates or washers 39 are rigidly mounted at both ends of sheath 38 and are closely abutting the sides of cushion 26 preventing bulging of the padding material and tending to maintain the sheath 38 in stationary position.

From the hereinabove made description of the back rest it will be apparent that the two sections thereof may be adjusted radially upon their pivot point and the desired position of the sections may be rigidly maintained by tightening upon hand screws 36, and the radial engaging ribs 37 will prevent any rotary creeping movement of the section in respect of the other on their pivot point. It is noted that the ends of sheath 38 abut the inner faces of hinge leaves 33, bearing thereagainst during the tightening of the screw 37 and thus preventing the displacement of the hinge leaves under the pressure of said screws.

The rear supports 11 have on their inner faces strips 40 which at their front edges have cut-away portions, which in cooperation with the adjacent faces of said supports 11 form recesses 41 which are adapted for receiving the enlarged end 29 of base 25 when the back rest is operatively adjusted in the chair use of the device.

Below arm supports 14 and at the lower ends of strips 40 is a transverse brace 42 connecting the two supports 11. Said brace has a longitudinal groove for providing seat 43 for the purpose hereinafter stated.

Fig. 1 shows the various adjustments of the back rest and of the seat portion when the invention is used as a chair. The full lines indicate the back rest as being mounted by its enlarged end 29 on strips 40 in the recesses 41 and with the lower end, or smaller section, spanning the seat portion 18 (see Fig. 5), with the bifurcated projections 32 in engagement with the teeth or tooth rack 24. In this position the back rest provides a comfortable support for a person's back. Seat portion 18 is shown in full lines as being closed, and when in that position the user may rest his feet on foot rest 44, which is attached by a pivoting member 45, which may be of the spring type, to the legs 20 of the seat portion 18, said foot rest being adapted to fold upwardly

against the front end of the seat portion as shown by dotted lines and may be normally held in that position by a spring associated with the pivot member or the like. When preferable the seat portion may be extended to the position indicated by dotted lines and marked 18' and when in that position it is capable of supporting the entire lower portion of a person's body as plainly seen in Fig. 1.

The back rest is capable of various other adjustments which will readily be apparent from Figs. 1 and 4. When it is desirable to use the present invention as an ordinary chair the back rest is positioned forwardly as at 26' with the frame support 27 resting by its lower free end in the seat 43 of brace 42, it being observed that since said frame 27 is narrower than the base 25 it cannot be accommodated within recesses 41 formed by strips 40 and the adjacent faces of the supports 11. The extreme backward position of the back rest is illustrated by dotted lines as at 26^a in Fig. 1, and the extreme inclined position thereof is shown in dotted lines as at 26^b. In that latter position projections 32 engage the tooth rack 24 at its front termination and the enlarged end 29 of the back rest is supported by seat 43 of brace 42. When that latter position of the back rest is used the seat portion 18 must be extended or pulled out to the position shown by dotted lines and indicated by 18^a. In the various positions of the back rest described and others which are apparent the two sections of the back rest may be adjusted on their pivot point 35 so as to make the back rest conform to the outline of a person's back, as is obvious.

Fig. 4 illustrates the invention when used as a bed or cot. To adapt it to such use the seat portion 18 is extended and the resulting gap in the chair structure is filled by the back rest. To adapt the back rest to the use now under consideration its relative position is reversed from that illustrated on Fig. 1. In a cot use of the invention the larger section 26 of the back rest is placed adjacent the rear end of the seat portion 18 and the smaller section 30 remains near to the supports 11 with its bifurcated projections 32 protruding beyond the rear outline of the chair. As plainly seen on Fig. 4 the smaller section 30 may be elevated and used as a head rest or pillow by making proper adjustment at the pivot point 35 already described. The dotted lines indicated by 30' show the smaller section when it is lowered and is in alinement with the larger section 26 and seat portion 18.

For supporting a person's head when the invention is used as a chair a cushioned head rest 46 is rotatably mounted on the horizontal portion of L-shaped bracket 47. The head rest 46 may be adjusted to a desired position and held against rotation by tightening the screw 48. The upright portion of the L-

shaped bracket 47 passes through a socket in head 49 and is capable of vertical adjustment by means of screw 50. Head 49 has an integral tubular extension 51 for mounting head 49 upon one end of a horizontal bracket 52 whereof the other end is rigidly mounted on one of the supports 11, see Figure 7. Said tubular extension 51 carries screw 53 by means of which the head rest 46 is capable of backward and forward adjustment.

While there is described herein a preferred embodiment of the present invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What I claim as new is:

1. In a convertible chair having a supporting frame, a back supporting member, legs, and a seat portion slidable on the frame, a back rest having pivoted sections carried by and movably mounted with respect to the frame and back supporting member to assume a relatively vertical position or a relatively horizontal position with respect to the seat portion, or any angular position intermediate the vertical and horizontal positions, means for retaining said back rest in any one of said positions and including a rack on the frame and a member carried by the back rest and engaging the rack, the pivoted sections of said back rest being adjustable with respect to each other, and means for maintaining them in adjusted positions.

2. In a convertible chair having a supporting frame, a grooved back supporting member, legs, and a seat portion slidable on the frame, a back rest carried by and movably mounted with respect to the frame and back supporting member and engageable in the grooves in the back supporting member to assume a relatively vertical position or a relatively horizontal position with respect to the seat portion, or any angular position intermediate the vertical and horizontal positions, said back rest consisting of a plurality of pivoted sections; means for retaining the back rest in any one of said positions and including a pair of racks carried by the frame on either side of the seat portion and a U-shaped member carried by the lowermost section of the back rest and the legs of which engage the racks, the pivoted sections of the back rest being adjustable with respect to each other and means for maintaining them in adjusted positions.

3. In a convertible chair having a supporting frame, a grooved back supporting member, legs, and a seat portion mounted for horizontal sliding movement on the frame, a back rest carried by and movably mounted with respect to the frame and back supporting member and engageable in the grooves in the back supporting member to assume a relatively vertical position or a relatively hori-

zontal position with respect to the seat portion, or any angular position intermediate the vertical and horizontal positions, means for retaining the back rest in any one of said positions including a pair of racks carried by the frame on either side of the seat portion and a member having legs carried by the back rest and engaging the respective racks, and said back rest being movable in a plane toward and away from the back supporting member, there being a swingable member carried by the back rest and engageable in the grooves in the back supporting member to support said back rest when it is moved to positions away from engagement with the back supporting member.

In testimony whereof I affix my signature.

ALEXANDER PLUDOWSKI.