No. 720,692. PATENTED FEB. 17, 1903.

G. C. HAWKINS.

REVOLVING TWIN CHAIRS.

APPLICATION FILED JAN. 31, 1902.

NO MODEL.

Fig. 1.

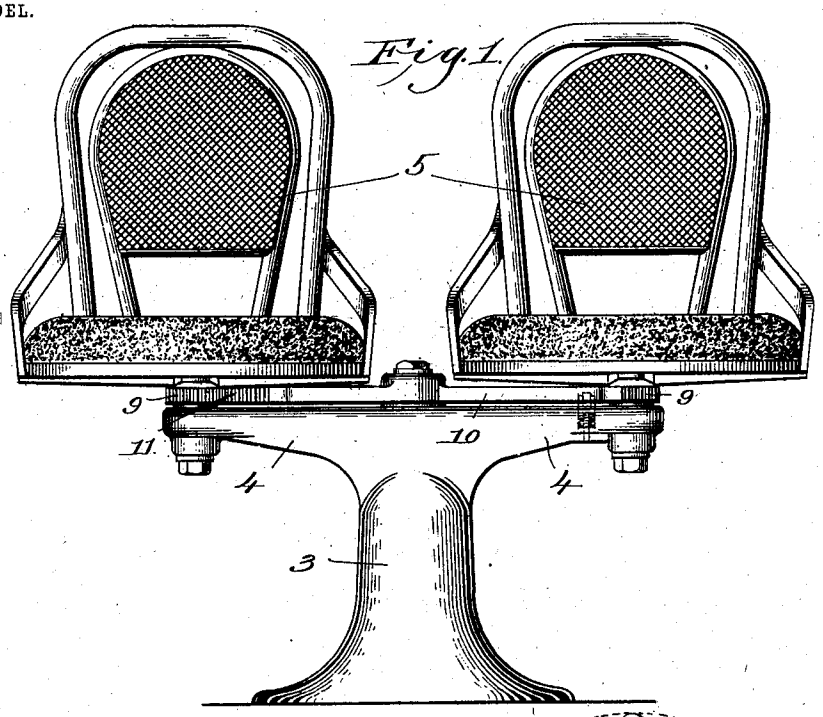


Fig. 2.

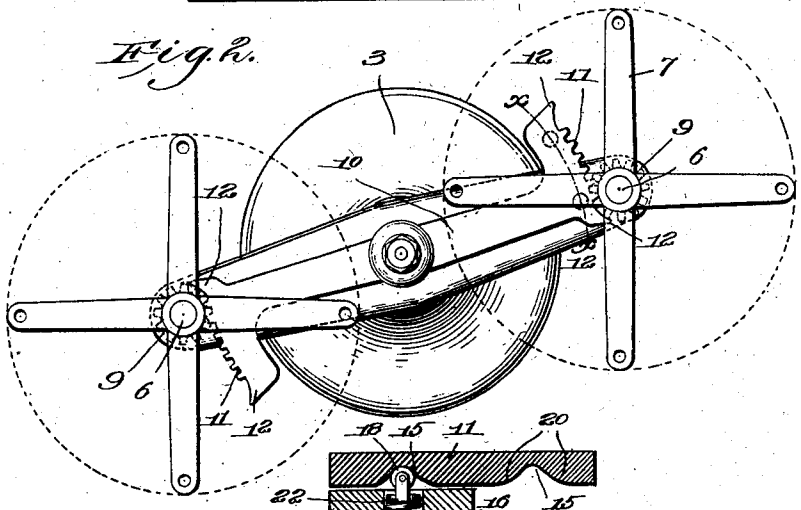
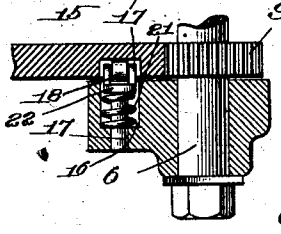


Fig. 3.

Fig. 4.



Witnesses.
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UNITED STATES PATENT OFFICE.

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REVOLVING TWIN CHAIRS.

SPECIFICATION forming part of Letters Patent No. 720,692, dated February 17, 1903.

Application filed January 31, 1902. Serial No. 91,972. (No model.)

To all whom it may concern:

Be it known that I, GARDNER C. HAWKINS, a citizen of the United States, and a resident of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Revolving Twin Chairs, of which the following description, in connection with the accompanying drawings, is a specification, like figures on the drawings representing like parts.

This invention relates to revolving twin chairs which are especially adapted for use in cars; and it is the object of my invention to simplify the structure of the said seats by reducing to a minimum the number of parts, and, furthermore, to provide a novel and effective means for locking the chairs in any adjusted position.

Figure 1 of the drawings is an elevation of a pair of twin revolving chairs constructed in accordance with my invention. Fig. 2 is a plan view thereof with the seats removed, and Figs. 3 and 4 are details of the locking means.

In the ordinary form of revolving twin chairs a suitable base or standard is provided on which the seats are mounted to revolve about vertical axes, and suitable connecting mechanism is employed, so as to cause the seats to revolve in unison. Heretofore the locking means for maintaining the seats in their adjusted position has been applied directly to the seats themselves; and it is one of the objects of my invention to devise a novel form of locking mechanism which instead of locking the seat directly locks instead the connecting member between the seats.

3 designates any suitable base or standard, having arms 4 projecting therefrom, at the ends of which are journaled vertical spindles 6, carrying at their upper ends spiders 7, on which the two chair or seat bodies 5 are supported. Each spindle 6 has fast thereon a gear 9, and in order that the two spindles, and consequently the chairs, may rotate in unison I have provided a connecting member 10, centrally pivoted to the standard 3 and having its ends shaped to form segmental racks 11, which mesh with the gears 9. From this construction it will be obvious that when either chair or seat 5 is turned about its spindle the other chair will be correspondingly turned and to a corresponding extent. The rack portions 11 of the connecting member are of a length sufficient to allow each seat to make a half-revolution, and in order to prevent the racks from moving far enough in either direction to become disengaged from the pinions 9 each rack is provided at its end with an elongated tooth 12, which operates as a stop to prevent undue movement of the rack.

In order to prevent the turning of the seats when they are swung into their adjusted position, I provide a novel locking device, which coöperates with the connecting member 10.

Referring to Fig. 3, which is a section through the end of the connecting member 10 and the arm 4 on substantially the line $x\,x$, Fig. 2, it will be seen that the under side of the rack portion 11 is provided with two locking-recesses 15 and that the arm 4 is provided with a suitable recess 16, which receives a spring-pressed pin 17, carrying at its upper end a roll 18, which is adapted to be received by either recess 15, according to the position of the connecting member 10. The pin 17 is illustrated as having a collar 22 thereon, against which one end of the spring 21 abuts, the other end of the spring resting on the bottom of the recess, the said spring thus operating to force the pin upwardly against the rack portion 11.

It is one of the purposes of my present invention to provide a locking device which requires no special manual manipulation to release the same, and accordingly I have provided the upper end of the pin with a roll 18 and made the recesses 15 with rounding edges, as at 20. With this construction it will be obvious that if either seat is turned about its pivot the connecting member will be given a turning movement, and the rounded portion 20 of the recess coming against the roll 18 will force the pin 17 downwardly against the action of the spring 21. As soon as the chair or seat has been given a half-revolution the other recess 15 comes into position over the locking-pin 17, and the spring 21 thereupon forces the said spring upwardly, carrying the roll into the recess, and thus locking the connecting member 10.

I have found from experiment that the form

of locking mechanism herein shown is sufficient to prevent the rotation of the chairs while being used, and yet is of such a character that no special manipulation of the locking device is necessary to release the same. The operation, therefore, of reversing the position of the chairs or seats is reduced to a minimum, as it is simply necessary with my invention to turn either chair with sufficient force to force the locking-pin out of the recess which it occupies.

I may employ the locking means herein shown at one or both ends of the locking member, as desired.

While I have shown one form in which my invention may be embodied, yet my invention is not limited to the exact construction shown herein, as various changes may be made in the details of the construction without departing from the invention expressed in the appended claims.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. Revolving twin chairs comprising in their construction a base or standard, two seats mounted to rotate about fixed axes on said standard, means connecting said seats whereby they rotate in unison, a locking device for said connecting means, and means independent from the locking device to limit the turning movement of the seats.

2. A base or standard, two seats mounted to rotate thereon, a gear rigid with each seat, a pivoted connecting member having gear-teeth at each end meshing with the gears on the chairs, and a locking device for said connecting member.

3. A base or standard, two seats mounted on spindles journaled in said base or standard, a gear fast on each spindle, a connecting member pivoted to the standard and having at each end gear-teeth meshing with the said gears, said connecting member having a plurality of locking-recesses, and a spring-pressed stop carried by the stand and adapted to be engaged by one or the other of said recesses.

4. A base or standard, two seats mounted on spindles journaled in said base or standard, a gear fast on each spindle, a connecting member pivoted to the standard and having at each end gear-teeth meshing with the said gears, said connecting member having a plurality of locking-recesses, and a spring-pressed stop carried by the standard and having at its upper end a roll adapted to enter either one of said recesses.

5. Revolving twin chairs comprising in their construction a base or standard, two seats mounted to rotate in unison about said standard, and connections between said seats whereby they rotate in unison, said connections carrying means to limit the turning movement of these seats.

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

GARDNER C. HAWKINS.

Witnesses:
JOHN C. EDWARDS,
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