To all whom it may concern:

Be it known that I, Benjamin B. Betts, a citizen of the United States, and resident of St. Louis, State of Missouri, have invented certain new and useful Improvements in Multiple-Rail Chairs, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming part hereof.

My invention relates to improvements in multiple rail chairs wherein a unitary structure provides seats and securing means for a number of rails whose base flanges are to be maintained at different elevations.

The object of my improvements is to provide a chair providing seats for a main running rail and a siding running rail in the same plane but at a relative angular relationship and a seat in a plane above the mentioned seats and alining with the seat of the siding running rail whereby to provide in a single unitary structure a chair for a main running rail and a siding running rail of substantially the same dimensions and weight and for a switch point rail of dimensions and weight differing from the other rails.

In the accompanying drawing, made a part of this specification,

Figure 1, shows in plan a chair embodying my improvements, a fragment of a main running rail, a fragment of a siding running rail and a fragment of a switch point rail.

Fig. 2 is a perspective view of the chair, and

Fig. 3 is a transverse sectional elevation taken on the line 3—3 of Fig. 1.

Referring to the drawing by numerals, 5 designates the main running rail, 6 the siding running rail and 7 the switch-point rail, and it is to be particularly noted that the two running rails 5 and 6 are much larger than the switch-point rail, the said running rails being for example "one hundred pound" rails, and the switch-point rail being an "eighty pound" rail.

The lighter weight of the switch point rail allows for more easily moving the same as required for switching purposes.

In rail manufacturing when changes are made in rail weights a corresponding change is made in their sectional dimensions, hence, the switch point rail will be less in height from the top of the ball to the bottom of the base and less in width from side to side of its base flanges than the running rails.

For this reason I construct my chair with rail seats of different widths and in different planes to the end that rails of different weights when supported thereby will have their balls in substantially the same plane and certain of the rails in relative alignment with respect to their balls.

The numeral 8 designates the plate as a whole, which is of substantially rectangular oblong shape, its greater dimension disposed lengthwise of its supporting sleeper and its lesser dimension disposed in the trend of the rails supported thereby. Near one end of the chair there is an upstanding shoulder 9 which partially defines the seat 10 for the main running rail 5. Intersecting the shoulder and extended through the body of the 75 chair are the spike openings 11 whereby to secure the one base flange of the running rail 5 and the one end of the chair to a sleeper. Upstanding from the body of the chair parallel with the shoulder 9 is a flange 12 which defines the margin of the seat 10 opposite the shoulder 9. This flange is arranged to partially overhang the one flange of the rail 5 to serve as rail securing means, the spikes 13, one only of which is shown in Fig. 3, serving to secure the opposite flange of the rail 5.

Arising from the chair body adjacent the flange 12 is a shoulder 14 which extends for only a portion of the width of the chair 90 and at an angle to the flange 12.

Paralleling the shoulder 14, and of substantially the same length thereof and arranged at the chair end opposite the shoulder 9, is a shoulder 15, which with the shoulder 14 defines the seat 16 for the end of the siding running rail 6.

Intersecting the shoulders 14 and 15 and extended through the chair body are the spike openings 17 whereby to secure the 100 siding running rail to the chair.

Arising from the chair body to one side of the seat 18 is a seat 19 which stands in a plane above the seat 16, and arising from said seat 18 at each of its ends is a flange 19 overhanging the seat whereby to secure therebetween the base flanges of the switch point rail 7.

The seat 18 aligns with the seat 16 and is of a lesser width to the end that when the 110 switch point rail is placed on the seat 18 with its base flanges inserted between the
flanges 19 of the chair the ball of the switch point rail will be in the same plane as the ball of the siding running rail 6 and the one side face of its ball in alinement with the corresponding side face of the siding running rail 6.

By the employment of the chair embodying the arrangement of seats as described the base flange of the switch point rail may be moved laterally over the base flange rail of the main running rail to the end that the base of the switch point rail need not be reduced in width to the extent common to the employment of chairs supporting the running and switch point rails in the same plane, thereby lending to the life and safety of the switch point rail, and a consequent cost in labor in producing and installing the switch point rail.

Having thus described my invention, what I claim as new therein and desire to secure by Letters Patent of the United States therefore is:

1. A rail chair having a seat for a running rail at one end and a seat for a switch rail at the other end, the latter seat being at a different level and at an angle to the first seat.

2. A rail chair having a seat for a running rail at one end and a seat for a switch rail at the other end, the seat for the switch rail being at an angle to the running rail and located at a higher level.

3. A rail chair having a seat for a running rail at one end, and a seat for a switch rail at the other end, the switch rail seat being at an angle to the first seat, and at a higher level, and being of less width.

4. A rail chair having a seat near its one end and coextensive with its width and means for securing a rail therein, a second seat laterally to one side of the first mentioned seat and extending for only a portion of its width and means for securing a rail end therein, and a third seat, in substantial alinement with the second mentioned seat, and disposed in a plane thereabove and means for securing a rail end therein.

5. A rail chair provided with three defined seats adapted to receive rails, said 50 seats being of unequal widths, two of which are in alinement and the remaining seat at an angle to the alined seats.

6. A rail chair provided with two seats of different elevations arranged end to end and occupying the width of the chair, one of said seats being provided with hooked flanges for securing the base flange of a rail and the other being provided with shoulders and spike openings intersecting said shoulders.

7. A rail chair having two seats of different widths arranged end to end and occupying the width of the chair, one of said seats being provided with hooked flanges for securing the base flange of a rail and the other being provided with shoulders and spike openings intersecting said shoulders.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

BENJAMIN B. BETTS.

Witnesses:
R. G. ORWIG,
M. E. KLEE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."