B. KLEIN.

CAR FOR PROTECTING THE FEET OF PASSENGERS. APPLICATION FILED JAN. 20, 1906.

Fig. 1. Fig. 2. Hermann Conheim Martha Morton Conheim

UNITED STATES PATENT OFFICE.

BELA KLEIN, OF NEW YORK, N. Y.

CAR FOR PROTECTING THE FEET OF PASSENGERS.

No. 841,540.

Specification of Letters Patent.

Patented Jan. 15, 1907.

Application filed January 20, 1906. Serial No. 297,058.

To all whom it may concern:

Be it known that I, Bela Klein, a citizen of Hungary, and a resident of New York, in the county of New York and State of New York, 5 have invented certain new and useful Improvements in Cars for Protecting the Feet of Passengers, of which the following is a specification.

The object of the present invention is pri-10 marily an arrangement for protecting the feet of passengers traveling in railroad-cars, electric cars, omnibuses, or other cars or vehicles from injury, pain, or discomfort due to being stepped upon or trodden upon by other 15 passengers standing in the cars or walking to and fro when entering or leaving said cars.

In carrying out my invention I slightly raise the center portion of the floor of the cars where passengers are standing or walking to 20 and fro from that portion of the floor where the feet of seated passengers are resting. Instead of raising the center part of the floor I may, if convenient, lower the last-mentioned portion, or else leave the whole floorr-surface 25 on the same level and only protect or surround the part of the floor where the feet of the seated passengers are resting by sills or ribs or projections of any suitable material and shape.

In the accompanying drawings, Figures 1 and 2 show perspective views of the interior of cars embodying my invention.

a, Fig. 1, shows the center portion of the floor of a car slightly raised from b, where the 135 feet k of seated passengers are resting.

c denotes the seats of the cars.

d designates sills, ribs, or projections of any suitable material or materials and of any suitable shape for the purpose of giving still 4° greater protection to the feet of seated passengers.

e (indicated in dotted lines) shows another method for increased protection. This lateral or horizontal projection e might be re-45 movable or hinged in a convenient manner in order to turn it over or aside when necessary—as, for instance, when cleaning the carfloor or when dropping some small object on the car-floor. The said lateral projection might be used in connection with the ribs or vertical projections d.

f and b, Fig. 2, show practically the entire floor at the same level with projections g and d for protecting the feet.

If convenient, g may be curved or another 55 horizontal projection may be added to it for

partly overlapping the spaces b and i.

As seen from Fig. 1, if the foot l of a standing passenger should step over the foot of a seated passenger the foot of the former would 60 overlap or project over the foot of the lastmentioned passenger without touching or hurting him, owing to his foot being lowered. For this reason the present invention effects also an increase in the standing capacity or 65 standing room of cars, as the standing passengers can step farther toward the seated passengers, thereby leaving more room in the center of the car for other standing passengers or for passengers entering or leaving the car.

The projections d, spaced conveniently so as to leave the spaces i just wide enough for the accommodation of one foot prevent passengers walking through the car from stepping with the length of their feet across the width 75 of the feet of seated passengers. Furthermore, if used in connection with a they prevent passengers walking through the car from falling, due to suddenly stepping lower down into space b, Fig. 1, as the length of their feet, if 80 stepping across the spaces i, would always

rest upon one or more projections d. The projections a, g, and d may be pro-

vided in the cars during their construction or added afterward. Said projections may be 85 made of any suitable material or materials.

The portion a, Fig. 1, may conveniently be a rubber mat. Another good construction is to place a rubber mat of suitable dimensions in the space f, Fig. 2.

Having now described my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. An arrangement for protecting the feet of passengers in cars, consisting of spaced and 95 vertical projections on the floor, whereby the feet of seated passengers are protected from those standing, substantially as described.

2. Projections in the floors of cars, spaced and arranged to accommodate and protect 100 separately each foot of the seated passengers.

3. The combination of projections in the

floors of cars, arranged to protect separately each foot of the seated passengers, with other projections arranged to partly overlap them.

4. An arrangement for protecting the feet of passengers in cars, consisting of spaced and vertical projections on the floor, the central, raised floor portion, and horizontal projections in connection therewith to partly over-

lap the spaces allotted for the feet of seated persons.

Signed at New York, in the county of New York and State of New York.

BELA KLEIN.

Witnesses:

HERMANN CONHEIM,
MARTHA MORTON CONHEIM.