No. 745,854. PATENTED DEC. 1, 1903.

S. E. JACKMAN.

LOCKING DEVICE FOR SEAT GUARDS.

APPLICATION FILED AUG. 3, 1903.

NO MODEL.

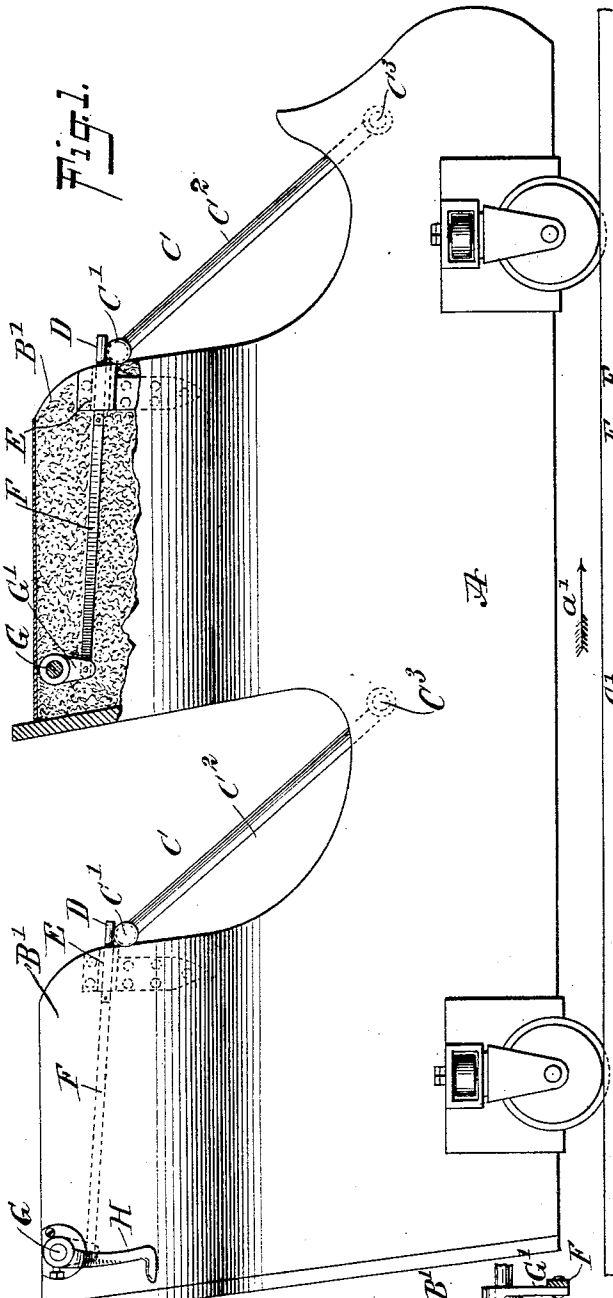

Fig. 1.

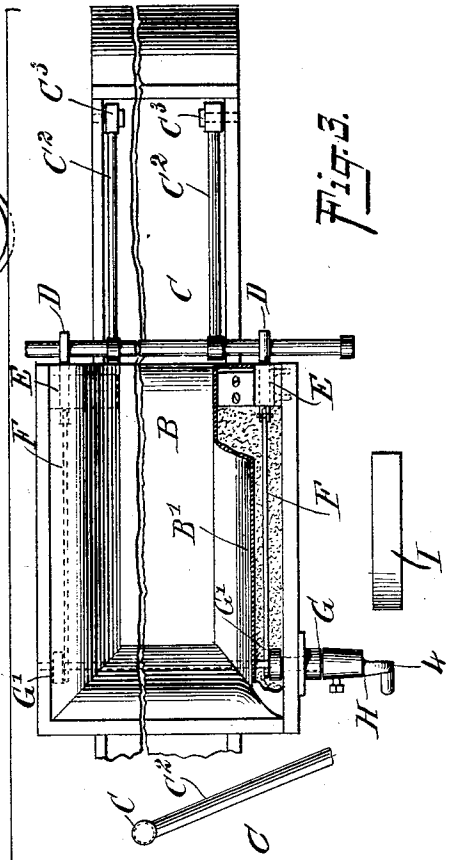

Fig. 3.

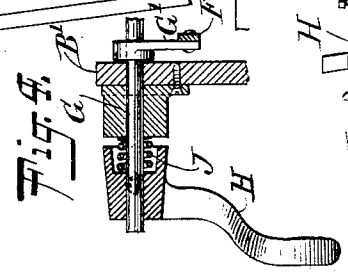

Fig. 4.

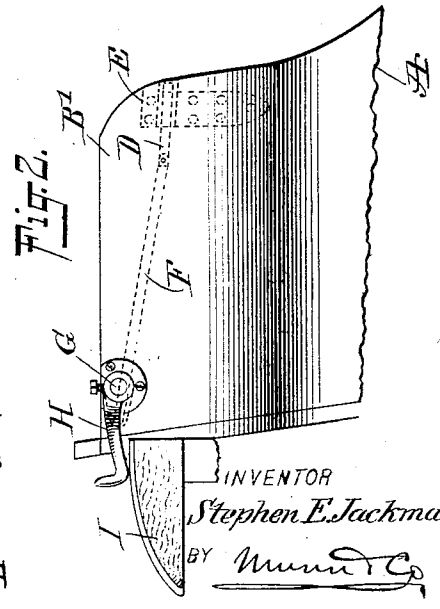

Fig. 2.

WITNESSES:

William P. Goebel.

Theo. G. Hoster.

INVENTOR

Stephen E. Jackman

BY Munn & Co.

ATTORNEYS.

No. 745,854. Patented December 1, 1903.

UNITED STATES PATENT OFFICE.

STEPHEN E. JACKMAN, OF NEW YORK, N. Y.

LOCKING DEVICE FOR SEAT-GUARDS.

SPECIFICATION forming part of Letters Patent No. 745,854, dated December 1, 1903.

Application filed August 3, 1903. Serial No. 168,016. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN E. JACKMAN, a citizen of the United States, and a resident of the city of New York, (Coney Island, borough of Brooklyn,) in the county of Kings and State of New York, have invented a new and Improved Locking Device for Seat-Guards, of which the following is a full, clear, and exact description.

The invention relates to inclined or switch-back railways, such as are used in pleasure-resorts, exhibitions, and the like; and its object is to provide a new and improved locking device for the seat-guard of a car, boat, or like vehicle arranged to securely hold the guard against accidental opening or opening by the passengers of the vehicle while the latter is in motion to prevent the passengers from leaving the seat during the ride, thereby insuring complete safety of the passengers.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement as applied to a car, parts of the latter being shown in section and the locking device being in a locking position. Fig. 2 is a side elevation of the improvement in an unlocking position. Fig. 3 is a plan view of the improvement, parts being in section; and Fig. 4 is an enlarged transverse section of the improvement on the line 4 4 of Fig. 3.

The car, boat, or other vehicle A is provided with one or more seats B, each preferably sufficiently wide to accommodate a number of passengers. The seat-guard C for each seat consists of a cross-bar C′, extending across the seat and adapted to rest against the front edges of the sides or arms B′ of the seat, and the said cross-bar C′ is rigidly attached to the upper ends of arms C^2, fulcrumed at their lower ends at C^3 to the sides of the vehicle-body, near the bottom thereof and a distance in front of the seat B.

Now when the guard C is swung forward the passengers can readily enter the vehicle and seat themselves on the seat B, and then when the passengers are seated the guard C is swung rearward, so that the cross-bar C′ rests against the sides B′ of the seat, thereby extending across the passengers, in the front thereof, to prevent the same from leaving their seats, and at the same time the cross-bar C′ forms a means for the passengers to take hold of during the ride, especially when the vehicle is going down steep inclines, around sharp curves, and the like. Now in order to lock the seat-guard C in this closed position mentioned bolts D are provided, extending longitudinally and adapted to be shot over the cross-bar C′ at the sides B′ of the seat, so as to hold the seat-guard against forward swinging. The bolts D are mounted to slide longitudinally in suitable bearings E, held in the sides B′ of the seat B, and the rear ends of the bolts are pivotally connected by links F with crank-arms G′, secured on a transversely-extending shaft G, journaled in suitable bearings in the sides B′ of the seat B, at the rear end thereof, so that the shaft G extends through the back B^2 of the seat from one side to the other.

On one outer end of the shaft G is secured a handle or arm H, adapted to be taken hold of by the operator for imparting a turning motion to the shaft G, so as to shoot the bolts D outward into a locking position or inward into an unlocking position, according to the direction in which the handle H is swung. The free end of the handle H is also adapted to engage a cam-surface I, arranged alongside the track on which the vehicle A travels, the said cam-surface being located at or near the destination of the vehicle, so that when the bolts D lock the guard C in position during the ride and the vehicle nears its destination then the arms H come in contact with the cam-surface I, whereby a rearward swinging motion is given to the said arm to slide the bolts D rearwardly to automatically unlock the seat-guard C. The seat-guard can now be swung forward to allow the passengers to disembark.

The seat-guard remains unlocked until the next complement of passengers have entered and taken possession of the seats, and then

the seat-guard is swung rearward, and the handle H is swung back from its horizontal position (shown in Fig. 2) into a vertical downward position, so that the bolts D are shot out to lock the seat-guard in position in front of the seat B.

In order to hold the shaft G and connected parts against accidental movement, a suitable device is provided—such, for instance, as a spring J, coiled on the shaft G and pressing with one end against the shaft-bearing and at the other end against the hub of the handle H, as plainly indicated in Fig. 4. Now by this arrangement the handle H is held in either a vertical or horizontal position until shifted, as above described.

The device is very simple and durable in construction, is not liable to easily get out of order, and insures complete safety of the passengers seated in the vehicle, as the same cannot leave their seats during the ride.

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

1. The combination with a vehicle seat-guard mounted to swing on the vehicle-body and adapted to extend across the front of the vehicle-seat, of a locking device arranged on the seat-body and adapted to engage and lock the said guard against accidental opening or opening by the passengers in the seat, as set forth.

2. The combination with the seat-guard of a vehicle, of a locking device for the said seat-guard, to lock the latter against accidental opening or opening by the passengers in the seat, and means in the path of the car or boat for automatically opening the said locking device at the time the car or boat reaches its destination, for the disembarkation of the passengers, as set forth.

3. A locking device for the seat-guard of a vehicle, consisting of a bolt adapted to pass over the transverse hand-rail of the seat-guard, and means for actuating the said bolt, as set forth.

4. A locking device for the seat-guard of a vehicle, consisting of a bolt adapted to pass over the transverse hand-rail of the seat-guard, a crank-shaft journaled on the vehicle, a link connecting the bolt with the crank of the shaft, and a handle on the outer end of the crank-shaft, as set forth.

5. A locking device for the seat-guard of a vehicle, consisting of a bolt adapted to pass over the transverse hand-rail of the seat-guard, a crank-shaft journaled on the vehicle, a link connecting the bolt with the crank of the shaft, a handle on the outer end of the crank-shaft, and an inclined block in the path of the vehicle, adapted to be engaged by the said handle, as set forth.

6. A locking device for the seat-guard of a vehicle, consisting of a bolt adapted to pass over the transverse hand-rail of the seat-guard, a crank-shaft journaled on the vehicle, a link connecting the bolt with the crank of the shaft, a handle on the outer end of the crank-shaft, and a device for holding the arm and connected parts in position against accidental movement, as set forth.

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

STEPHEN E. JACKMAN.

Witnesses:

THEO. G. HOSTER,

EVERARD B. MARSHALL.