

March 5, 1963

J. A. BERG

3,080,195

SELF-ALIGNING SEATING CONSTRUCTION

Filed March 7, 1960

Fig. 1

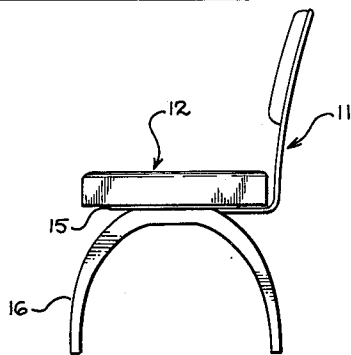


Fig. 2

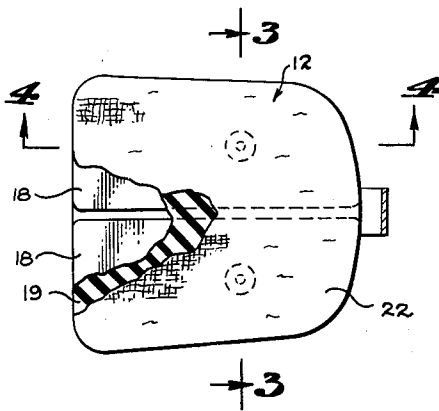


Fig. 3

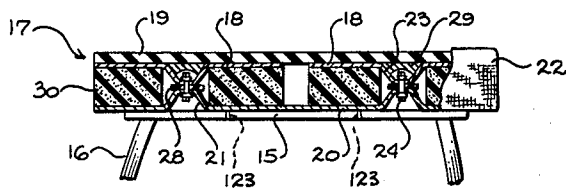


Fig. 4

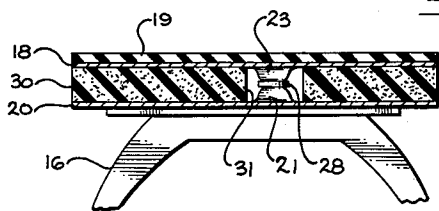
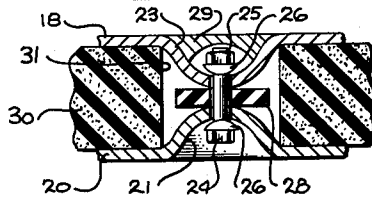


Fig. 5



JOSEPH A. BERG  
INVENTOR.

BY

*Merri V. Graham*  
ATTORNEYS

1

3,080,195

## SELF-ALIGNING SEATING CONSTRUCTION

Joseph A. Berg, Arcadia, Calif.  
(619 N. Glendale Ave., Glendale 6, Calif.)  
Filed Mar. 7, 1960, Ser. No. 13,212  
3 Claims. (Cl. 297—312)

This invention has to do generally with seating constructions and is an improvement upon that set forth in my United States Letters Patent No. 2,799,323.

Conventional seating and special seat constructions, such as are provided in so-called posture chairs and the like, do not provide seats which accommodate for various postural attitudes of the occupant in a manner to prevent undue pressure at local areas of the occupant's body. Consequently circulation is impaired and strains are placed upon the body producing fatigue.

An object of the invention is to provide a novel seating construction which readily accommodates itself to the individual so as to substantially equalize the pressure of the occupant's body over the entire seating surface engaged and thus minimize or eliminate localized pressure areas which impair the normal function of the body.

A further object is to provide a novel, flexible seating construction which is relatively low in over-all height and can be readily incorporated in a chair or the like and also can be readily used upon the top of conventional seats.

Another object is to provide a novel and improved self-aligning seating means which is extremely simple in construction and can be fabricated economically. A still further object is to provide a construction embodying a pair of universally tiltable platforms and novel, quiet means for yieldably resisting tilting movement thereof.

These and other objects will be apparent from the drawing and the following description. Referring to the drawing:

FIG. 1 is a side elevational view of a chair embodying the invention;

FIG. 2 is a plan view of the seat portion of the chair of FIG. 1, but on a larger scale and with portions thereof broken away;

FIG. 3 is an enlarged sectional view on line 3—3 of FIG. 2;

FIG. 4 is an enlarged sectional view on line 4—4 of FIG. 2; and

FIG. 5 is an enlarged fragmentary detail view of the pivotal connection means between the base plate and one platform plate.

More particularly describing the invention, numeral 11 generally indicates a chair having a seat 12 embodying the invention. The chair is shown provided with a seat support 15 from which the chair legs 16 depend. The seating unit of the invention, designated generally by 17, is mounted upon the seat support 15, and includes a pair of complementary seat platforms 18 which are supported in laterally spaced relation above a base plate 20. The platforms are covered by a pad 19 and suitable upholstery fabric or the like, 22. Platforms 18 and base plate 20 are preferably formed of metal, and are so shown, however they may be made of other, relatively rigid material, and, if desired, the platforms may be contoured somewhat to a person's body. The base plate is supported upon the

2

member 15 of the chair, being attached thereto by screws 123.

Base plate 20 is provided with two, integral, upwardly extending, apertured dimpled portions 21 which are disposed in laterally spaced relation as best shown in FIGS. 2 and 3. The dimpled portions act as pedestals for mounting the platforms 18 in a manner such that each platform can universally tilt a limited amount from a position parallel to the plane of the base plate 20. Each of the platform members 18 is also provided with an apertured dimpled portion, in this case designated 23, which depends therefrom toward one of the portions 21 of the base. The parts are secured by means of a bolt 24 and nut 25, with suitable round-ended washers 26 being provided against the outer surfaces of the dimpled portions. The bolt 24 loosely fits the apertures through the dimpled portions 21 and 23 to permit universal tilting movement of the platforms relative to the plate 20. A relatively hard rubber washer or disk 28 is shown provided between the dimpled portions. If desired, a plug 29 is fitted in each dimpled portion so as to provide an uninterrupted flat surface for each member 18.

Between each of the platforms 18 and the base plate 20 I provide a resilient cushion 30, made of sponge rubber or other material having similar resilience. Each cushion is apertured at 31 to accommodate the mounting means between the platform and plate 20. In order to anchor the cushions 30 in place and at the same time provide means for preventing rotation of the seat platforms about the axes of the bolts 24, the cushions are cemented or otherwise adhered to the undersides of the platforms, respectively, and to the upper surface of the base plate 20.

With the construction described, it will be apparent that each platform is independently universally tiltable relative to the base plate 20 against the yieldable resistance of its cushion 30. Thus when a person sits upon the seat, each side of the seat readily adjusts independently of the other to accommodate for the altitudes and movements of the leg and seat portions of the occupant.

Although I have illustrated and described a preferred form of my invention, I contemplate that various changes and modifications can be made therein without departing from the invention, the scope of which is indicated by the following claims.

Also, although the seating unit has been shown directly incorporated as a part of a chair, I contemplate that the unit may be used much as a pad by placing it upon an existing chair or seating surface.

I claim:

1. In seating construction, a base plate, a pair of complementary seating platforms disposed side by side in laterally spaced relation above said base plate, means supporting each platform upon the base plate for limited universal tilting movement relative thereto, a flat, resilient cushion between each platform and the base plate yieldably resisting tilting movement of the platform and urging the same to a position in which it is parallel to the base plate, said cushions substantially filling the space between the platforms and the base plate, and means securing the cushions to the platforms, respectively, and to the base.

2. In seating construction, a metal base plate formed with a pair of laterally spaced, apertured, upwardly convex dimpled portions, a pair of complementary seating platforms disposed side by side above said base plate, each

platform having an apertured, convex downwardly dimpled portion immediately above a dimpled portion of said base plate, securing means extending through the dimpled portions of each platform and the adjacent dimpled portion of the base, and a resilient cushion between each platform and the base plate substantially filling the space therebetween.

3. A construction as set forth in claim 2 in which said cushions are attached to said platforms and to said base plate.

5

10

2,429,472  
2,457,058  
2,799,323  
2,926,725

852,384  
1,191,604

## References Cited in the file of this patent

## UNITED STATES PATENTS

Maxson ----- Oct. 21, 1947  
Markowitz ----- Dec. 21, 1948  
Berg ----- July 16, 1957  
Eckmann ----- Mar. 1, 1960

## FOREIGN PATENTS

France ----- Oct. 23, 1939  
France ----- Apr. 13, 1959