

May 8, 1923.

1,454,760

M. J. NEARY

ROLLER COASTER SAFETY APPLIANCE

Filed June 24, 1922

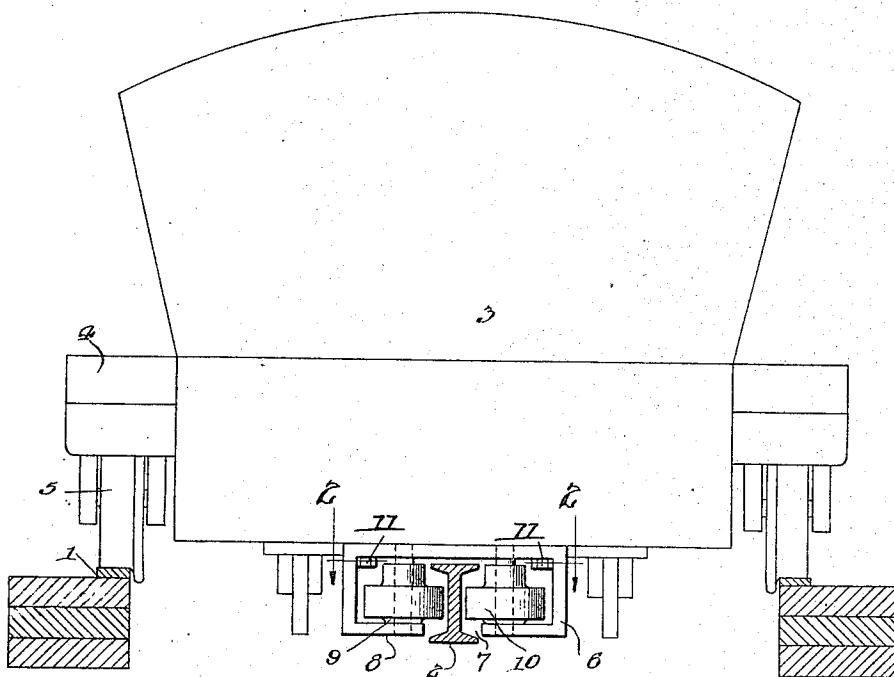


Fig. 1.

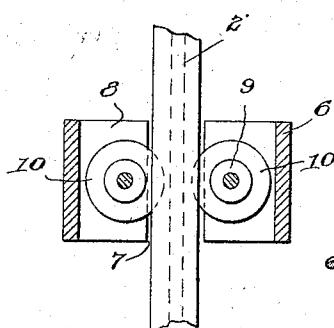


Fig. 2.

LawMarkward
Thomas S. Turpin

M.J.Neary

INVENTOR

BY *Victor J. Evans*

ATTORNEY

Patented May 8, 1923.

1,454,760

UNITED STATES PATENT OFFICE.

MICHAEL J. NEARY, OF SCRANTON, PENNSYLVANIA.

ROLLER-COASTER SAFETY APPLIANCE.

Application filed June 24, 1922. Serial No. 570,535.

To all whom it may concern:

Be it known that I, MICHAEL J. NEARY, a citizen of the United States, residing at Scranton, in the county of Lackawanna and 5 State of Pennsylvania, have invented new and useful Improvements in Roller-Coaster Safety Appliances, of which the following is a specification.

The object of my said invention is the 10 provision of a simple and inexpensive device calculated to absolutely preclude derailment of cars such as used in roller coasters, scenic railways and other amusement apparatus such as generally employed 15 in pleasure resorts the wheel carrying member of the said device being susceptible of ready connection as a unit to the body of an ordinary roller coaster car such as at present in use.

20 To the attainment of the foregoing, the invention consists in the improvement as hereinafter described and definitely claimed.

In the accompanying drawings, forming part of this specification:—

25 Figure 1 is a transverse section illustrating a railway and a car equipped with my improvement.

Figure 2 is a detail horizontal section taken in the plane indicated by the line 2—2 30 of Figure 1, looking downwardly.

Similar numerals of reference designate corresponding parts in both views of the drawings.

In addition to appropriately supported 35 rails 1, the railway illustrated includes an I beam 2 arranged longitudinally intermediate of and preferably in the longitudinal center of the space between the rails 1.

At 3 is a car arranged to travel on the 40 rails 1, the said car including a body and appropriate appurtenances 4 carried by the body and carrying, in turn, flanged wheels 5 arranged to travel on the rails 1.

In furtherance of my invention the body 45 of the car 3 is provided at its underside with a housing 6 with a space 7 in its bottom wall 8 for the downward projection of the lower portion of the I beam 2 which the housing receives as best shown in Figure 1.

Arranged in the housing 6 are wheels 9 with portions 10 designed to move at opposite sides of the web of the I beam 2 and between and in spaced relation to the upper and lower 55 portions of the I beam 2 as well as in spaced relation to the said web. The wheels 9 are

disposed horizontally, and when the car is in motion their peripheries are adapted to make contact with the sides of the I beam web. The upper and lower portions or 60 flanges of the I beam are adapted to prevent the wheels 9 from escaping from the troughs formed by the said upper and lower portions of flanges and hence it is impossible for the car to jump from the track or 65 become derailed when traveling at a high rate of speed or at any other time to the injury of the occupants of the car.

As will be readily understood from the foregoing the wheels 9 are mounted in the 70 housing 6, and the unit comprising the wheels 9 and the housing 6 is readily attachable to the body of an ordinary roller coaster car 3 through the medium of bolts 11, Figure 1, or other appropriate means. 75

It will also be noted that the housing 6 and the bolts described constitute a strong connection of the wheels with the car 3 so that there is no liability of the car pulling away from the wheels 9.

80 Any appropriate means such as that illustrated may be employed to support the I beam 2 and maintain the said I beam 2 in fixed relation to the rails 1 and the means employed for the support of the rails 1.

85 It will be apparent from the foregoing that my improvement carries no part of the weight of the car, and hence the improved appliance will be subjected to but little wear. It will also be manifest that the improvement is so simple in construction that it will not materially increase the cost of roller coaster, scenic railways and the like.

I have entered into a detailed description 90 of the construction and relative arrangement of the parts embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as confining myself to the said specific construction and relative arrangement of parts inasmuch as in the future practice of the invention various changes and modifications may be made such as fall within the scope 95 of my invention as defined in my appended claim.

Having described my invention, what I claim and desire to secure by Letters-Patent, is:—

100 In safety appliance for roller coasters, scenic railways and analogous railways, the

combination of appropriately supported rails, an appropriately supported longitudinal I-beam arranged intermediate of the rails, a car with wheels arranged to travel on the rails, a housing carried at and rigidly and directly connected to the bottom of the car and having a top wall and a bottom wall and an opening in the bottom wall for the projection of the I-beam received in the housing, and freely

revoluble horizontally disposed wheels centrally mounted in the housing between the top and bottom walls thereof and also arranged at opposite sides of the web of the I-beam and in spaced relation to the upper and lower portions or flanges of said I-beam. ¹⁵

In testimony whereof I affix my signature.

MICHAEL J. NEARY.