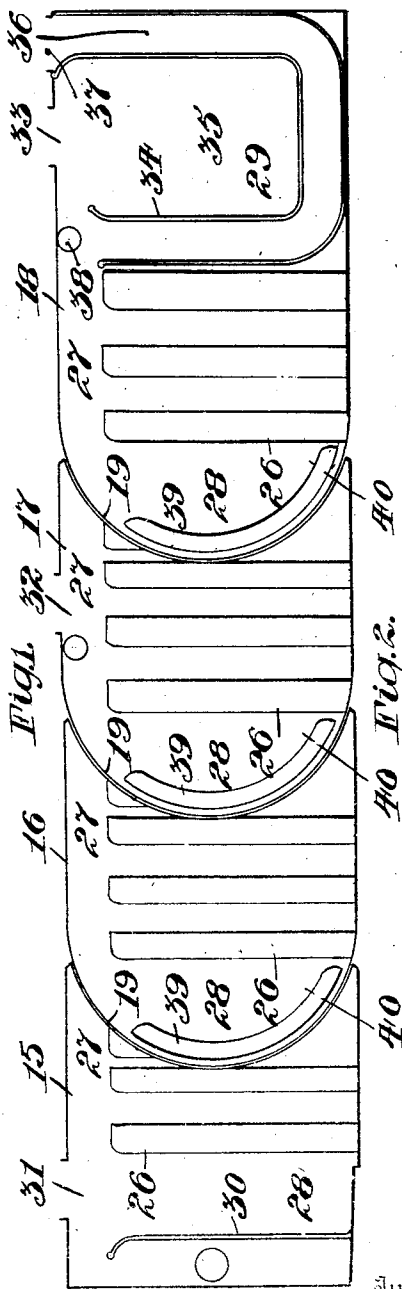


APPLICATION FILED AUG. 17, 1911.

3 SHEETS—SHEET 1.

New O. George
 Harry Davis



Inventor

Israel Pascal.

By Peterborough L. J. J. J.

Attorneys

I. PASCAL.
RAILWAY CAR.

APPLICATION FILED AUG. 17, 1911.

Patented Sept. 24, 1912.

3 SHEETS—SHEET 2.

1,039,585.

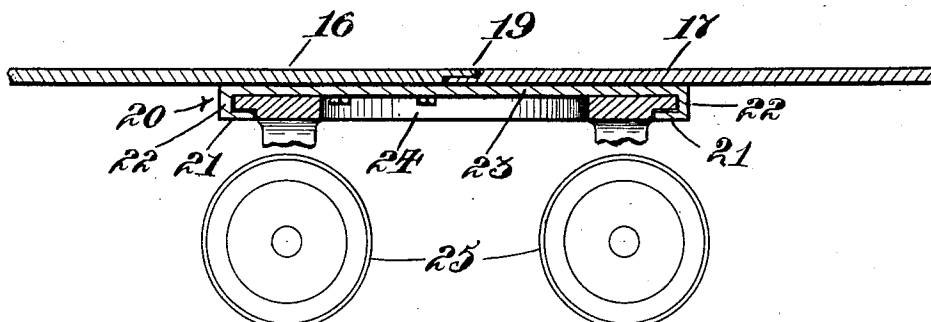


Fig. 5.

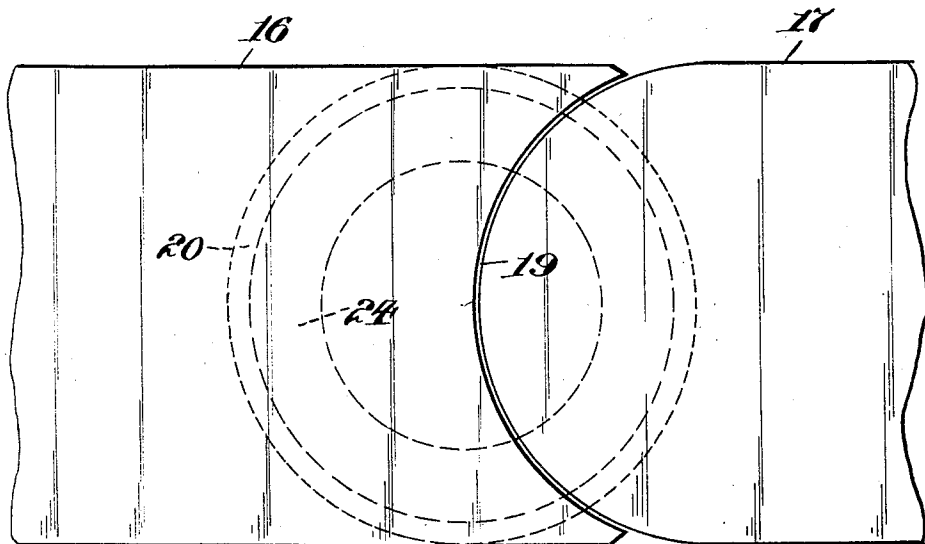


Fig. 4.

Inventor

Israel Pascal

Witnesses

Wm. A. Bryant
Harry Davis

By J. H. Stanton & J. D. Davidson

Attorneys

I. PASCAL.
RAILWAY CAR.

APPLICATION FILED AUG. 17, 1911.

Patented Sept. 24, 1912.

3 SHEETS-SHEET 3.

1,039,585.

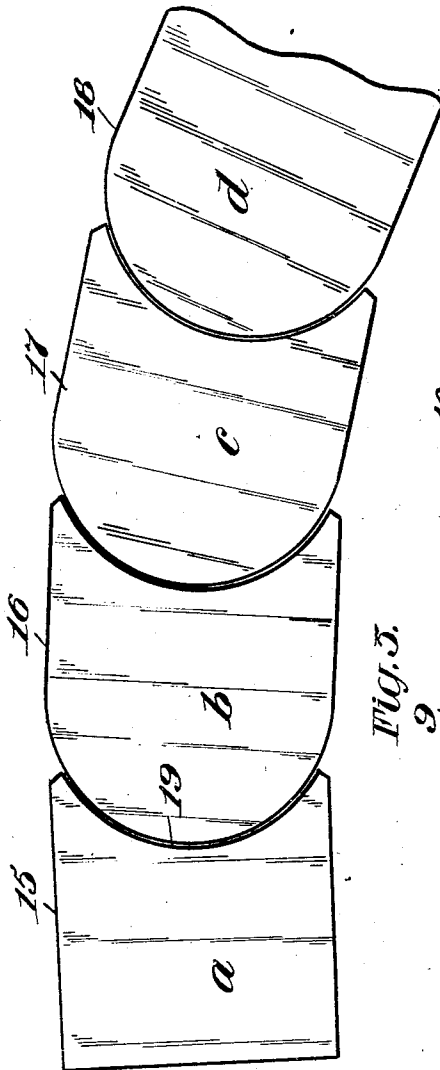


Fig. 3.

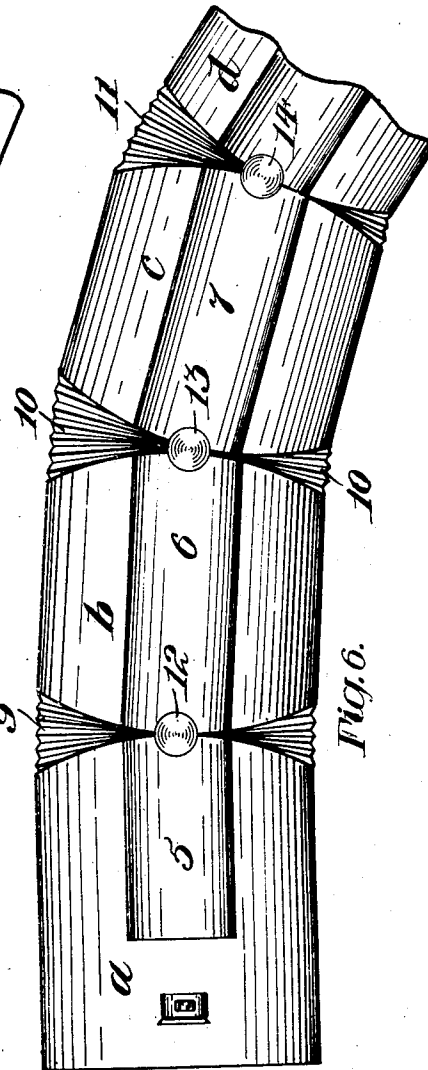


Fig. 6.

Witnesses

Will A. Leonard
Harry Davis

Inventor

Israel Pascal

By *J. H. Stanton & Co.*

Attorneys

UNITED STATES PATENT OFFICE.

ISRAEL PASCAL, OF MONTREAL, QUEBEC, CANADA, ASSIGNOR OF ONE-HALF TO
MORISS RESSLER, OF MONTREAL, QUEBEC, CANADA.

RAILWAY-CAR.

1,039,585.

Specification of Letters Patent.

Patented Sept. 24, 1912.

Application filed August 17, 1911. Serial No. 644,671.

To all whom it may concern:

Be it known that I, ISRAEL PASCAL, resident of 20 Rivard street, in the city and district of Montreal, Province of Quebec,
5 Dominion of Canada, a subject of the King of Great Britain, have invented certain new and useful Improvements in Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description of the
10 same.

The invention relates to improvements in railway cars, as described in the present specification and illustrated in the accompanying drawings that form part of the
15 same.

The invention consists essentially in the novel construction and arrangement, whereby the body of the car is constructed of a plurality of pivotally connected sections so
20 arranged as to provide a continuous interior.

The objects of the invention are to devise a car which will readily follow the curves of a line of railway, to add to the efficiency of car construction and arrangement, to prevent derailments from certain causes, and
25 generally to provide a car which will be suitable for electric or steam railways, be of simple and durable construction, economical to build and comfortable to ride in.

In the drawings, Figure 1 is a side elevation of the car. Fig. 2 is a diagrammatic plan view of the sectional platform, with the arrangement of seating. Fig. 3 is an enlarged sectional view of a portion of the
30 platform or flooring through the turn table of one of the trucks supporting said flooring and showing the running gear diagrammatically. Fig. 4 is an enlarged diagrammatic plan view of a portion of the platform at the joint, showing the truck
35 turn table in dotted lines. Fig. 5 is a diagrammatic plan view of a plurality of sections of flooring, showing the position taken by said sections at a curve on a line of railway. Fig. 6 is a similar view to Fig. 5, with
40 the exception that the plan view is of the roof.

Like numerals of reference indicate corresponding parts in each figure.

50 Referring to the drawings, *a*, *b*, *c* and *d* are the sections of the body of the car formed by the side wall sections 1, 2, 3 and 4, the roof sections 5, 6, 7 and 8 and the

fluted joint sections 9, 10 and 11, said joint sections being made of heavy rubbered fabric
55 or any suitable material and in the roof section converging from each side to the ventilators 12, 13 and 14 so that when the section *a* is joined to the section *b* by the joint section 9 and section *b* to section *c* by
60 the joint section 10, and section *c* to section *d* by the joint section 11, the whole body is flexible to the extent of the extensible properties of said fluted joint sections.

It will be understood that other forms of
65 joint sections may be used, though that described herein is probably the most serviceable and certainly the most economical and its use has been already proved in the vestibule portions of railway cars.
70

15, 16, 17 and 18 are the floor sections or
75 platforms for supporting the seating, each of the sections 16, 17 and 18 being formed at the front end in a curve extending from side to side and forming part of a circle and each of the sections 15, 16 and 17 being recessed at the rear end in a curve corresponding to the aforesaid curve and meeting the
80 same, the said sections preferably having an over-lapping joint 19 as shown in Fig. 3.

20 is a circular track formed by the flanges 21 and 22 from the underside of the circular plate 23.

24 is a turn table or plates extending into the tracks 20 and moving freely there-
85 around, said turn table being secured to any suitable kind of frame in which the running gear 25 operates.

Half of the plate 23 is rigidly secured to the section 16 of the flooring and the other
90 half of said plate extends under the rear end of the section 17, therefore, the front end of each floor section is free to move in a serpentine fashion as they are not secured at their front ends to the plates in which
95 the truck turns. The sections are connected one to the other by a flexible connection, but this is not shown here as it is only a detail and it is obvious that they must be connected in some way, the particular construction
100 of the connecting members being not essential to this invention.

26 is the seating arranged in rows and extending from one side of the car on each section of the flooring and terminating toward
105 the other side of the car, leaving the side

aisle 27 extending the full length of the car to the platform spaces 28 at the front and 29 at the rear.

30 is a rail dividing the front platform into an exit passage and a motorman's place.

31 is a door-way forming an exit leading from the front platform 28 through the side of the car.

32 is a doorway forming an exit or entrance passage, as the case may be, through the side of the car, here shown as applied to section *c*. It could of course be placed in any other section, but as here illustrated, the doorway is in the center of the car.

33 is a door-way, leading through the side of the car on to the rear platform 29 into the space partitioned off by the rail 34, said rail inclosing a smokers' space 35 on the inner side and on the other side dividing off the entrance passage 36, which leads from the door-way 37 to the side of the car at the rear end thereof and around the smokers' place 35 and past the conductor's stand 38 into the interior of the car.

39 are seats parallel with the front curves of the floor sections 16, 17 and 18 separated from the rows of seating 26 by the standing space 40.

It will be thus seen that every convenience is provided in this car, both for the rounding of curves on the line of railway, a convenient method of embarking and debarking of passengers and of making them comfortable during their passage.

In operation, the car, which is here shown as an electric railway type of car particularly for street or suburban railway purposes, travels, on a straight line of rail, exactly the same way as an ordinary car, the joint sections 9, 10, and 11 being a very small part of the whole side wall of the car, but as the car turns the corner the joints lengthen out on one side of the car and compress on the other. At the same time the front end of each section 16, 17 and 18 of the flooring turns on a plate 23 within the curve of the section of flooring, immediately in advance, thus the whole body of the car has a serpentine movement and will follow the curves of the track.

In regard to the arrangement for entrances and seating on the floor space, it will

be understood that this may be varied to some extent, though the present arrangement is extremely efficient in the handling of passengers as the door openings are in such a way as to prevent undue crowding.

What I claim as my invention is:

1. A railway car comprising a plurality of sections, the floors of said sections articulating at the ends with an arc whose diameter is equal to the width of the car, means for pivotally joining said sections at the center of the arc, and running gear disposed beneath the extreme forward point of each section.

2. A railway car comprising a plurality of sections pivotally connected together at their ends, the floorings at said ends having over-lapped joints formed in an arc spanning the entire width of the car flooring and having meeting convex roof ends and extensible joint members connecting each two sections and forming continuations of the car wall and roof, whereby said car is made continuous from end to end.

3. In a railway car, a car body comprising a plurality of pivotally connected sections having articulated floor ends meeting in an arc spanning the width of the car body and seating arranged in transverse rows and covering the major portion of each section, terminating at one end at a distance from the car wall, providing a side aisle, and a curved seat arranged parallel to the curved front end of the car flooring.

4. In railway cars, the combination with the car body comprising a plurality of sections, the flooring of one section articulating with the next section in an arc spanning the width of the car, and means for pivotally joining said flooring at the center of the arc, of a circular track secured to one section only beneath the car body to break joint between the two sections, and running gear having a circular portion of its frame engaging said circular track.

Signed in the city and district of Montreal, Quebec, Canada, this fourth day of August, 1911.

ISRAEL PASCAL.

Witnesses:

G. H. TRESIDDER,
H. GAYLOR.