

Nov. 8, 1938.

C. H. OERMANN

2,135,833

CHAIR

Filed March 6, 1937

2 Sheets-Sheet 1

Fig. 1

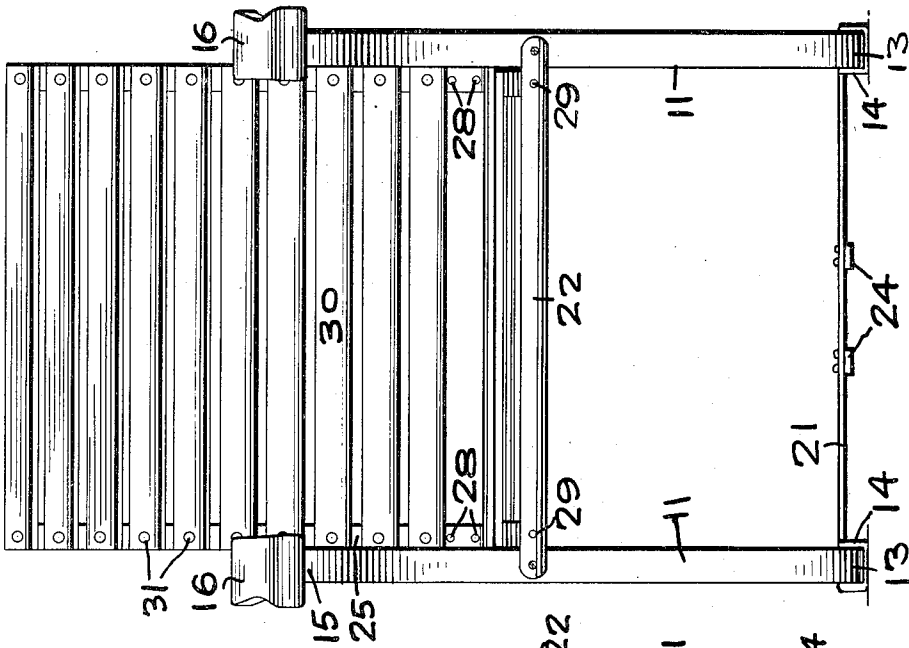
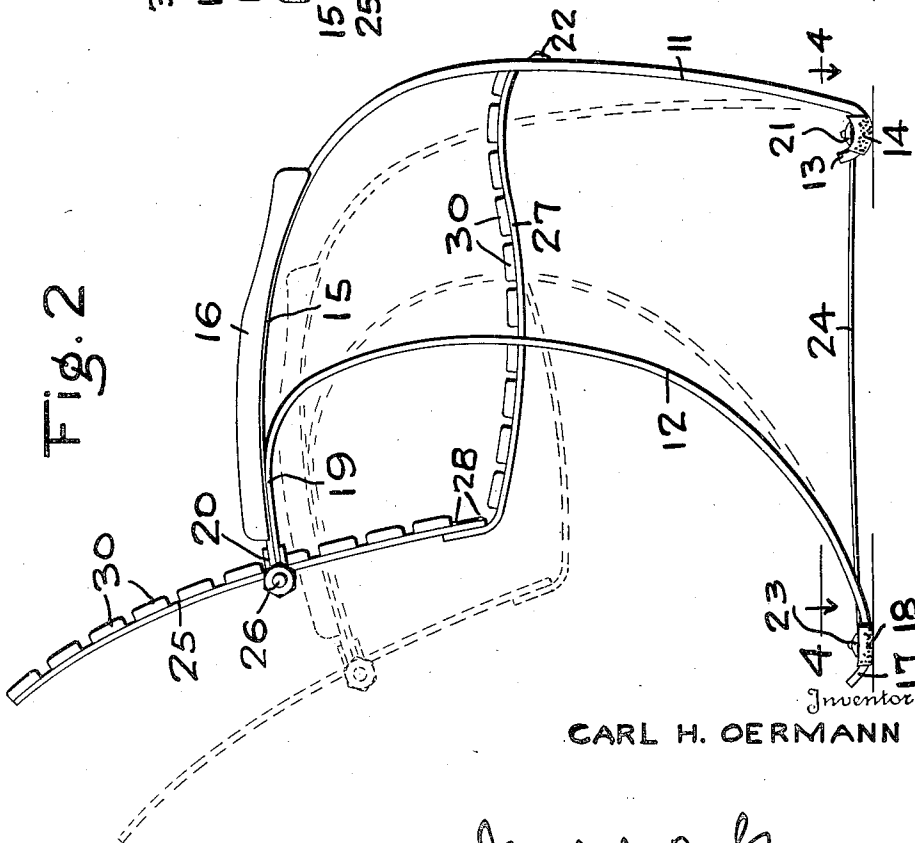


Fig. 2



INVENTOR
CARL H. OERMANN

334 *Malcolm J. Garnett*
Attorney

Nov. 8, 1938.

C. H. OERMANN

2,135,833

CHAIR

Filed March 6, 1937

2 Sheets-Sheet 2

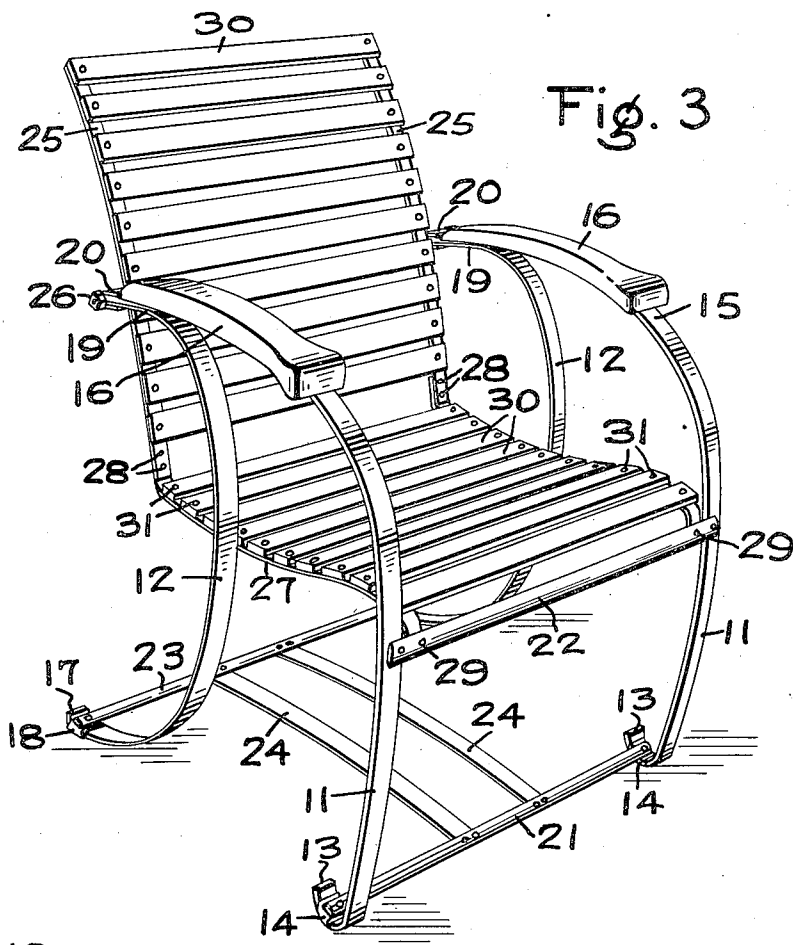


Fig. 3

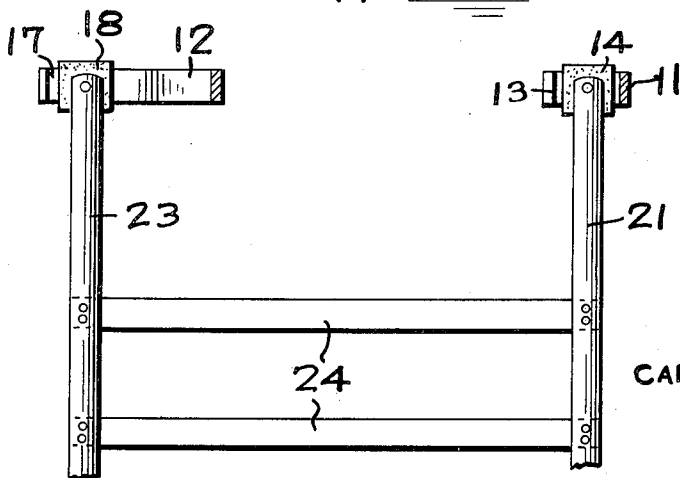


Fig. 4

Inventor
CARL H. OERMANN

By *Malcolm F. Gamlett*
Attorney

UNITED STATES PATENT OFFICE

2,135,833

CHAIR

Carl H. Oermann, York, Pa.

Application March 6, 1937, Serial No. 129,444

4 Claims. (Cl. 155—54)

This invention relates to the art of furniture and particularly to a chair or the like having a resilient supporting structure.

5 An object of the invention is to provide an improved chair wherein the supporting members are formed of suitable metallic bars which are normally somewhat rigid and yet provide a certain degree of resilience for comfort to the occupant.

10 Another object of the invention is to provide an improved seat structure which is light in weight and which will permit a limited amount of yielding under load.

15 Another object of the invention is to provide an improved seat structure which will permit of a rocking motion by the user without the necessity of providing rockers, and wherein the back will yield readily to provide the degree of inclination desired by the user.

20 With the foregoing and other objects and advantages in view, the invention consists in the preferred construction and arrangement of the several parts which will be hereinafter fully described and claimed.

25 In the accompanying drawings—

Figure 1 is a front view of a chair embodying the present invention;

30 Fig. 2 is a side elevation of the chair shown in Fig. 1, the normal position of the chair being shown in full lines and a position of the chair when the same is occupied being shown by broken lines;

Fig. 3 is a perspective view of the chair; and

35 4—4 of Fig. 2.

Referring to the drawings, the chair comprises a frame structure formed with a pair of front legs 11 and a pair of rear legs 12, the rear legs 12, when the chair is viewed from the front being disposed directly behind the front legs.

The front legs 11 at their lower ends are formed with rearwardly curved feet 13.

45 If so desired a suitable tubular pad 14 may be inserted over the intermediate portion of each foot 13, so as to protect the floor or other surface upon which the chair is placed. The pads 14 may be formed of a suitable rubber composition or any other suitable material.

50 From the feet 13, the front legs 11 are bowed forwardly slightly and this forwardly curved portion of the legs extends upwardly to a point adjacent to the point at which the seat structure is fastened to the front legs 11. From thence the front legs 11 extend upwardly and rearwardly in an arc, indicated at 15, Figs. 2 and 3, and said

front legs terminate at a point adjacent to the point at which the back is secured to the frame structure, as will be hereinafter more fully described.

The front leg portions 15 overlie the seat structure a considerable distance. In fact, the height of the portions 15 is such that these portions of the front legs 11 provide means for supporting arm rests 16. In this way, each arm, as well as each front leg of the chair, can be formed of a single length of material.

The rear legs 12, at their lower ends, are formed with rearwardly extending curved feet 17, which feet are provided with pads 18 similar to the pads 14 heretofore described.

15 As shown in Fig. 2, the rear legs 12 are arcuate in form, and the feet 17 are disposed at a considerable distance rearwardly with respect to the front leg feet 13, so that the chair frame will be rigidly and firmly supported on the floor.

20 From the feet 17, the rear legs 12 extend in an arc forwardly, upwardly and thence rearwardly.

The upper rear portion 19 of the legs 12 underlies the rear of the portion 15 of the front legs 11, and at their upper rear extremities the legs 11 and 12 are secured together by any suitable means, such as a bracket 20.

25 Preferably the material used in constructing the front legs 11, is relatively stiff. Spring steel of suitable resilient characteristics should preferably be used for the rear legs 12. By employing two different kinds of materials for the front and rear legs, respectively, when the chair is occupied the rear legs 12 will bend downwardly and rearwardly, as shown by the broken lines, Fig. 2, and in doing so will draw or pull the front legs rearwardly and downwardly therewith, the front legs 11 turning or swinging on their feet 13, since the legs are connected together at their upper rear ends by the brackets 20. When an occupant arises from the chair, and the load is thus removed from the seat structure, the rear legs 12 will spring back, returning the frame structure to the normal unoccupied position shown by full lines, Fig. 2.

30 In order to prevent spreading of the legs, the lower ends of the front legs 11 are connected by a cross bar 21, and also intermediate of their lengths the front legs are connected by a second cross bar 22. The cross bar 22 has two functions, the second function thereof being hereinafter more fully described. The lower ends of the rear legs 12 are connected by a cross bar 23. As shown in Fig. 4, the cross bars 21 and 23 are

connected by straps 24. These straps prevent relative movement of the cross bars 21 and 23 and consequently the feet 13 and 17 are retained spaced apart, even when the chair is occupied.

5 The back frame structure of the chair comprises a frame consisting of two bars 25, one on each side of the chair. These bars are curved slightly so as to conform somewhat to the contour of an occupant's back, and intermediate
10 their length the bars 25 are connected to the brackets 20 by bolts or other securing elements 26.

The seat frame structure of the chair is a continuation of the back structure and comprises two bars 27 which are connected at their rear
15 ends to the lower ends of the back bars 25, as indicated at 28, Figs. 1 and 3.

The front ends of the bars 27 are secured to the cross bar 22, as indicated at 29.

20 Any form of back and seat supporting means may be mounted on the bars 25 and 27. In the present instance the back and seat structure comprises a plurality of wooden slats 30 which span the bars as shown in Figs. 1 and 3, said
25 slats being connected at their ends to said bars by rivets or other suitable securing means, as indicated at 31.

The construction of the back and seat structure may be such that this portion of the chair is substantially rigid, while resiliency is obtained
30 by constructing the rear legs flexible, as has been heretofore described. Thus, when the chair is occupied the back and seat structure can be tilted rearwardly, as shown by the broken lines, Fig. 2. Due to the flexible nature of the rear
35 legs, the seat structure can be rocked by the occupant forwardly and rearwardly, and in such movements of the chair, the rear legs 12 will bend or flex and the front legs 11 will swing about the pivot provided by the feet 13.

40 While in describing my invention, I have referred in detail to the form, arrangement and construction of the parts thereof, the same is to be considered merely as illustrative, so that I do not wish to be limited thereto except as may
45 be specifically set forth in the appended claims.

Having thus described my invention, what I claim is:

1. Seat structure comprising arcuate front and rear legs, the lower ends of the legs being spaced
50 apart and the upper ends of said legs being connected together at their extremities, bars for bracing the lower portions of said legs, arm rests mounted on the upper portions of the front legs, a back structure connected intermediate its ends
55 to the upper rear portion of said legs, and a seat

structure extending forwardly from the lower portion of the back and connected at its front end to the front leg structure.

2. Seat structure comprising front and rear legs, the rear legs being formed of flexible material and the front legs being formed of relatively stiff material and having lower floor engaging ends curved to permit rearward swinging movement of said front legs when the rear legs are flexed by the weight of an occupant of the device, the upper ends of the front and rear legs extending rearwardly with the front legs overlying and connected to the rear legs near the extremities thereof, the lower ends of said legs being spaced apart, means for bracing said legs to prevent relative spreading movement of the lower ends thereof, a back joined to the upper ends of said front and rear legs at the juncture thereof, said back extending upwardly and downwardly from the point at which it is connected to the legs, and a seat rigidly connected to the back and connected at its forward end to the front legs, said rear legs being free to flex between their extremities whereby the seat structure can be rocked forwardly and rearwardly.

3. Seat structure comprising resilient side frames, each consisting of front and rear legs formed of relatively thin metal straps having their lower ends spaced apart and resting upon the floor, said legs being curved upwardly and rearwardly, the upper ends of said legs being brought together and secured one to the other, spacer means connecting and bracing the lower ends of all of said legs, and a seat and back rest structure connected intermediate its length to the upper extremities of said side frames and connected at its forward portion to said front legs, said seat frame constituting means for spacing and bracing said side frames.

4. Seat structure comprising resilient side frames, each consisting of front and rear legs formed of relatively thin metal straps having their lower ends spaced apart and resting upon the floor, said legs being curved upwardly and rearwardly, the upper ends of said legs being brought together and secured one to the other, a cross brace connecting the front legs intermediate the length thereof, spacer means connecting the lower ends of all of said legs, and a seat and back rest structure connected intermediate its length to the upper extremities of said side frames and connected at its forward portion to said cross brace.

CARL H. OERMANN.