

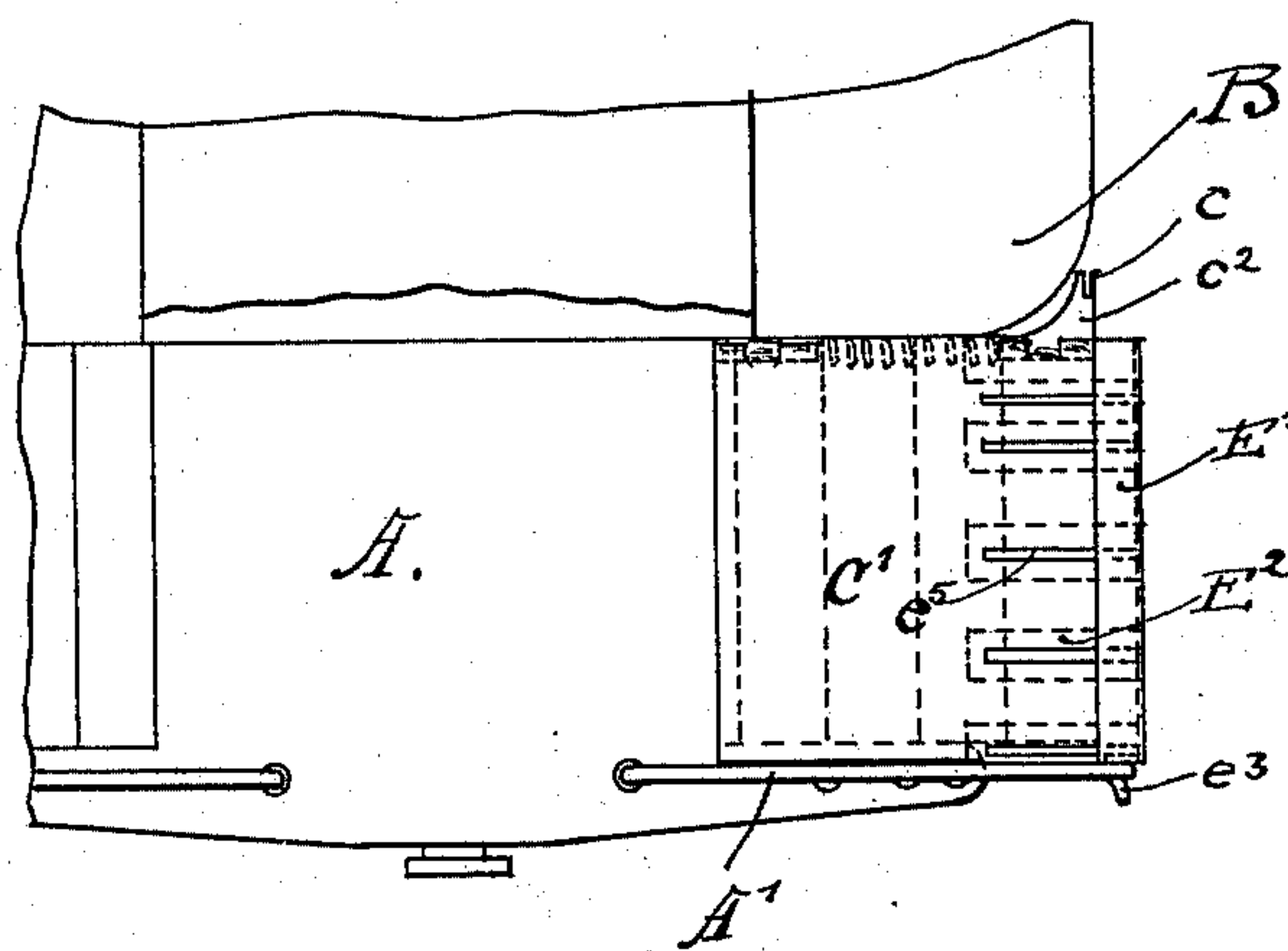
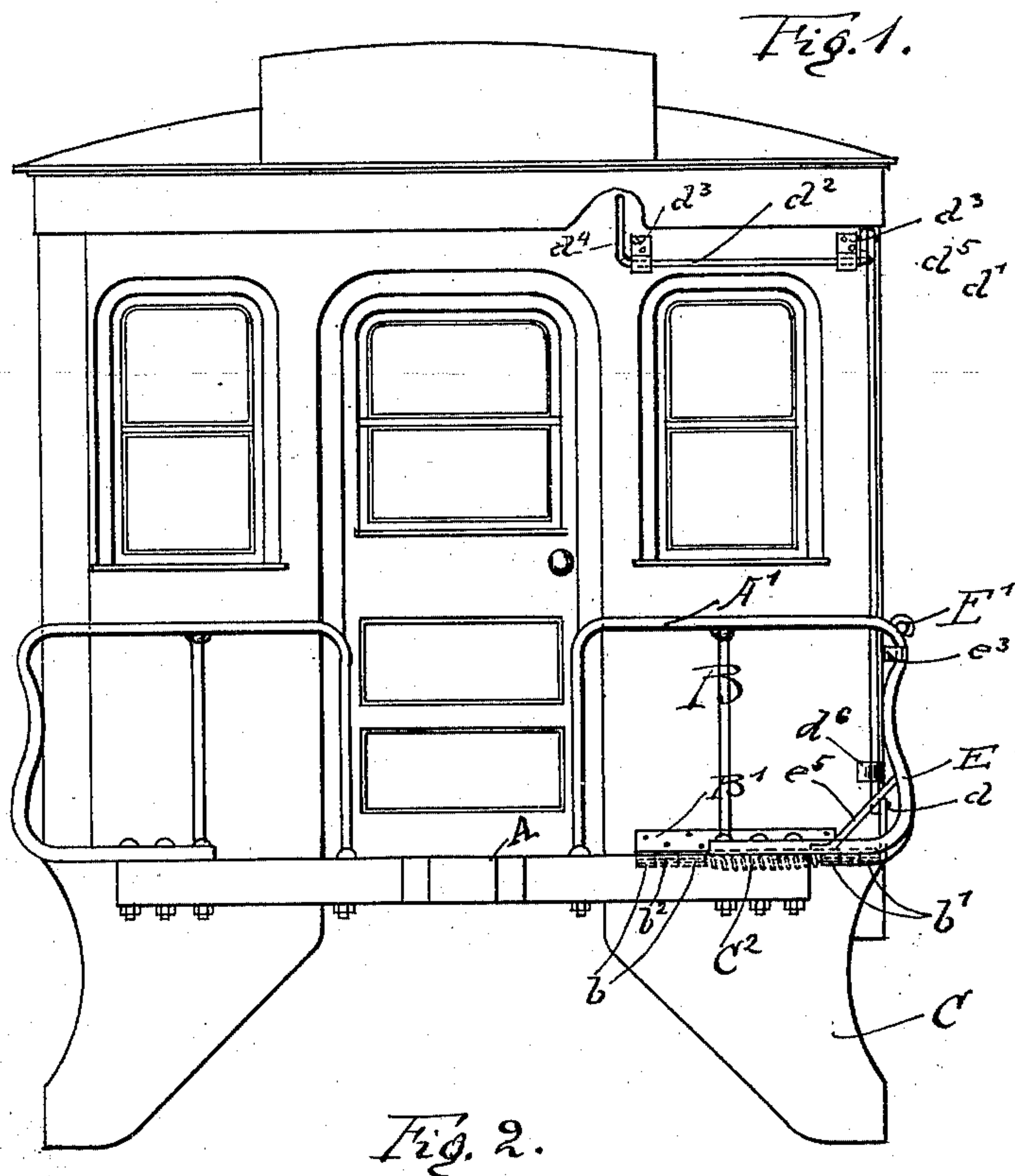
(No Model.)

2 Sheets—Sheet 1.

E. W. APPELMAN.
CAR PLATFORM BALCONY.

No. 509,641.

Patented Nov. 28, 1893.



Witnesses:

Chas. Knast.

Chas. E. Barber.

Inventor.

E. W. Appelman.

By N. E. Williams atty.

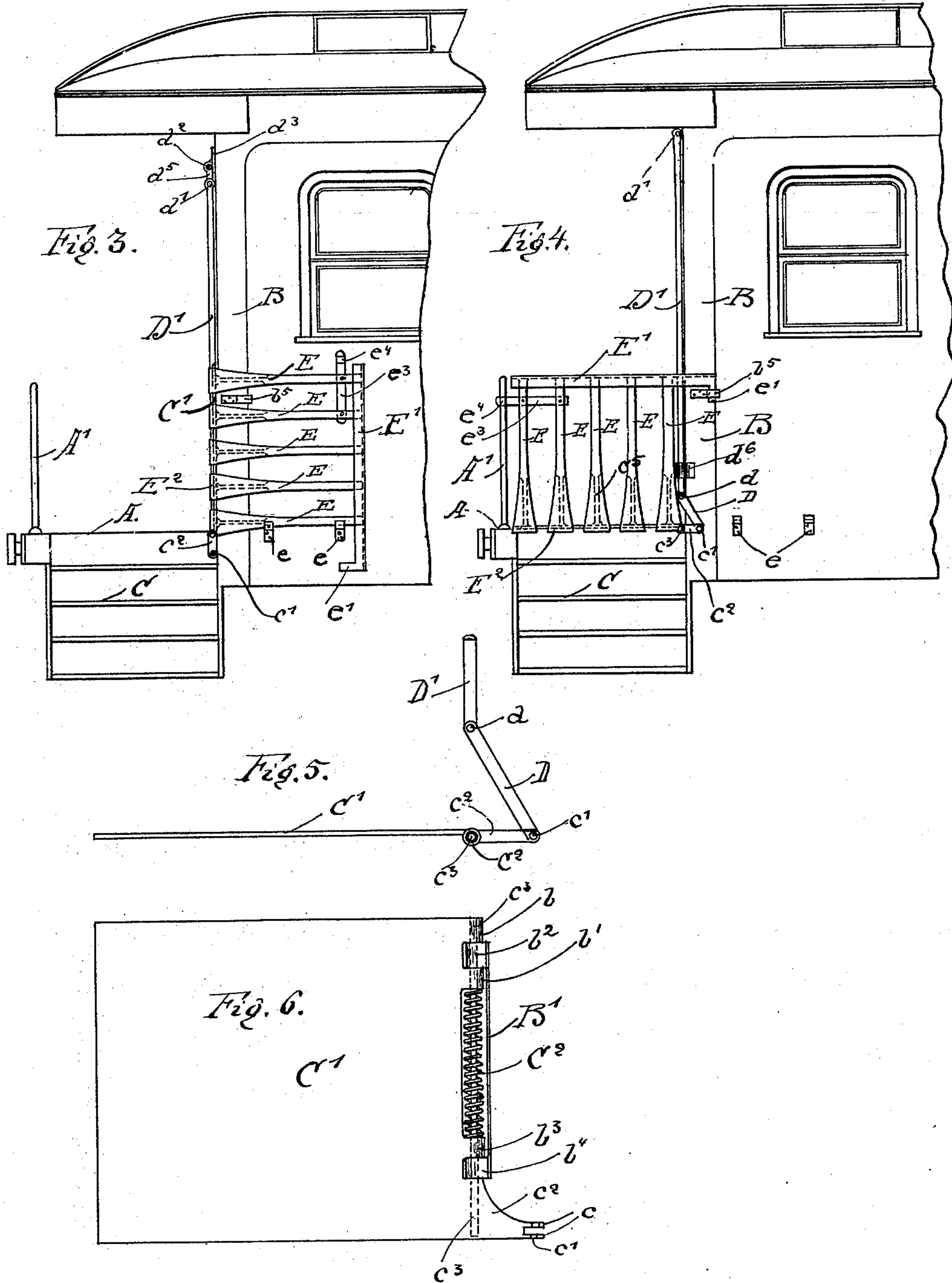
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By W. E. Williams atty

UNITED STATES PATENT OFFICE.

ERASTUS W. APPELMAN, OF CLERMONT, IOWA.

CAR-PLATFORM BALCONY.

SPECIFICATION forming part of Letters Patent No. 509,641, dated November 28, 1893.

Application filed February 21, 1893. Serial No. 463,183. (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 Car-Platform Balconies, of which the following is a specification.

My invention relates to car platforms of the ordinary type and has for its object to convert an ordinary platform to a balcony serving a similar purpose as the vestibule, but without some of its objections; and the invention consists in the mechanical elements and combinations set forth in the claims hereof.

Reference will be had to the accompanying drawings, in which similar letters refer to similar parts throughout the several views.

Figure 1 is an end view of a car showing my invention on one side only. Fig. 2 is a plan of a section of the car corner showing the invention. Fig. 3 is a side view showing the balcony folded up. Fig. 4 is a side view with the balcony down. Fig. 5 is a detail side view showing the links connecting the floor plate. Fig. 6 is a plan of the floor plate.

In the drawings "A" designates any ordinary car platform to which there is the front rail "A'."

"B" designates the end of the car, to which, on a level with the floor of the platform, there is fixed a hinge plate "B'." To this hinge plate "B'" there is hinged a floor plate "C'" which covers and uncovers the steps "C" and has hinge lugs "b, b', b³" engaging by means of the hinge pin "c³" the hinge lugs "b², b⁴" of the hinge plate "B'," and this plate "C'" is provided with a projection "c²" which is provided with lugs "c" having a pivot "c'" engaging the link "D" pivoted to rod "D'" at "d" which rod "D'" is held in a keeper "d⁶" and is pivoted at "d'" to a lever "d⁵" on shaft "d²" held in bearings "d³" on the end of the car, and provided with an actuating handle "d⁴," by which the device is operated.

To the outer edge and top of the plate "C'" there are fixed railing posts "E" which are firmly fixed to top of plate and connected by braces "e⁵" and these railing posts extend up and are fixed in a top rail "E'." To the two forward posts "E" there is fixed an engaging clasp "e⁸" with a notch "e⁴" which engages

the front rail as the device is lowered into position of Fig. 4 from Fig. 3. To the rear end of the rail "E'" there is a projection "e'" extending down to engage clip "b⁵" fixed to the corner of the car and as the device is lowered "e'" engages "b⁵," thus, when the device is in position, the rail "E" is supported at both ends. To the side of the car there are two supporting brackets which support the railing when in position of Fig. 3. On the hinge pin "c³" of the plate "C'" there is a coil spring "C²" which counterbalances the weight of the plate "C'" and railing "E'" which materially aids in operating the device.

The operation of the device is thus: The railing and platform are folded back as in Fig. 3, while the passengers are boarding and when all aboard, the operator by the lever "d⁴" pulls up the lever "d⁵" and hence the rod "D'" and the projection "c²," lowering the plate "C'" with its railing, the plate "C'" covering the steps and its railing closing the entrance to the steps, making platforms of the car as safe as the vestibule and much more pleasant in mild weather, and this railing being attached to the plate "C'" and carried thereby, and the whole counterbalanced by a spring as shown, makes it easy of operation and this device can readily be attached to any ordinary car platform, which is a desideratum, and can be operated from a convenient position for the operator.

What I claim, and desire to secure by Letters Patent, is—

1. A car platform having a plate "C'" pivoted to the car, covering and uncovering the steps, and said plate carrying a railing closing and unclosing the entrance to the steps, and the whole counterbalanced in its movement, to facilitate its operation, substantially as shown.

2. A car platform having a plate "C'" covering and uncovering the steps, pivoted to the car, said plate carrying a railing closing and unclosing the entrance to the steps, and the whole counterbalanced in its movements substantially as shown.

3. A car platform having a plate "C'" pivoted to the car, covering and uncovering the steps and carrying a railing closing and unclosing the entrance to the steps, and the

same connected to mechanism for operating the device in its movements, which mechanism is provided with an actuating handle " d^4 " located near the door of the car to be available
5 to a convenient position of the operator.

4. A car platform having a plate pivoted to the car, covering and uncovering the steps and carrying a railing closing and unclosing the entrance to the steps by the movements
10 of the plate, said plate and railing operated in its movements by a link "D," rod "D'," lever " d^5 ," shaft " d^2 " and handle " d^4 ," substantially as shown.

5. A car platform pivoted to the car, and
15 carrying a gate which moves with the platform through an arc of ninety degrees to the position shown.

6. A car platform pivoted to the car, and

carrying a gate which moves with the platform through an arc of ninety degrees to the
20 position shown and provided with actuating mechanism substantially as shown.

7. A car platform pivoted to the car and carrying a gate which moves with the platform through an arc of ninety degrees to the
25 position shown, and the same counter balanced in its movement for the purpose described.

In witness whereof I have hereunto subscribed my name in the presence of two witnesses.
30

ERASTUS W. APPELMAN.

Witnesses:

F. W. HOSSFELD,
FRED LARRABEE.