No. 677,195. Patented June 25, 1901.

C. W. H. FREDERICK.

CAR SEAT.

(Application filed Jan. 12, 1901.)

(No Model.)

FIG. 1.

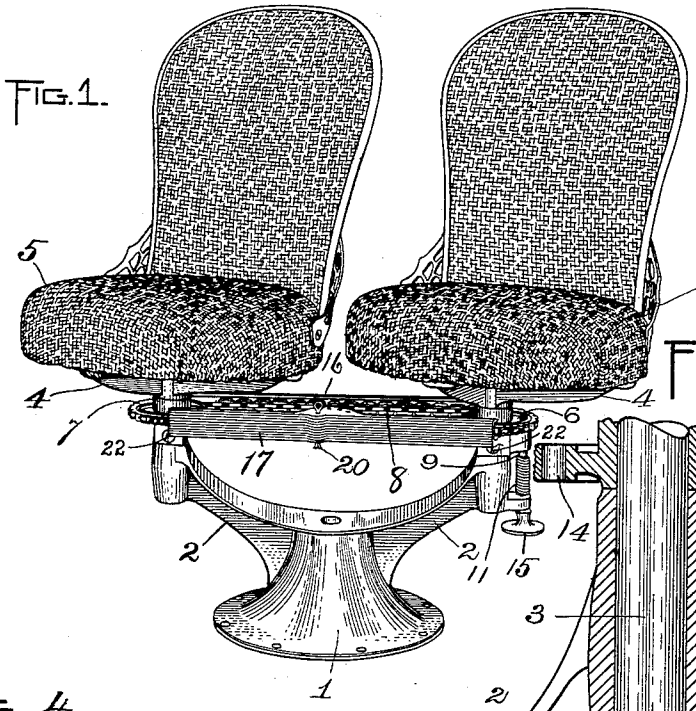


FIG. 3.

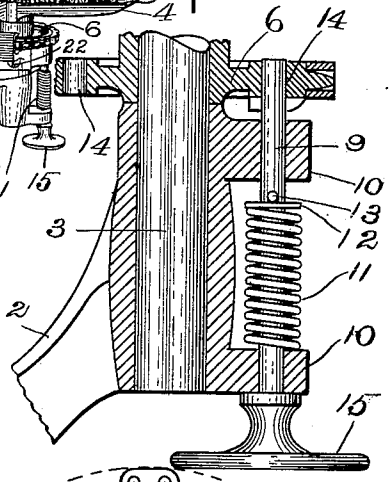


FIG. 4.

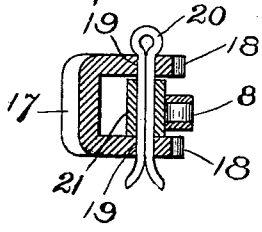


FIG. 2.

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WITNESSES:
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES W. H. FREDERICK, OF MELROSE, MASSACHUSETTS, ASSIGNOR TO THE HEYWOOD BROTHERS AND WAKEFIELD COMPANY, OF WAKEFIELD, MASSACHUSETTS.

CAR-SEAT.

SPECIFICATION forming part of Letters Patent No. 677,195, dated June 25, 1901.

Application filed January 12, 1901. Serial No. 43,012. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. H. FREDERICK, of Melrose, 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.

The object of this invention is to provide an improved construction for revolving railway seats or chairs, one of the features of the invention being a novel form of lock or latch for holding the seat in a fixed relation to its base.

Another feature of the invention relates to double-seated revolving chairs having a sprocket-chain connecting the seats to cause them to revolve in unison; and it consists in a novel chain-adjusting device for keeping the chain tight.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a front elevation of a double-seated revolving railway-chair constructed in accordance with my invention. Fig. 2 represents a plan view with the seats removed. Fig. 3 represents a detail vertical section through the locking device. Fig. 4 represents a detail vertical section through the chain adjustment.

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

In the drawings, 1 represents a base or standard adapted to be fixed to the floor of a car and having two arms 2 2, at the ends of which are journaled vertical spindles 3 3, carrying at their upper ends spiders 4 4, on which the two chair or seat bodies 5 5 are supported. Sprocket-wheels 6 7 are secured to the spindles 3 3 and connected by an endless sprocket-chain 8, which causes the chair-bodies 5 5 to rotate in unison when rotating pressure is applied to either of them. The two chair-bodies are normally locked, so as to be incapable of rotating, but are capable of being unlocked and reversed in order to face them either way in a car.

I provide a novel form of locking device by means of which the chair-bodies may be locked in either of two positions one hundred and eighty degrees apart, said device, as here shown, comprising a bolt 9, mounted to slide vertically in bearings 10 10 on one of the arms 2 of the base and normally projected upwardly into locking position by means of a spring 11, which surrounds the bolt and is interposed between the lower bearing 10 and a washer 12, held in place on the bolt by a pin 13. The upper end of the bolt is adapted to enter either one of two holes or sockets 14 14, formed in the sprocket-wheel 6, said sprocket-wheel constituting a socket-piece or complemental locking member for the bolt. The lower end of the bolt 9 is provided with a circular flange or projecting footpiece 15, having a shoulder 23, which coöperates with the lower bearing 10 in limiting the upward movement of the bolt, said flange being stepped on and depressed by a person when it is desired to reverse the seat. The depression of the bolt releases its upper end from the hole in the sprocket-wheel with which it was engaged and permits the chair to be reversed by rotative pressure applied to one of the chair-bodies 5, the bolt when released from the foot-pressure bearing against the under surface of the sprocket-wheel, which is made flush with the edges of the holes 14 in all portions of the path of the bolt, the bolt automatically engaging with the opposite hole when the seat has been completely reversed.

As the chain 8 wears through continued use it is apt to accumulate slack, the effect of which would be to permit independent movements of the two chair-bodies 5 5 if no provisions were made for taking up this slack. Such a device I provide in a novel form, as follows: 16 17 represent the two sides of a chain-guard attached, as by screws 22 22, to the upper portion of the base 1, the part 17 of said guard having formed about midway on it a pair of ears or flanges 18 18, each having a series of holes 19 19, into any pair of which is adapted to be fitted a split pintle 20, upon which is journaled a chain-roller 21, bearing laterally against one of the stretches of the chain 8. The holes 19 19 in each flange 18 are arranged in different lateral positions with respect to the chain, so that as the slack of the chain increases the chain-roller may be shifted inwardly, so as to take up this slack

and prevent independent movements of the two chair-bodies.

From what has been said it will be perceived that I have produced a lock for revolving railway seats or chairs which is simple in construction and effective in operation, and being made of few parts is not liable to readily get out of order or become deranged. It will also be noted that by means of my improved chain-adjusting device the chain can always be kept at a uniform tension, thus precluding any independent movement of the seats.

I claim—

1. In a swinging seat or chair the combination of a base or standard, a seat mounted to rotate thereon and having a locking member, bearings formed on said standard and a spring-pressed bolt mounted to slide in said bearings, its upper end being adapted to engage said locking member, said bolt having its lower end provided with an unobstructed curved flange or footpiece having a shoulder adapted to limit the upward movement of said locking member, said footpiece being accessible from the side, front or rear of the seat.

2. In a railway seat or chair the combination of a base or standard, two seats mounted to rotate thereon and having sprocket-wheels on their axes of rotation, a chain connecting said sprocket-wheels, whereby said seats are caused to rotate in unison, a chain-guard supported by said base, a chain-tightening roller carried by said guard, and means whereby said roller may be adjusted laterally with relation to said chain.

3. In a railway seat or chair, the combination of a base or standard, two seats mounted to rotate thereon and having sprocket-wheels on their axes of rotation, a chain connecting said sprocket-wheels, whereby the seats are caused to rotate in unison, and an adjustable chain-tightening device mounted on the base and bearing laterally against the portion of said chain which extends between the sprocket-wheels, said device comprising a pair of flanges on the base, each having a series of holes arranged in different lateral positions, a pintle adapted to occupy any pair of said holes, and a chain-roller mounted on said pintle.

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

CHARLES W. H. FREDERICK.

Witnesses:
GEORGE E. HART,
FRANK A. CLAPP.