

F. GIORDANO.
MONORAIL AND TRUCK.
APPLICATION FILED AUG. 7, 1912.

1,048,679.

Patented Dec. 31, 1912.

FIG. 1.

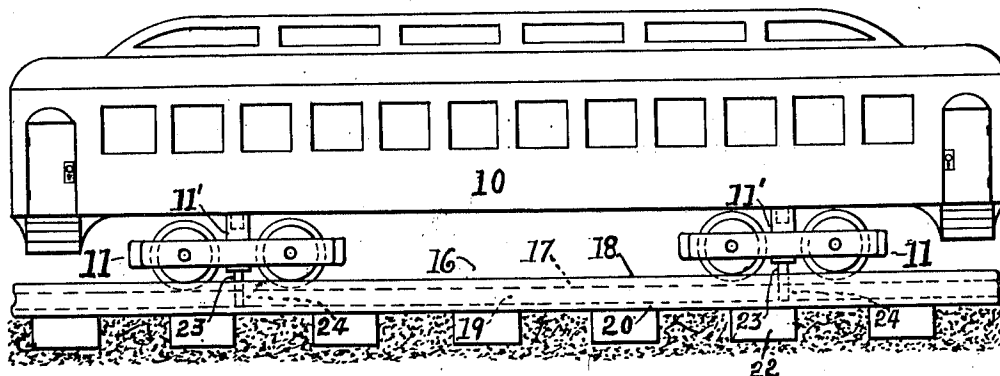


FIG. 2.

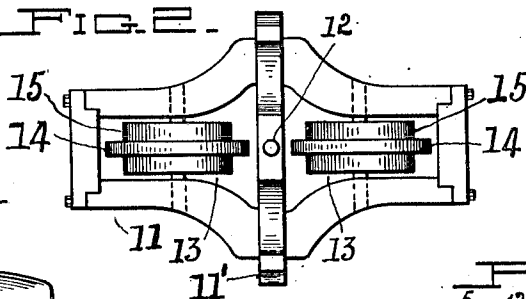


FIG. 3.

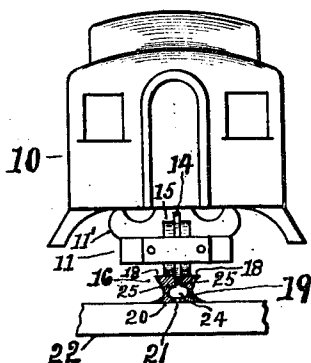


FIG. 4.

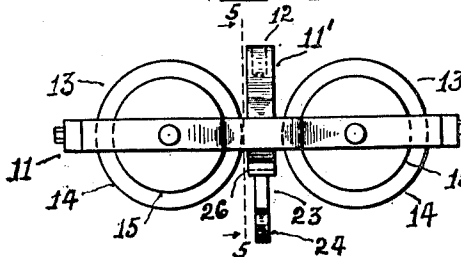
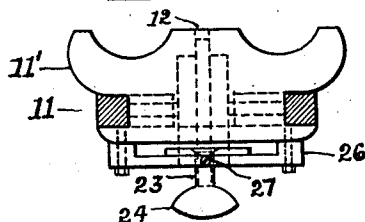


FIG. 5.



Witnesses:

J. L. McPherson
Joce Emrich

Inventor:

Felice Giordano
By John J. Power
Attorney

UNITED STATES PATENT OFFICE.

FELICE GIORDANO, OF PITTSBURGH, PENNSYLVANIA.

MONORAIL AND TRUCK.

1,048,679.

Specification of Letters Patent.

Patented Dec. 31, 1912.

Application filed August 7, 1912. Serial No. 713,826.

To all whom it may concern:

Be it known that I, FELICE GIORDANO, a subject of the King of Italy, resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Monorails and Trucks; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention pertains to what is known as mono railways.

The principal object of my invention is to effect a construction of rail and car that will enhance economy in the construction of railways. And a further object of my invention is to provide a novel construction of car whereby the smooth running of the latter will be effectually accomplished.

Reference numerals in the following specification refer to like parts in the accompanying drawings; in which—

Figure 1 is a longitudinal elevation of a car and mono rail embodying my invention. Fig. 2 is a plan view of a truck. Fig. 3 is an end view in elevation of the construction shown in Fig. 1. Fig. 4 is a view in elevation of the truck shown in Fig. 2. Fig. 5 is a view partly in section on line 5—5 of Fig. 4.

In the accompanying drawings a car 10 having a superstructure of ordinary construction is shown mounted on trucks 11 each of which may be provided with springs of any well known type, said trucks having each a transversely arranged portion 11' (Figs. 2 and 4) swivelly engaged at 12 (Fig. 2) below the bed of the car, and having wheels 13 journaled thereon and alined centrally relative to the bed of the car. The wheels 13 are each formed with an annular flange 14 projecting from the peripheral face thereof so as to divide the tread 15 as shown in Figs. 2 and 4. A mono rail 16 (Figs. 1 and 3) is formed with a central longitudinal opening 17 intervening the treads 18 of the rail, said opening being enlarged as at 19, above the rail base 20 (Fig. 3) by which the opposite sides of the rail are integrally connected. Openings 50 or perforations 21 (Fig. 3) are provided centrally in the base 20 of said rail which is suitably mounted on cross ties 22. Tongues 23, having an enlarged part 24 (Figs. 1, 3 and 4), are inserted in the longitudinal opening 17 and positioned so that the enlarged part 24 occupies the enlarged open-

ing 19 and is in a position to engage the shoulders 25 on the webs of the rail as shown in Fig. 3. The upper or contracted end of said tongues is suitably secured to the part 26 by a bolt 27 transversely engaging the same, the part 26 being suitably secured to the transverse part 11, as shown in Fig. 5.

The car may be propelled by any well known means, the tread 15 of the wheels traveling on the treads 18 of the rail, and the annular flange 14 traveling in the central groove or opening 17 controls the car against undue lateral movement. The tongues 23 by engaging the rail at 25, as already explained, will effectually prevent a rocking movement of the same. The position of the tongues being between the wheels of the trucks they will always be in a line with said wheels by reason of the swivel movement of the trucks at curved points of the rail.

What I claim as my invention and desire to secure by Letters Patent is:

1. A mono rail, comprising a car having trucks swivelly connected thereto, a mono rail having its tread divided by an intervening opening, said opening being enlarged below the web of said mono rail, wheels carried in alinement by said trucks, said wheels carrying said car on the surface of the divided tread of said rail and having each an annular flange dividing the treads thereof and projecting into said opening to maintain the wheels on the rail, a tongue carried by each of said trucks and positioned in the opening in the rail, an enlargement on the lower end of said tongues corresponding with said enlarged opening in the rail to engage the shoulders of the latter by an endwise rocking movement of the car during transit of the same, and thereby minimize said rocking movement.

2. A mono railway, comprising a car having trucks swivelly connected thereto, a rail having its tread divided longitudinally by an intervening opening and having a base integrally connecting each side of said rail, said opening being enlarged below the web of said rail, wheels carried in alinement by said trucks, said wheels carrying said car on the surface of the divided tread of said rail and having each an annular flange dividing the treads thereof and projecting into said opening to maintain the wheels on the rail, a tongue carried below said car

and positioned in said opening in the rail, an enlargement on the lower extremity of said tongue and occupying the enlarged opening in the rail for engaging the shoulders below the web of the latter by a rocking movement of the car in transit and thereby minimizing such movement, and drain outlets in the base of said rail for draining moisture from the rail.

- 10 3. A mono railway, comprising a mono rail having its tread divided longitudinally by an intervening opening, said opening having an enlargement to form shoulders on the webs of the rail, a car having trucks
15 swivelly connected thereto, wheels carried in alinement by said trucks and operating on surface of the divided tread of said rails to carry the car, an annular flange projecting

centrally from the peripheral face of said wheels and occupying said opening in the rail, to prevent lateral movement of said wheels, and a centrally suspended tongue secured upon said truck and extending into the enlarged opening in the rail, said tongue being carried freely in said enlarged opening and adapted to engage said shoulders on the webs of the mono rail by the endwise movement of the car and thereby minimize said movement during the operation of the car.

In testimony whereof, I the said FELICE GIORDANO have hereunto set my hand.

FELICE GIORDANO.

Witnesses:

JOSEPH T. BELL,
HARRY P. CLEIS.