

(No Model.)

2 Sheets—Sheet 1.

E. W. APPELMAN.  
PLATFORM AND GATE FOR CARS.

No. 497,744.

Patented May 16, 1893.

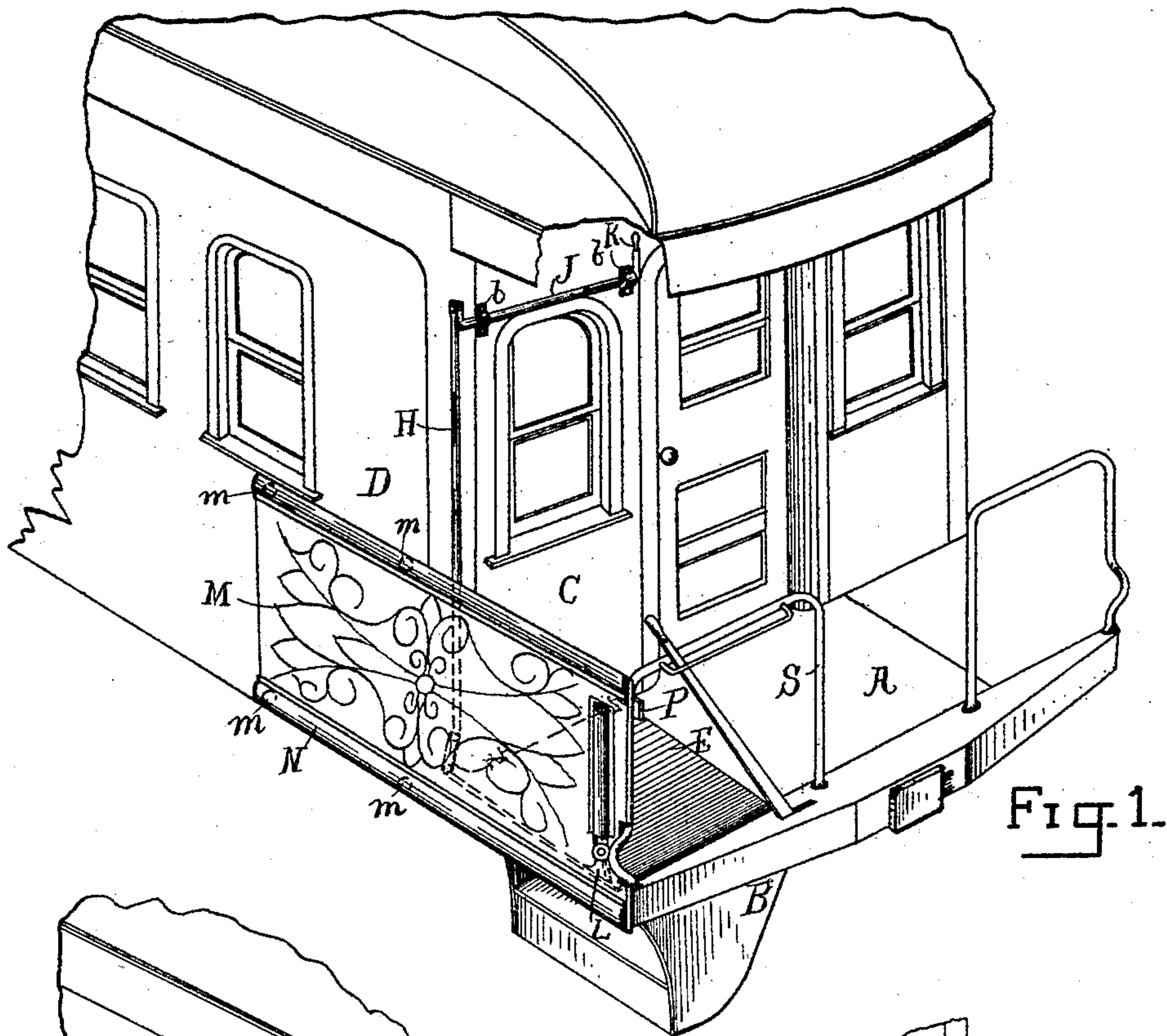


Fig. 1.

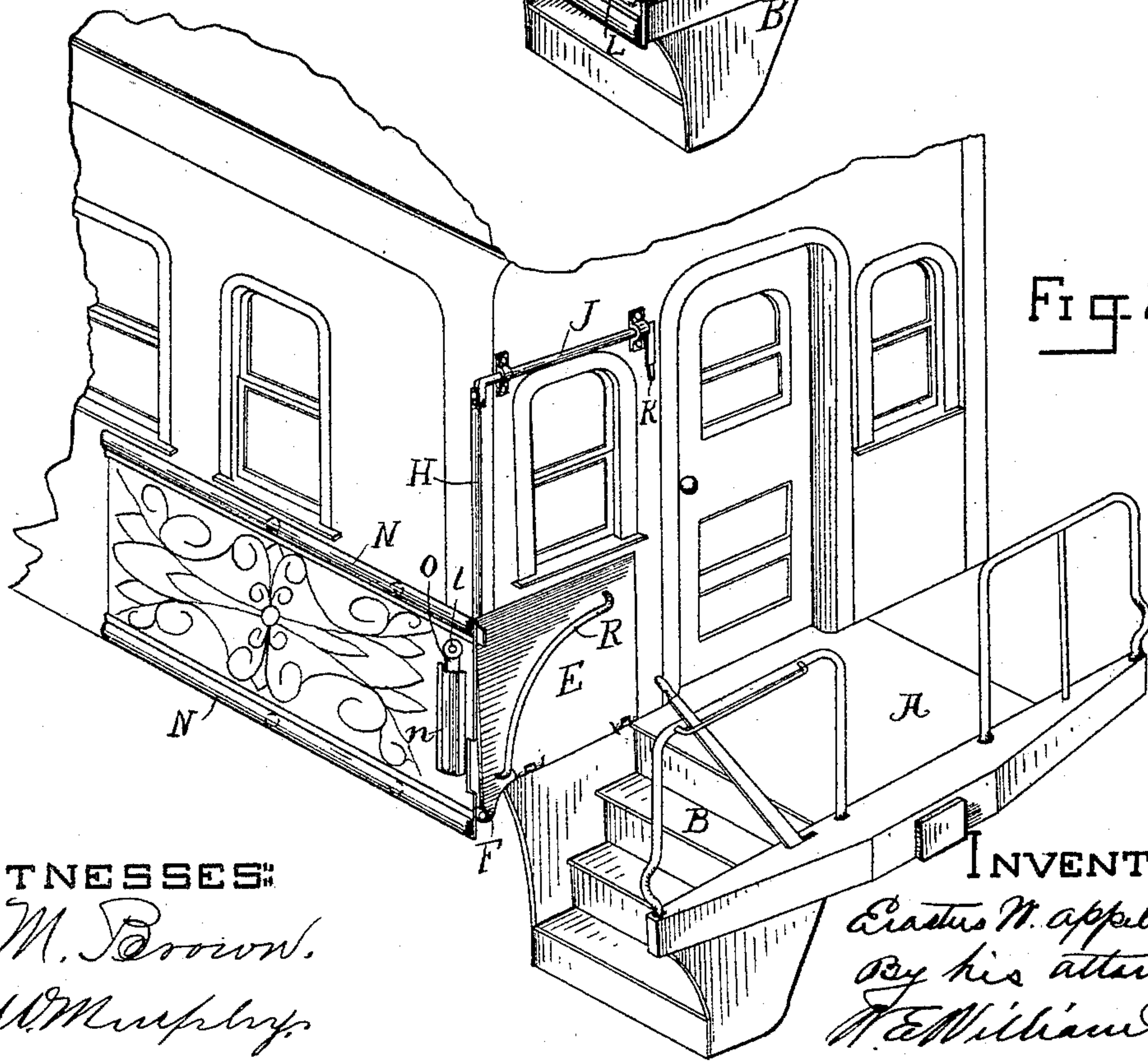


Fig. 2.

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L. W. Murphy.

INVENTOR:  
E. W. Appelmann  
By his attorney  
T. E. Williams

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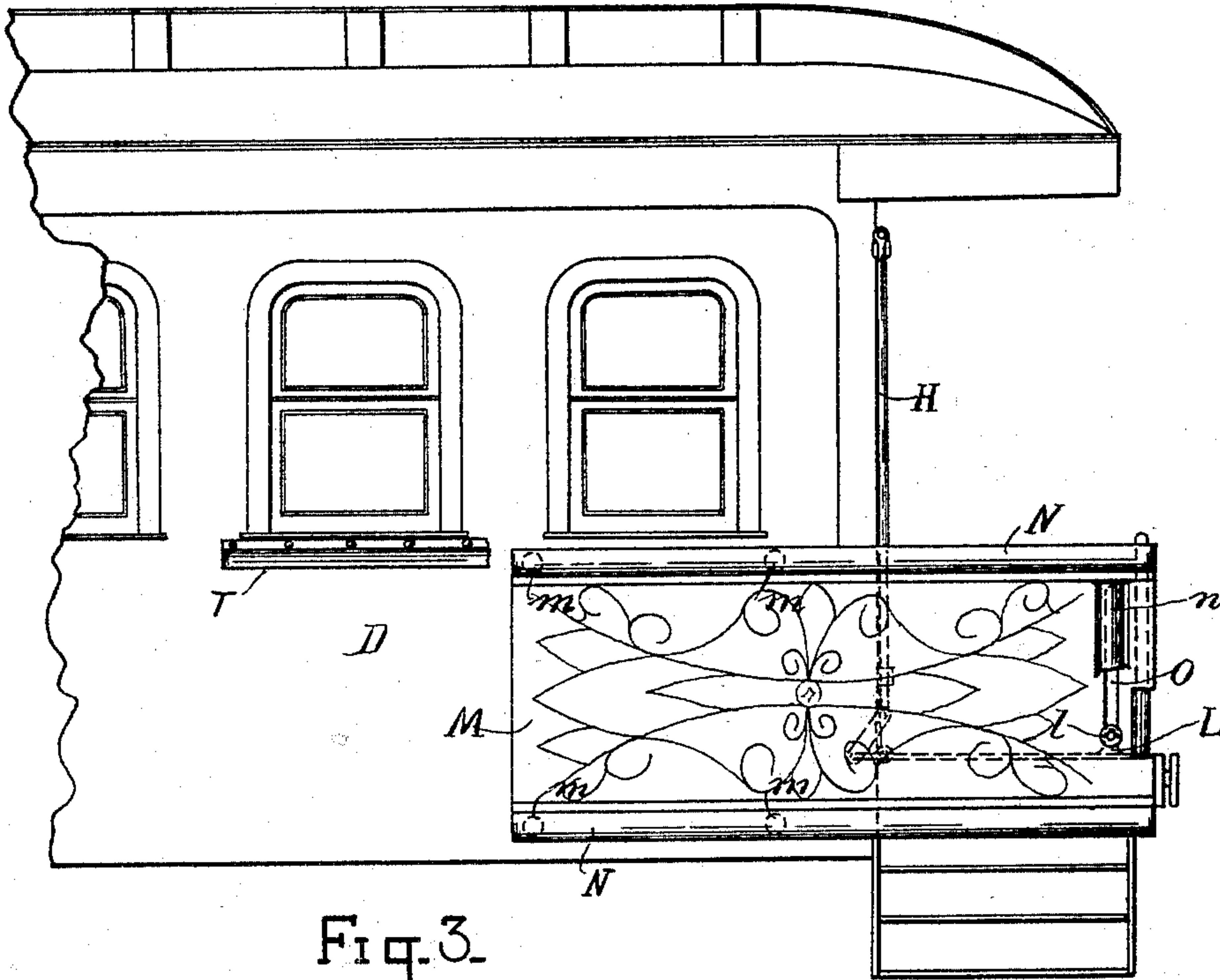


Fig. 3.

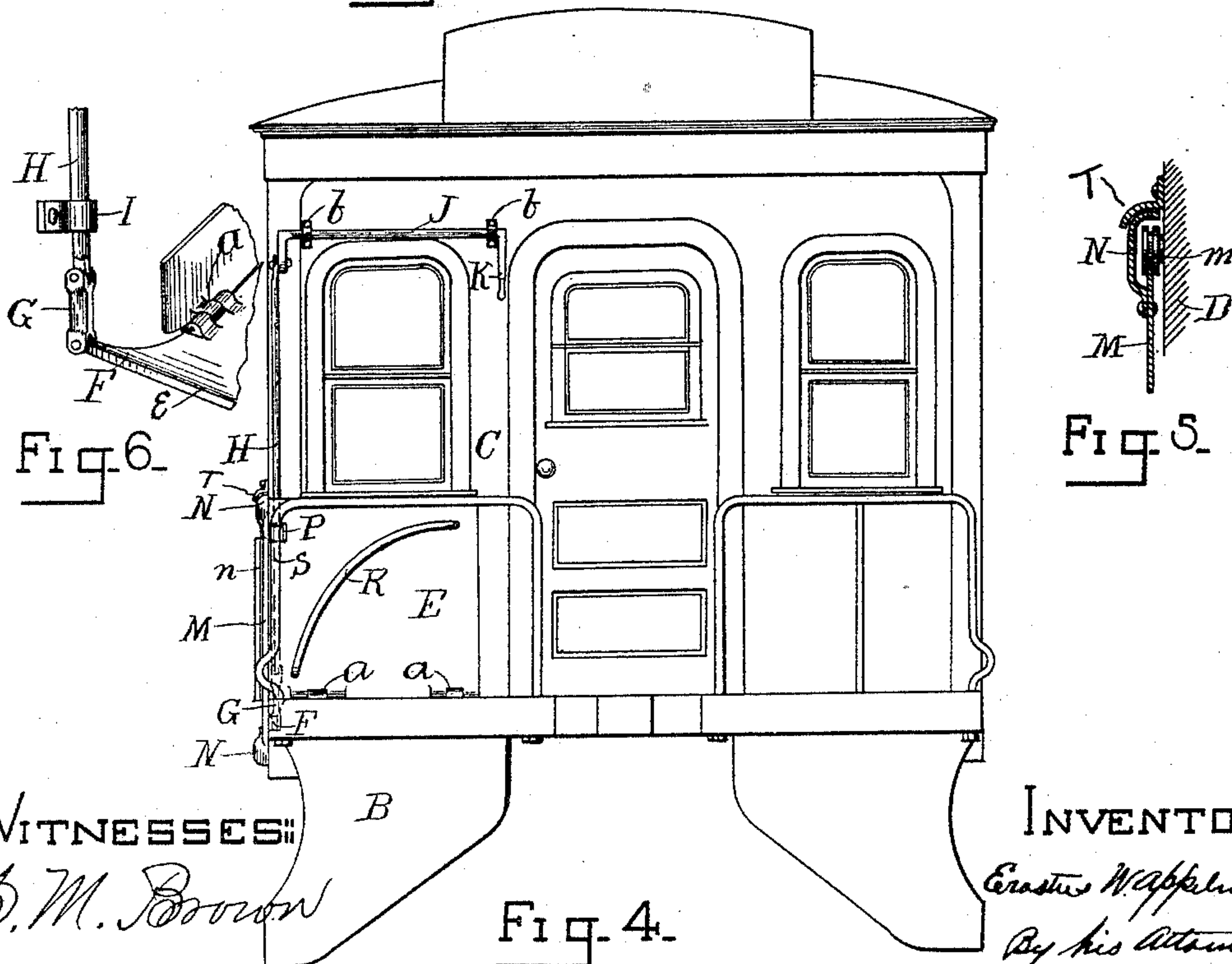


Fig. 4.

WITNESSES:

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INVENTOR:

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By his Attorney  
W. E. Williams



# UNITED STATES PATENT OFFICE.

ERASTUS W. APPELMAN, OF CLERMONT, IOWA, ASSIGNOR OF ONE-HALF TO  
R. P. BERRY, OF SAME PLACE.

## PLATFORM AND GATE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 497,744, dated May 16, 1893.

Application filed August 29, 1892. Serial No. 444,346. (No model.)

*To all whom it may concern:*

Be it known that I, ERASTUS W. APPELMAN, a citizen of the United States, residing at Clermont, in the county of Fayette and State of Iowa, have invented a new and useful Improvement in Platform-Balconies for Railway-Cars, of which the following is a specification.

The objects of my invention are to provide a mechanical device whereby an ordinary passenger car platform can be instantly converted into a balcony with a railing on all sides and a floor covering the steps, and permitting the full width of the car for a platform balcony, which balcony can be used for observation with perfect safety as it is inclosed on all sides and is intended as a safeguard against accidents to passengers as it closes the entrance to the steps before the train starts and persons on the platform are guarded against falling off at all times. I attain these objects by the mechanism illustrated in the accompanying drawings in which—

Figure 1 is a perspective view showing the platform balcony in position. Fig. 2 is a perspective view showing the balcony folded up when the car is receiving or discharging passengers. Fig. 3. is a side elevation showing the balcony in position. Fig. 4 is an end elevation showing the balcony folded up. Fig. 5 is a detail showing the rollers and guard for the same on side of the car. Fig. 6 is a detail showing the connection of the actuating rod H and the plate E.

Let A be any ordinary car platform and B the steps thereof and C the front end of the car and D the side of the car. To the front end of the car on a level with the floor of the platform there is pivoted at "a" plate E and at the outside inner corner there is a projecting arm F, pivoted by a link G to the end of the rod H, the lower end of which rod H is held in a keeper I. Said rod H extends up along to the corner of the car and is pivoted to a rock shaft J, which rock shaft J is held in bearings "b b" on the end of the car and the rock shaft J is provided with an actuating arm K. The plate E is provided at its outer corner with a projection L which furnishes a bearing for the small roller "l."

On the side of the car D there is pivoted by means of the rollers "m m m m" the plate M.

This plate M is provided with a slot O in its forward end in which the roller "l" is held and adapted to travel up and down in the operation of the device. The plate M is provided with guards or casings N for the rollers "m m m m" and a cover plate "n" for the slot O and roller "l." These casings N serve to cover the rollers "m" from view and to protect them from sleet and ice and the top one serves to round the edge of the plate M making a better railing for the balcony. At the forward end of this plate M there is provided a catch or an engaging device P which engages the end railing of the platform S when the balcony is in use. The plate M is shown as being embossed to improve its appearance, for this plate M there can be substituted a lattice frame work of any desired design. To protect the rollers "m" from snow and ice a guard T is fastened on the side of the car projecting out over the plate M and its fasteners. This guard is shown only in Figs. 3, 4 and 5 and in Fig. 3 a part of it only is shown. On the lower edge of the plate E there is provided the ordinary hand rail R which when the balcony is folded back serves the purpose of the ordinary hand rail.

When at stations and the car is receiving and discharging passengers the balcony is folded back in the positions of Figs. 2 and 4 and preceding the departure of the train the brakeman lifts up the handle K which, by means of the rock shaft J pulls up the rod H which through the link G pulls up the pivot F which causes the plate E to revolve forward on its pivots "a" and falls to the position of Figs. 1 and 3 covering the steps and thereby extending the floor of the platform the full width of the car, and as the plate E revolves to the position of Figs. 1 and 3 the roller "l" working in the slot O draws forward the plate M and when home the catch P engages the front railing S which completes the balcony and on arriving at a station the operator pulls down the lever K and thereby throws up the plate E and back to plate M leaving the way clear to passengers.

What I claim is—

1. A platform for a car provided with the ordinary steps thereof, a movable cover for said steps pivoted to the car and adapted to



be folded up to clear the steps and passage way and to be let down covering said steps and forming part of the floor of the platform. said movable cover provided with a hand rail  
5 on its under or outer side adapted to be used as the ordinary hand rail when the cover is up substantially as shown and described.

2. A car platform having a plate "E" pivoted to the car, substantially as shown, and  
10 connected to and actuated, in folding, by a rod "H" extending up from said plate, at the corner of the car, and said rod "H" connected to a hand lever by which the device is operated, substantially as described.

15 3. A car platform having a plate "E" pivoted to the car, adapted to cover and uncover the steps thereof, combined with a gate "M" closing the entrance to the steps, said gate "M" held in ways on the outside the car and  
20 adapted to be drawn forward in the lowering of the plate "E" and driven back by the raising the plate "E," said gate "M" connected to said plate "E" by a slot and roller, substantially as shown.

4. A car platform, the combination of a 25 plate "E" covering and uncovering the steps thereof and pivoted to the car; and an actuating mechanism consisting of a rock shaft "J" rod "H," link "G" and projection "F," substantially as shown. 30

5. A car platform having a plate pivoted to the car and adapted to cover and uncover the steps, combined with an actuating mechanism, which actuating mechanism is provided with a handle "K" near the door of the car, and a 35 rock shaft "J" and connecting rod "H" extending down the corner of the car and connected to the plate, in combination with a gate closing and unclosing the entrance to the platform, pivoted to the car and to the before 40 mentioned plate, substantially as shown.

In testimony whereof I affix my signature in the presence of two witnesses.

ERASTUS W. APPELMAN.

Witnesses:

S. M. BROWN,  
L. W. MURPHY.