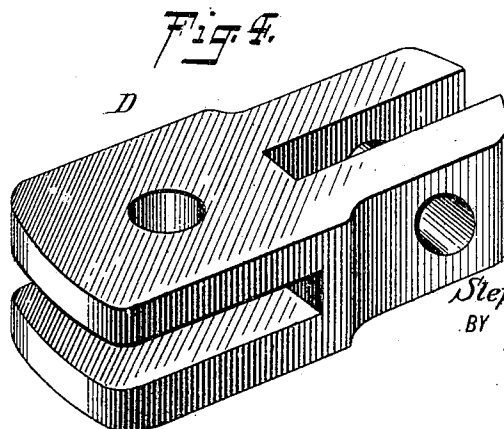
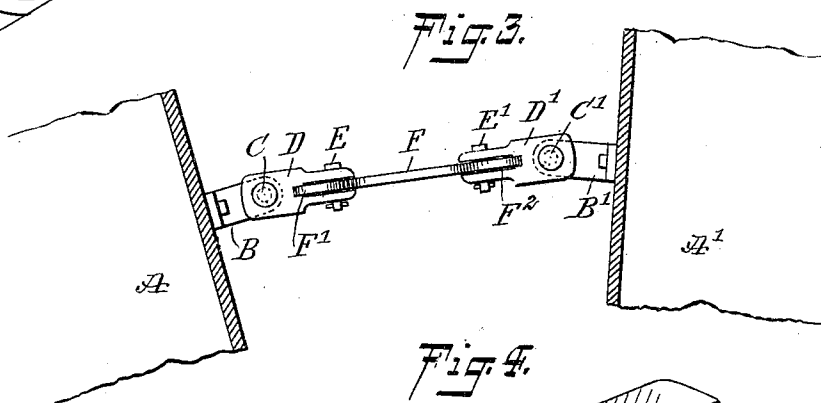
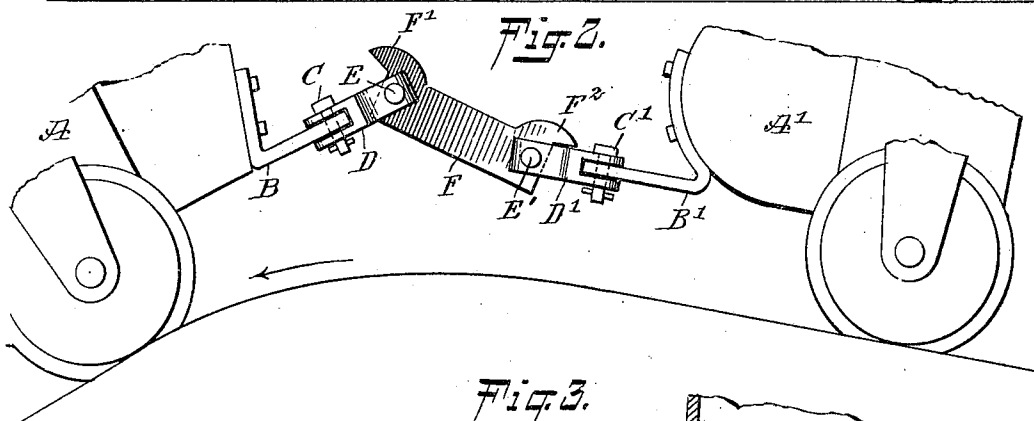
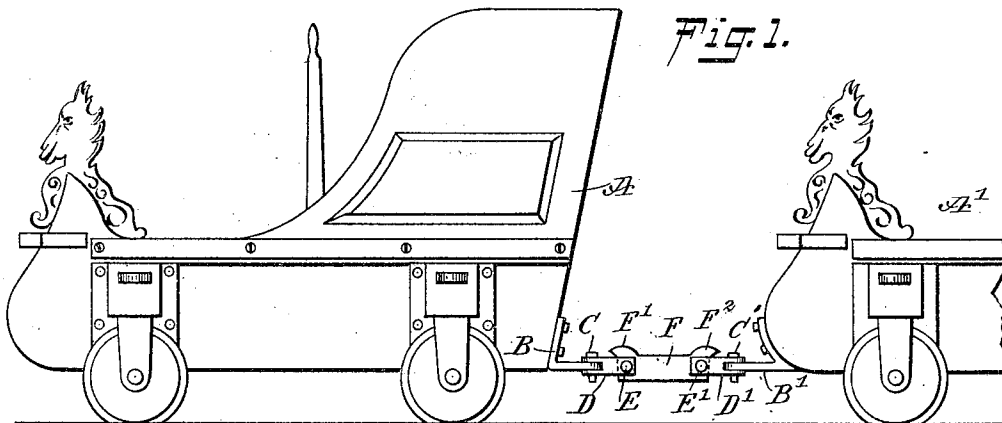


No. 807,933.

S. E. JACKMAN.
CAR COUPLING.

PATENTED DEC. 19, 1905.

APPLICATION FILED JUNE 13, 1905.



WITNESSES:

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

CAR-COUPLING.

No. 807,933.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed June 13, 1905. Serial No. 265,033.

To all whom it may concern:

Be it known that I, STEPHEN EDWARD 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 Car-Coupler, of which the following is a full, clear, and exact description.

The invention relates to cars traveling on inclined or switchback railways, such as are used in places of amusement; and the object of the invention is to provide a new and improved car-coupler arranged to safely couple adjacent cars to allow the cars to readily travel over sharp curves and steep inclines of the track without danger of the cars becoming uncoupled or jumping the track.

The invention consists of novel features and parts and combinations of the same, which will be more fully described, and 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. Fig. 2 is an enlarged side elevation of the same, showing the car running over a steep incline in the track. Fig. 3 is a plan view of the same, showing the coupled cars in section and when rounding a curve in the track; and Fig. 4 is an enlarged perspective view of one of the coupling-links.

The cars A and A' to be coupled together are provided at their adjacent ends with fixed draw-bars B B', connected by vertically-disposed pivots C C' with coupling-links D D' to allow the latter to swing laterally. The coupling-links D D' are provided at their adjacent ends with transversely-extending pivots E E', engaging the ends of a connecting-link F provided on the top at the ends with longitudinally-extending lugs F' F'', adapted to swing in engagement with the top of the coupling-links D D' to prevent the cars from jumping upward off the track-rails.

By the arrangement described the coupling-links D D' are mounted to swing in a horizontal plane, while the connecting-link F is free to swing in a vertical plane, and hence the cars A and A' are connected with each other by a coupler having a universal motion relative to the cars.

By reference to Figs. 1 and 2 it will be seen that the bottom edges of the lugs F' F'' stand

normally at angles to the top surfaces of the coupling-links D and D' to allow the adjacent coupled cars A and A' to readily travel over portions of the track curved in a vertical plane, (see Fig. 2;) but in case the rear car A' should unduly press the forward car A then the draw-bar B' of the rear car A' and the coupling-link D' cause an upward swinging of the connecting-link F on the pivot E of the other coupling-link D until the lug F abuts against the coupling-link D', thus holding the car A' down and preventing further upward swinging of the connecting-link F, so that the car A' cannot leave the track. In case the front car A is suddenly braked very hard then the momentum of the rear car A' causes a similar operation of the coupler as above described.

By having the coupling-links D and D' mounted to swing on the vertical pivots C and C' the cars are free to readily travel round sharp curves disposed in a horizontal plane (see Fig. 3) without undue binding of the coupling members.

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

1. The combination with a plurality of cars and a coupler for the same having a universal motion relative to the cars, and means to hold the cars down to prevent a car from leaving the track when the cars pass over a steep incline in the track.

2. A car-coupler comprising coupling-links mounted to swing laterally on adjacent cars, and a connecting-link pivotally connecting the coupling-links with each other and mounted to swing up and down, the said connecting-link having stops adapted to engage the coupling-links.

3. The combination with cars having fixed draw-bars, of a car-coupler comprising coupling-links pivotally connected with the draw-bars to swing in a lateral direction, a connecting-link pivotally connected with the said coupling-links and adapted to swing up and down, and integral stops on the said connecting-link and adapted to abut on the top of the said coupling-links.

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

STEPHEN EDWARD JACKMAN.

Witnesses:

G. L. SANFORD,
C. W. COLLIER.