In the past many chairs have been made utilizing the general principle of having a base on which the seat portion of the chair might rock on fixed tracks. My invention utilizes this general principle in a rocking chair designed to have a fixed or permanent base having a track for the rockers, but also providing a mechanism whereby the seat and back portion of the chair may be adjusted to any desired reclining position and held there by special mechanism.

An object of my invention is to provide a chair which is adapted to be rocked on fixed tracks and also to be securely held in any adjusted position of recline.

A further object is to provide a rocking chair which may be periodically changed from its condition as a “rocking” to a condition as a fixed chair, fixed in any desired position of recline or slant.

A still further object is to provide a chair which may be adjusted in a fixed position, or be allowed to be rocked freely on tracks.

A still further object is to provide an adjustable rocking and/or straight chair having a cam supported rocker runners which may be readily adjusted to hold or release the chair so that the same may be placed in a desired fixed position or be allowed to rock freely.

In the figures:

Fig. 1 is a side elevation partly broken away;
Fig. 2 is a horizontal cross section on line 2—2 of Fig. 1;
Fig. 3 is an enlarged fragmentary detail in vertical cross section through the recline adjustment mechanism; and
Fig. 4 is a fragmentary plan view of the recline adjustment mechanism.

The chair 10 is relatively conventional in its general form and is adapted to be supported by a fixed base 12 which is constructed, preferably, with two substantially parallel rocker runners which are provided with suitable tracks 14 on the upper surfaces thereof, all of which will be more fully explained hereinafter.

The seat portion of the chair 10 is provided with rockers 16 spaced apart in such manner that they will regularly contact the tracks 14 of the legs 12. These rockers 16 are attached to the seat portion of the chair 10 in any suitable manner such as by bolting, cementing, gluing, doweling, screwing, or the like, to the frame of the chair seat.

The base of the chair seat has secured thereto a plurality of suitable coil springs 18 attached to the rocker runners and rocker rails. By virtue of the springs 18 the rockers 16 of the chair frame are maintained in proper position so that they will continually contact and remain on the tracks 14.

The legs 12 are spaced apart by suitable cross members, not shown, but including the cross member 20 to which is bolted or otherwise secured a bracket 22. The chair seat likewise is provided with a plurality of cross members, one of which is shown and is identified by reference character 24. To the cross member 24, a bracket 26 is secured by bolting, riveting, or otherwise attaching the same to the approximate center thereof.

I provide a rack bar 28 which is pivotally attached to the bracket 22 by means of a conventional pivot pin 30. At a convenient point on the rack bar 28 I secure a conventional tension spring 32 which is suitably attached to the main framework of the chair 10 in the approximate center of the forward edge or end thereof. With this construction the tension of the spring 32 tends to draw the rack bar 28 continually toward the front edge of the chair 10. Under this tension the front edge of the rack bar 28 is continually in contact with a cam 34 secured on a transverse rod 36 which extends from a pivot point within the bracket 26 at one end thereof to a point outside of the chair 10. This rod 36 is conveniently bent upwardly, relative to the floor upon which the chair is adapted to be placed, and is provided at the end thereof with a knob or handle 38. The cam 34 is keyed or secured to the rod 36 by means of a secant cut in the rod (as viewed in cross-section) and the cam so that as the rod is turned the cam is turned thereby.

By moving the handle 38 toward the front end of the chair (in the direction of the arrow in Fig. 2) the rod 36 is revolved a fraction of a turn and carries therewith the cam 34 turning the high lobe on the cam into the position in which it is shown in dotted lines in Fig. 3. When the cam is in this position the rack bar 28 will be spring urged toward the forward end of the chair by the tension spring 32, thus releasing the rack teeth of the bar from pin 40 riveted, welded or otherwise suitably secured to the bracket 26. By moving the handle 38 toward the rear of the chair, or in the direction opposite to the direction of the arrow in Fig. 2, the cam 34 will be moved so that the high lobe thereof assumes the position in which it is shown in Fig. 3. In this position the teeth of the rack bar 28 will engage the pin 40 and maintain that engagement so that
the transverse bar 24 may not be moved either up or down relative to the transverse bar 20. In operation, an individual sitting in the chair 10 may adjust the chair to a desired position of inclination, either forward or backward, by moving the handle 38 toward the front of the chair to release the rack bar 28 from engagement with the pin 40. After a suitable inclination of the chair has been achieved the handle 38 is moved toward the back of the chair, or in a direction opposite to the direction of the arrow in Fig. 2, thereby turning the rod 36, and the cam 34, to a position forcing the teeth of the rack bar 28 into engagement with the pin 40 to hold the rack bar thus engaged so that the distance between the transverse member 20 and the transverse member 24 can be neither increased nor decreased. Thus the inclination of the chair will be maintained until it is again desired to change its position, and/or the angle of inclination. At such time, the handle 38 is moved forwardly (in the direction of the arrow in Fig. 2) releasing the rack bar from engagement with the pin 40.

It will be understood that if desired, the rack bar 28 may be left in its released position so that the chair may be used as a rocking chair.

I claim:

1. A chair including a base presenting an upwardly facing track structure, a seat having an arcuate rocker structure depending therefrom and movably engaging said track structure, means maintaining said rocker structure in contact with said track structure, a pin secured to said seat and extending transversely of the longitudinal axis thereof, a rack-bar pivotedly mounted on said base and extending upwardly therefrom, said rack-bar having a plurality of teeth selectively engageable with said pin, means tending to yieldably withdraw the rack-bar from contact with said pin, and means pivotally carried by said seat and engaging the rack-bar and operable to cause the same to receive the pin selectively in spaces formed between the teeth.

2. A chair including a base presenting an upwardly facing track structure, a seat having an arcuate rocker structure depending therefrom and movably engaging said track structure, means maintaining said rocker structure in contact with said track structure in overlaying relation with predetermined portions thereof, a pin secured to said seat and extending transversely of the longitudinal axis thereof, a rack-bar provided with a plurality of teeth on one edge, said rack-bar extending upwardly from said base, means tending to yieldably withdraw the rack-bar from contact with said pin, cam means pivotally carried by the seat and engaging the rack-bar and operable to cause the same to receive the pin selectively in spaces formed between the teeth.

3. A chair including a base having oppositely disposed substantially parallel side portions, each presenting an upwardly facing track structure, a brace extending transversely of the longitudinal axis of the base and connecting said sides, a seat having an arcuate rocker structure depending therefrom and movably engaging said track structure, a pin secured to said seat and extending transversely of the longitudinal axis thereof, a rack-bar pivotally mounted on said base and extending upwardly therefrom, said rack-bar having a plurality of teeth selectively engageable with said pin, means tending to yieldably withdraw the rack-bar from contact with said pin, and means pivotally carried by the seat and engaging the rack-bar and operable to cause the same to receive the pin selectively in spaces formed between the teeth.

DANIEL F. CALDEMEYER.

REFERENCES CITED

The following references are of record in the file of this patent:

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re. 11,906</td>
<td>Haimon</td>
<td>Apr. 16, 1901</td>
</tr>
<tr>
<td>60,578</td>
<td>Winchester</td>
<td>Jan. 1, 1887</td>
</tr>
<tr>
<td>343,654</td>
<td>Will</td>
<td>June 15, 1886</td>
</tr>
<tr>
<td>380,909</td>
<td>Melcher</td>
<td>Apr. 16, 1888</td>
</tr>
<tr>
<td>408,236</td>
<td>Helne</td>
<td>Aug. 6, 1889</td>
</tr>
<tr>
<td>687,235</td>
<td>Ingells</td>
<td>Nov. 28, 1891</td>
</tr>
</tbody>
</table>