Nov. 21, 1944. F. D. FIELDS ET AL 2,363,054

CHAIR

Filed June 3, 1942

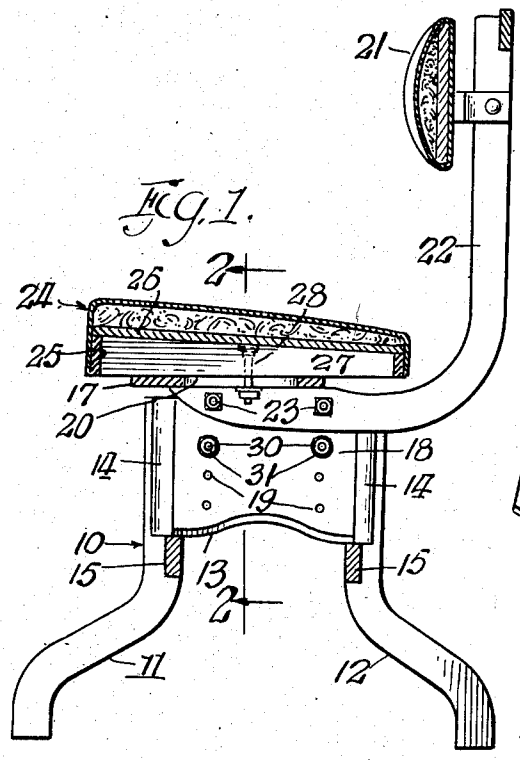


FIG. 1.

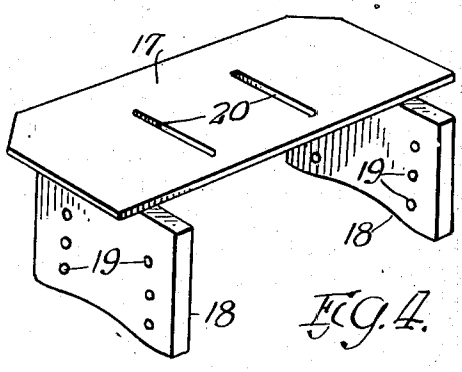


FIG. 4.

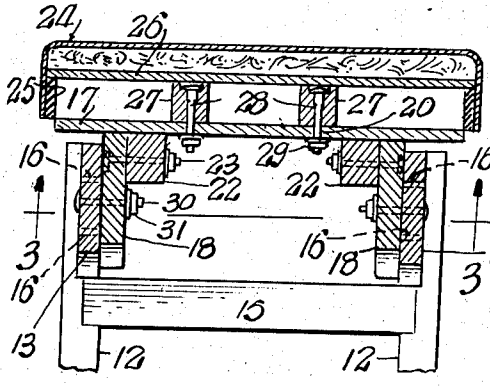


FIG. 2.

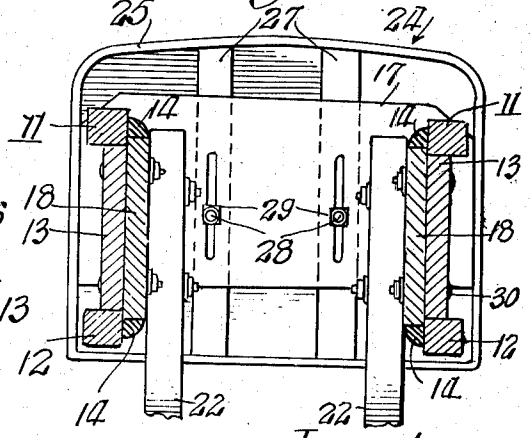


FIG. 3.

Inventors
Frank D. Fields
Glenn D. Wood
by Arthur M. Wilson Atty.

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2,363,054

CHAIR

Frank D. Fields and Glenn D. Wood, Elkhart, Ind., assignors to Posture Research Corporation, Elkhart, Ind., a corporation of Indiana

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6 Claims. (Cl. 155—88)

This invention relates to improvements in chairs and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

The chair with which the invention is more especially concerned is of the "office" type and includes the usual back rest and seat and a pair of supporting legs at each side of the seat, the legs of each pair being connected together and to the like leg of the other pair of legs.

One of the objects of the present invention is to provide a chair of this kind which is of a simple, light weight, strong and substantially an all-wood construction, so that the metallic parts employed in the chair are reduced to a minimum.

Another object of the invention is to provide a chair of this kind wherein the seat may be easily adjusted vertically with respect to the legs so as to be positioned at that elevation best adapted for the occupant.

A further object of the invention is to provide a chair of this kind wherein the seat may also be easily adjusted forwardly or rearwardly with respect to the legs at any elevation of said seat.

The above mentioned objects of the invention, as well as others, together with the advantages thereof will more fully appear as the specification proceeds.

In the drawing:

Fig. 1 is a front to rear, vertical sectional view through a chair embodying the preferred form of the invention.

Fig. 2 is a transverse vertical sectional view through the seat portion of the chair as taken on the line 2—2 of Fig. 1.

Fig. 3 is a horizontal sectional view through the chair as taken on the line 3—3 of Fig. 2.

Fig. 4 is a perspective view of a seat supporting member embodied in the chair and which will be more fully referred to later.

Referring now in detail to that embodiment of the invention illustrated in the drawing, 10 indicates the base of the chair as a whole and which comprises laterally spaced pairs of front and rear legs 11 and 12 respectively, preferably made of wood. The top end portions of the legs in each pair are vertically disposed and are spaced closer together than the bottom end portions which are curved as best shown in Fig. 1 to provide a spread for the legs that insures a firm stable base, which will not easily tip over.

The top end portions of the legs in each pair are connected together by a filler or web 13 of wood and the inner face thereof is flush with the inner faces of the legs of the associated pair. On the inner face of the top end portion of each leg is secured an upright guide strip 14 likewise of wood, with its guiding edge disposed about midway between the front and rear faces of the associated leg. Each leg of one pair of legs is connected to the like leg of the other pair by a wooden cross bar or rung 15. In each margin of each filler or web is a vertical row of holes 16 as indicated in dotted lines in Fig. 2, the purpose of which will appear later.

Associated with the top end portions of the pairs of legs is a seat supporting element, which best appears in Fig. 4. It comprises a wooden panel 17 of an area approximating that of the top end portions of the front and rear legs of both pairs. Spaced inwardly from the side edges of said element and depending from the bottom surface thereof is a guide member 18 of a width to fit snugly at its front and rear edges with the opposed guide faces of the strips 14 on each pair of legs. Each guide member has vertical rows of holes 19 therein adapted to register with the holes 16 in the filler or web of the associated pair of legs. Inwardly from the guide members 18, the panel is provided with slots 20 which extend parallel with said guide members.

The chair also embodies a backrest 21 operatively attached to the upper end of a pair of laterally spaced supporting members 22 and having horizontal lower ends that engage both the bottom surface of the panel 17 and the inner faces of the guides 18. Preferably, said supporting members are made of wood and their horizontal lower ends are secured to the guides 18 by means of bolts 23.

The chair further embodies a seat 24 which includes a generally rectangular wooden frame or rim 25 and an upholstery supporting base 26 and secured to the underside of said base and extending from the front to the rear thereof are strips 27. The rim or frame, base and strips just mentioned are all made of wood and the upper surface thereof is suitably upholstered as shown. The strips 27 are spaced apart the same distance as the slots 20 in the panel 17 of the seat support. Anchored in said strips and extending downwardly therefrom are bolts 28 which project through said slots 20 and on the bottom end of said bolts are nuts 29 and associated washers. By loosening these nuts, the seat may be adjusted forwardly or rearwardly of the support and then locked in the adjusted position by tightening up the bolt.

The filler blocks 13 are each provided with a pair of bolts 30 adapted to be extended through

certain ones of sets of vertically spaced holes 19 in the guide members 18 of the seat supporting member and to receive nuts 31 on the inner ends thereof. To adjust the seat in height, the nuts 31 are removed from the bolts 30 which are then moved outwardly far enough to clear the guide members 18 of the seat supporting member shown in Fig. 4. The supporting member is then moved upwardly or downwardly in guided relation with respect to the filler blocks 13 and guides 14 on the base into the desired elevation and when the proper holes 19 in the guides 18 line up with the bolts 30, said bolts are moved inwardly and passed through the lined-up holes. The nuts 31 are then reapplied so that the supporting member and its seat are locked in the position into which it has been adjusted.

With the chair construction made as described, it is apparent that wood may be used substantially throughout, in connection with conventional carriage bolts that are available in the market.

With the substantially all-wood construction described, a strong rigid light weight chair is provided, in which the seat may be adjusted in elevation and the desired forward or rearward position of the seat with respect to the base may be readily obtained.

While in describing the invention, we have referred in detail to the form, and arrangement of the parts described, the same is to be considered only in the illustrative sense so that we do not wish to be limited thereto except as may be specifically set forth in the appended claims.

We claim as our invention:

1. A chair embodying therein a pair of front and rear legs at each side of the chair, means connecting the upper portion of the legs of each pair together, a vertical guide member on the upper portion of each leg of each pair of legs and coacting with the associated connecting means in providing a vertical guide channel, seat providing means, means extending downwardly from each side of said seat providing means and slidingly engaged at its margins with the guide members of the associated guide channel, and means for directly securing said downwardly extending means to an associated connecting means for holding the seat providing means in the adjusted position relative to said pairs of legs.

2. A chair embodying therein a pair of front and rear legs at each side of the chair, means connecting the upper portion of the legs of each pair together, seat supporting means including a base and members extending downwardly therefrom, vertical guide members on the upper portion of the front and rear legs of each pair and with which the side edges of the last mentioned members engage and whereby the seat supporting means may be adjusted vertically relative to said legs, a seat engaged on the base of said supporting means, back rest supporting arms each having a part arranged under said base and fixed to the inner face of an associated member extending downwardly from said base, and means for securing the seat supporting means in the adjusted position with respect to said pairs of legs.

3. A chair embodying therein a pair of front and rear legs at each side of the chair, means connecting the upper portion of the legs of each pair together, means on the upper portion of each leg of each pair of legs and coacting with the associated connecting means in providing a vertical guide channel, seat supporting means including a base and members extending downwardly therefrom and slidingly engaged in an associated guide channel, a seat engaged on said supporting means, each downwardly extending member and associated connecting means having vertically spaced openings adapted to be brought into registration in the adjustment of the seat supporting means, and means engaged in the desired ones of said registered openings for securing the seat supporting means in the adjusted position with respect to said pairs of legs.

4. A chair embodying therein a pair of front and rear legs at each side of the chair, a filler member connecting the upper portion of the legs of each pair together, a vertical strip on the upper end of the inner surface of the legs of each pair and coacting with the filler in providing a vertical guide channel, seat supporting means having downwardly extending members near the ends thereof and each slidingly engaged in an associated guided channel and whereby said seat providing means may be adjusted vertically with respect to the legs, and means for securing the seat providing means in the adjusted position with respect to the legs.

5. A chair embodying therein a pair of front and rear legs at each side of the chair, means connecting the upper portion of the legs of each pair together as a unit, means providing a seat, a member extending downwardly from each side of the seat providing means adjacent to and associated with each unit, interengaging parts on each unit and the associated member providing a vertical guided engagement therebetween and whereby the seat providing means may be adjusted vertically into different positions with respect to said legs, means for securing the seat providing means in the adjusted position, a back rest, and supporting members each including an upright portion to which the back rest is operatively connected and each further including a horizontal portion extending under the seat and engaged with and secured to one side of an associated downwardly extending member.

6. A chair embodying therein a pair of front and rear legs at each side of the chair, a filler member connecting the upper portion of the legs of each pair together and having vertically spaced openings therein, a vertical strip on the upper end of the inner surface of the legs of each pair and coacting with the filler member in providing a vertical guide channel, seat supporting means having a downwardly extending member at each end thereof and each slidingly engaged in an associated guide channel and whereby said seat providing means may be adjusted vertically with respect to the legs, each downwardly extending member being associated with a filler member and having an opening therein which in the vertical adjustment of the seat providing means is adapted to be brought into registration with a certain one of the openings in the associated filler member, and means adapted for engagement in the registering openings in each filler member and associated downwardly extending member for positively securing the seat supporting means in the adjusted positive relation to said legs.

FRANK D. FIELDS.
GLENN D. WOOD.