No. 711,842. Patented Oct. 21, 1902.

H. L. FLINT.

CAR SEAT.

(Application filed Jan. 2, 1902.)

(No Model.)

FIG. 3.

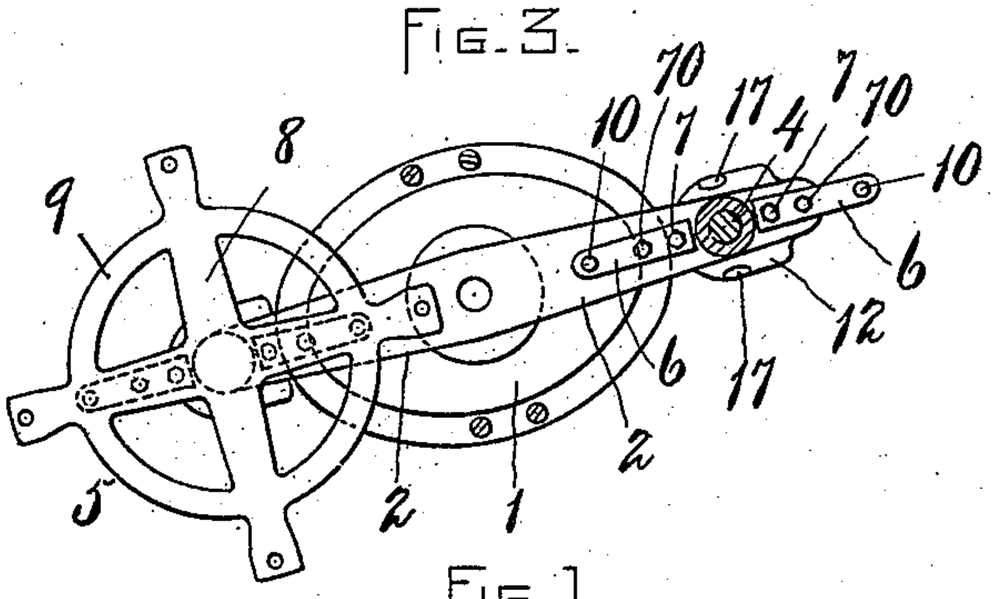
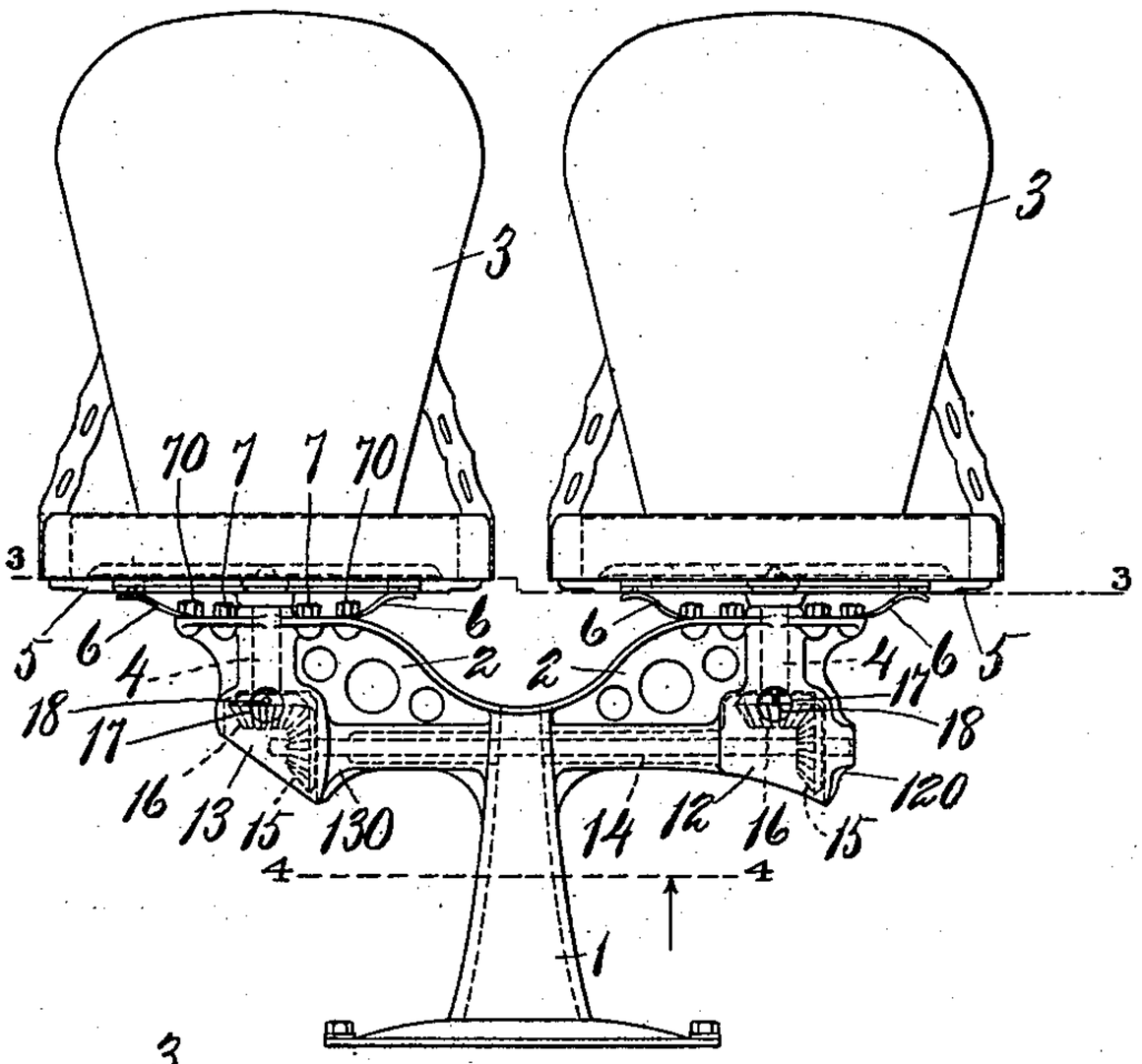


FIG. 1.

FIG. 2.



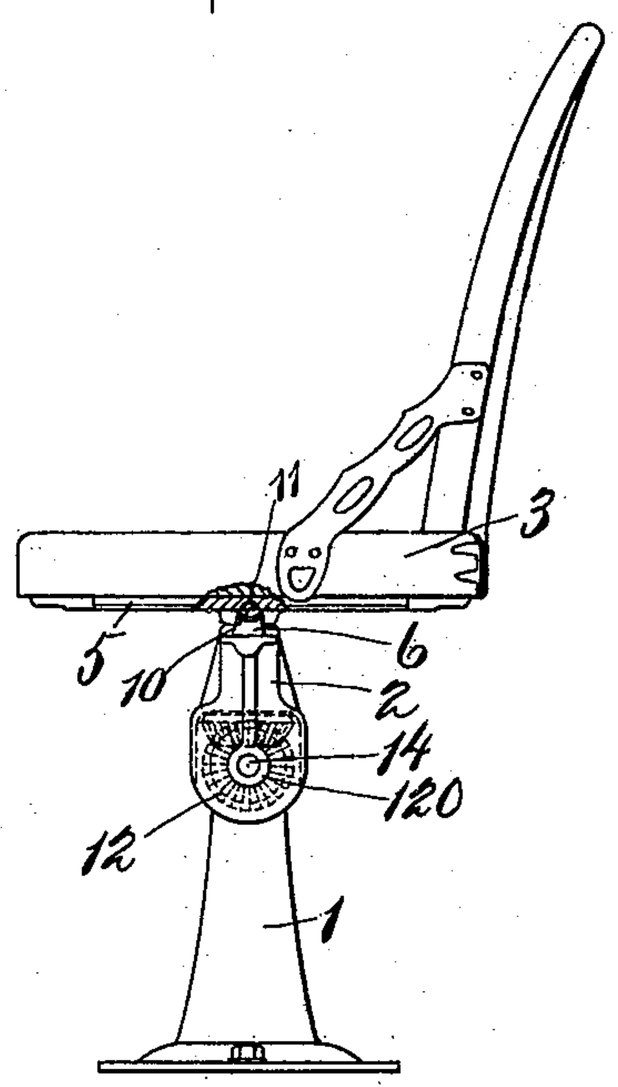
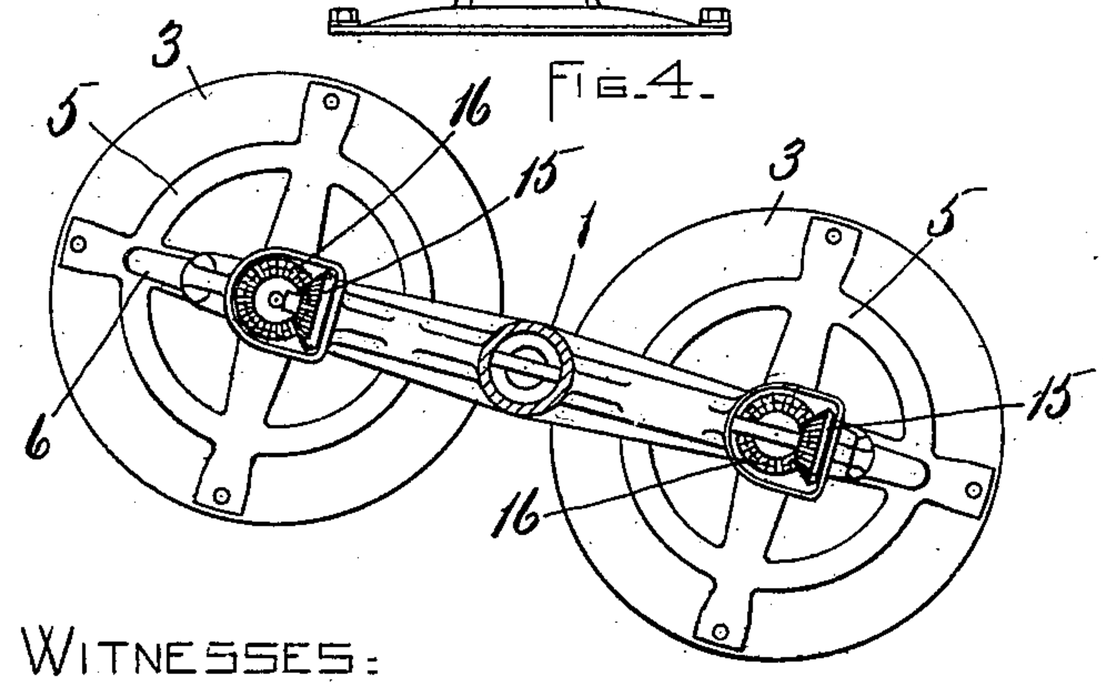


FIG. 4.



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UNITED STATES PATENT OFFICE.

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CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 711,842, dated October 21, 1902.

Application filed January 2, 1902. Serial No. 87,985. (No model.)

To all whom it may concern:

Be it known that I, HERBERT L. FLINT, of Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Car-Seats, of which the following is a specification.

This invention relates to revolving or rotating car-seats; and it consists in a certain improved automatic locking device for the seat and a certain improved connection between the individual seats whereby they are caused to rotate in unison.

Of the accompanying drawings, Figure 1 represents a front elevation of a car-seat constructed in accordance with my invention. Fig. 2 represents a side elevation. Fig. 3 represents a section on the line 3 3 of Fig. 1. Fig. 4 represents a section on the line 4 4 of Fig. 1 looking upwardly.

The same reference characters indicate the same parts in all the figures.

In the drawings, 1 represents a supporting base or standard formed with side arms 2 2, at the ends of which are mounted the rotating seats or chairs 3 3, having vertical shafts 4 4, mounted in bearing-apertures formed near the extremities of the arms 2 2. These shafts are secured to horizontal metallic frames 5 5, forming the lower portions of the seats. On opposite sides of the axis of rotation of each of the seats 3 are mounted two spring-arms 6 6, secured by bolts 7 70 to the standard 1 and so arranged that their free ends bear upwardly with considerable pressure against the frame 5, the pressure being regulated by adjusting the outer bolts 70, beneath which the springs have a limited vertical play, the holes in the springs through which the bolts 70 pass being slightly elongated. It will be noted that said frame 5 is composed of radiating arms 8 8 and connecting-segments 9, forming a solid circle. The spring-arms 6 bear continually against the segments 9 and the portions of the arms 8 alined therewith. The ends of the spring-arms 6 are formed with rounded projections 10 10, constituting locking members adapted to enter complemental recesses or locking members 11 11, formed in the frame 5, the said projections and recesses constituting complemental locking members whereby the spring-arms and the seat are held in locked engagement, the seat being thus fixed in a predetermined rotary position on the support. The locking devices thus constituted are automatically locked and unlocked by the movement of rotating the seat, the form of the members being such that the spring members 10 will be forced out of the recessed members 11 by force applied to either of the seats in a direction required to rotate the same. The recesses 11 may be placed in different angular positions around the circle of the frame 5, so as to lock the seats in different predetermined positions with respect to the standard 1.

The arms 2 2 in alinement with the bearing-apertures for the shafts 4 4 are integrally formed with hoods 12 13, from which the said bearing-apertures extend vertically and from which also extends horizontally an aperture for a horizontal connecting-shaft 14, having a bearing 130 at the inner side of the left-hand hood 13 and another bearing 120 at the outer side of the right-hand hood 12. To this horizontal shaft are affixed bevel-gears 15 15, meshing with bevel-gears 16 16, secured to the lower ends of the vertical shafts 4. This form of connection between the seats causes the seats to rotate in unison smoothly and with very little backlash or lost motion. Each gear 15 is on the right-hand side of its gear 16, as shown, and the right-hand wall of the hood 12 is extended downwardly a sufficient distance to form the shaft-bearing 120. The hoods 12 13 inclose the gears and protect them from observation and from contact with outside objects. They are open on their under sides to allow the gears to be inserted and removed. The walls of the hoods are formed with openings 17 17, through which the cotter-pins 18 18, which secure the gears 16 to the shafts 4, may be inserted and removed. The cotter-pins for the gears 15 may be passed through the open lower ends of the hoods.

It will be seen that the spring locking members on the seat-supports and the complemental locking members on the bottoms of the seats, in connection with the means for imparting rotation from one seat to the other, enable the seats to be unlocked simultane-

ously by the application to either seat of force tending to rotate it, the unlocking operation being automatic in the sense that no movement of the operator for that purpose alone is required. The operator can therefore adjust the seats by grasping and turning either seat and is not required to make a separate movement or to stand at a given seat of the pair in unlocking the seats, as has been necessary heretofore.

I do not confine myself wholly to the details of construction herein set forth, as considerable variation may be made without departing from the spirit of the invention.

I claim—

1. In a revolving car-seat, the combination of a support, a seat mounted to rotate horizontally thereon, and spring-arms attached to the support at opposite sides of the axis of rotation of said seat and arranged to press upwardly, said spring-arms and the seat having frictional locking members constructed to be automatically engaged and disengaged by the rotation of the seat.

2. A revolving car-seat comprising a standard having oppositely-extended arms forming seat-supports, vertical bearings formed in the outer portions of said arms, two seats having vertical shafts journaled to rotate on said arms and provided with locking members on their lower sides, means connecting the shafts to cause their simultaneous rotation, and spring locking members mounted on the respective arms and bearing yieldingly against the seats, said locking members being displaceable by a rotary movement of the seats, whereby force applied to either seat is caused to simultaneously unlock and adjust the two seats, the spring members being arranged to engage the seat members when the seats reach predetermined positions.

In testimony whereof I have affixed my signature in presence of two witnesses.

HERBERT L. FLINT.

Witnesses:
C. F. BROWN,
E. BATCHELDER.