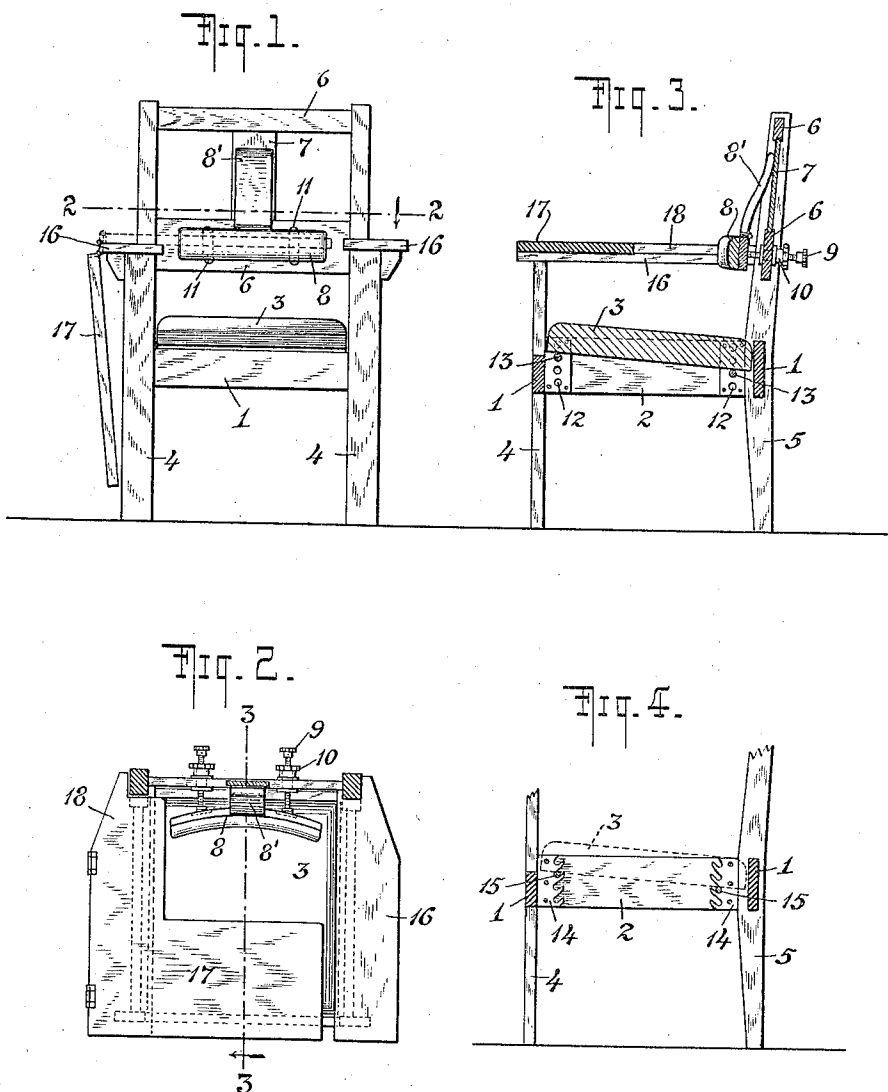


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CHAIR.

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WITNESSES

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To all whom it may concern:

Be it known that I, CHARLES H. JAEGER, a citizen of the United States, and a resident of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Chairs, of which the following is a specification.

My invention relates to chairs, especially such as are intended for use by deformed persons and has for its object to construct a chair of this kind which will cause the person occupying it to assume a proper sitting posture and which will be capable of adjustment so that it may be made to accommodate persons of various sizes and anatomical peculiarities.

In the accompanying drawings I have shown an embodiment of my invention, it being understood, however, that my invention is not limited to the structure illustrated but that said structure may be altered in various ways without departing from the spirit and scope of my invention as defined in the claim appended hereto.

In said drawings Figure 1, is a front elevation of a chair embodying my invention, the desk attachment being in pendant position. Fig. 2 is a horizontal section along the line 2—2 of Fig. 1, the desk attachment being in normal position. Fig. 3 is a vertical section along the line 3—3 of Fig. 2, and Fig. 4 is a detail section similar to that of Fig. 3 but illustrating a modification of the seat supporting structure.

The chair illustrated comprises a seat frame composed of the front and back members 1 and the side members 2 within which the seat 3 is supported in a manner hereinafter to be described, the seat frame being secured to and supported by the front legs 4 and back legs 5 in any suitable manner. The legs 5 are extended upwardly to form with the bars 6 and panel 7 the back of the chair.

Extending inwardly from the back is a lumbar pad or rest 8 the face of which is curved to accommodate nicely the back of the occupant of the chair in the region of the lumbar vertebrae of said occupant. This rest is suitably supported on the chair back so as to be adjustable forwardly and backwardly as well as upwardly and downwardly. As shown in the drawings, the rest 8 is supported by screws 9 which extend through securing devices 10, the latter extending through the vertical slots 11 in the back member 6. By suitably manipulating

the screws 9 the rest, as will be apparent, may be moved to a limited extent either in forward or backward direction. By manipulating the securing devices 10 in an obvious manner the rest may be moved upwardly or downwardly in the slots 11. By variously adjusting both of the screws 9 and both of the devices 10, a variety of positions for the rest 8 may be provided, by which the chair may be made to accommodate persons of varying deformities. The adjustability of the lumbar rest is of great importance and constitutes an essential feature of an anatomically correct chair as among other things it enables one to accommodate properly the varying degrees of lumbar lordosis existing in different people. Suitably secured to the lumbar rest as by a hinged joint at its lower end is a back rest 8', the upper end of which rests against the back of the chair.

The seat frame of the chair is provided with means by which the seat 3 may be set at an angle and may be raised and lowered; the forward part of the seat is preferably higher than the rearward part thereof and the angle of tilt is adjustable. Any suitable means for providing this seat adjustment may be used. In Fig. 3 of the drawings I have shown one construction for accomplishing this result, in which a vertical series of holes 12 are provided in the side members 2 or in plates secured thereto in proximity to the legs 4 and 5. Pegs 13 suitably formed to fit these holes and of a length to project a short distance inwardly of the frame when seated in the holes, are provided for supporting the seat 3. As shown in Fig. 3 pegs are inserted in the second hole from the top of the series near the legs 4 and in the second hole from the bottom of the series near the legs 5, the corresponding degree of tilt of the seat being clearly indicated in the drawing. Obviously if a different degree of tilt is desired the pegs may be withdrawn from the holes which accommodate them as shown, and placed in other holes. Moreover, if it is desired to raise or lower the seat without disturbing its angle, an obvious change in the position of the pegs may be made.

Another manner of securing the desired adjustability for the seat is illustrated in Fig. 4 of the drawings. In the modification there shown plates 14 provided with a vertical series of hooks are secured to the legs

or to the side bars of the seat frame in proximity to the legs. Rods 15, one for the front pair of plates 14 and the other for the back pair of plates 14 are each adapted to be placed in corresponding hooks of the front or back pairs of plates and when so supported the rods, as will readily be understood, are capable of supporting the seat 3; the height and tilt of the seat 3 will obviously depend upon the particular hooks with which the rods engage.

The adjustability of the seat and the adjustability of the lumbar rest serve conjointly to accommodate properly the occupant of the chair. The angular position of the seat is so adjusted that the pelvis is tilted backward, thus moving with it the lumbar vertebrae and directing the whole spine backward. This forces the occupant without muscular effort to rest against the back of the chair and to assume and retain a straight, upright position. The angle of the seat at the same time provides space for the gluteal muscles and gives proper support to the popliteal space, two important features in giving comfort to the occupant and thus allowing of long sitting without fatigue. The angular adjustment of the seat being such as to direct the spine backward, the lumbar rest must necessarily be adjusted horizontally or vertically to support properly the lumbar region of the occupant of the chair. The vertical adjustment of the lumbar rest is also of importance in that the rest may be raised as the patient using the chair grows or as his deformities are gradually corrected. The rest furthermore may be raised or lowered coincidentally with the raising or lowering of the seat, the relative positions of these elements being maintained constant.

The chair is provided with right and left arm rests 16 (which as shown are in substantially the plane of the lumbar rest) and the right arm rest is provided with a table attachment 17 which is doubly hinged or otherwise suitably pivoted to the right arm rest so as to be capable of rotation from the pendant position shown in Fig. 1 to the normal position of use shown in Fig. 2. The right arm rest 16 is sufficiently lower than the left arm rest 16 so that when the table is in normal position its upper surface is level with that of the left arm rest 16. The attachment is provided with a rearwardly extending portion 18 which in the normal

position of the attachment, is located close to the right side of the body of the occupant. Because of the position of this extension 18, the occupant is prevented from drooping his right elbow and thus causing a bending of the spine. The table attachment with its extension, and the left arm rest cooperate with the tiltable seat and adjustable lumbar rest to cause the occupant to assume a correct sitting position, the first-mentioned elements serving especially to prevent the upper part of the occupant's body from curving sidewise or otherwise assuming a crooked position, since the two arm rests are so close together that they force both elbows to rest thereon, which forces the shoulders of the occupant into an approximately horizontal plane while the inner edge of the table acts as a barrier in front of and close to the body of the occupant which prevents the middle part of the body from moving forward out of contact with the lumbar rest.

I claim:

An anatomical apparatus for supporting an occupant thereof in correct sitting posture, comprising a tiltable and vertically adjustable seat, a horizontally and vertically adjustable lumbar rest, said seat being lower at the rear portion than at the front, so that the lower part of the body of the occupant is, without muscular effort, forced against said lumbar rest, said lumbar rest being adapted to contact with and support the lumbar regions of the occupant of the apparatus, right and left arm rests located in substantially the plane of said lumbar rest, and so close together as to force both elbows to rest thereon, whereby the shoulders of the occupant are forced into an approximately horizontal plane and a table connected with the apparatus and located in substantially the horizontal plane of said arm rests, the inner edge of said table constituting a barrier extending in front of and close to the body of the occupant and adapted to prevent the middle part of the body of said occupant from moving forward out of contact with said lumbar rest.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES H. JAEGER.

Witnesses:

LOUISE KINDSGRAB,
VIRA LARSEN.