E. E. JACOBS.
SILL PLATE FOR RAILWAY CARS.

SILL PLATE FOR RAILWAY CARS. Patented Aug. 20, 1889. No. 409,404. Fig. 1. Fig. 2 WITNESSES:

ATTORNEYS.

## United States Patent Office.

ERNEST E. JACOBS, OF ARCOLA, ILLINOIS.

## SILL-PLATE FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 409,404, dated August 20, 1889.

Application filed May 21, 1889. Serial No. 311,563. (No model.)

To all whom it may concern:

Be it known that I, ERNEST E. JACOBS, of Arcola, in the county of Douglas and State of Illinois, have invented a new and useful Improvement in Doorway Sill-Plates for Railway-Cars, of which the following is a full,

clear, and exact description.

This invention relates to the metal plates used on the sills of the doorways of baggage, 10 express, and other railway-cars to protect the sills from being damaged by the loading and unloading of freight—such as trunks, boxes, and other packages—and to more or less facilitate the putting in and taking out of such 15 freight. Heretofore these plates have been of a plain angle-iron construction, presenting upper floor and downward front surfaces meeting in a sharp unyielding angle, which affords but poor facility for passing the freight 20 on or over it, is very liable to wear, and causes the trunks or other packages being drawn or pushed over it to catch and often to be seriously damaged or torn.

My invention, which is not only applicable to baggage, express, and other like freight cars, but also to refrigerator-cars on railways in loading and unloading large boxes of meat and other produce, has for its object the obviating of these defects, to make the plate more durable, and to greatly ease the labor and quicken the operation of sliding or passing the freight in and out of the car free from

injury to the package.

To these and other ends the invention consists in a doorway sill-plate for railway-cars provided with a roller along its upper front marginal portion, substantially as hereinafter described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate

corresponding parts in all the figures.

Figure 1 represents a side elevation of a railway baggage, express, or other like freight car in part with my improved doorway sill-plate applied thereto. Fig. 2 is a view in perspective of said plate applied to the floor and outside portions of the car, and Fig. 3 is a transverse section of such plate.

 $\circ$  A indicates the plate proper, which may have its floor and outside front portions b c

cast or otherwise made in one piece, and which may be secured on and over the sills d of the doorway e of the car B in the usual or any suitable way. This plate where its two por- 55 tions b c meet—that is, the upper front marginal portion of said plate—is formed with a recess f in and along it to receive with proper room for clearance within it a roller C, extending throughout the length of the plate, 60 or thereabout. Said roller is made with a series of journals g, preferably two end ones and one middle one, that rest and turn in suitable bearings, each of which may be formed of a partial bushing and of an outer bearing 65 h, of strap-like or other construction, and fastened to the plate A by screws or screw-bolts, so that said bearings can readily be taken off and put on while the plate is in position on the car. By thus providing the roller with 70 more than two bearings it will make it strong enough to carry the heaviest box or package that may be passed over it into or out of the car. The body of said roller, it should be noted, is of a sufficient size to project slightly 75 beyond the outside surfaces of the portions b and c of the plate A, and the bearings h occupy a sunken position within the body of the roller, so as to make the roller the carryingsurface for the boxes or packages passed in 80 or out of the car over the sill-plate. By means of this doorway angular sill-plate with its attached roller not only will said plate be protected from wear and made more durable, but boxes or freight may be passed in and out 85 over it much more rapidly and with less labor than heretofore and without damaging or tearing the packages.

Having thus fully described my invention, I claim as new and desire to secure by Letters 90

Patent—

1. In a doorway sill-plate for railway-cars, the angular plate consisting of floor and outside front portions recessed along their meeting surfaces and provided with a roller arged to freely rotate within said recessed part of the plate and supported by suitable bearings therein, and having its body arranged to project beyond the exterior surfaces of the floor and outside portions of the plate, substantially as specified.

2. In a doorway sill-plate for railway-cars,

the angular plate A, having floor and outside front portions b c, provided with a longitudinal recess f where said portions meet, in combination with the roller C, arranged to freely rotate within said recess, with its body portion projecting beyond the exterior surfaces of the portions b c and constructed with intermediate and end journals, and detachable bearings h, constructed to occupy a sunken position within the body of the roller, essentially as shown and described.

3. As a new article of manufacture, a doorway sill-plate for railway-cars, provided with a projecting roller along its upper front marginal portion, substantially as set forth.

ERNEST E. JACOBS.

Witnesses:

A. SNYDER, H. H. MOORE, Jr.