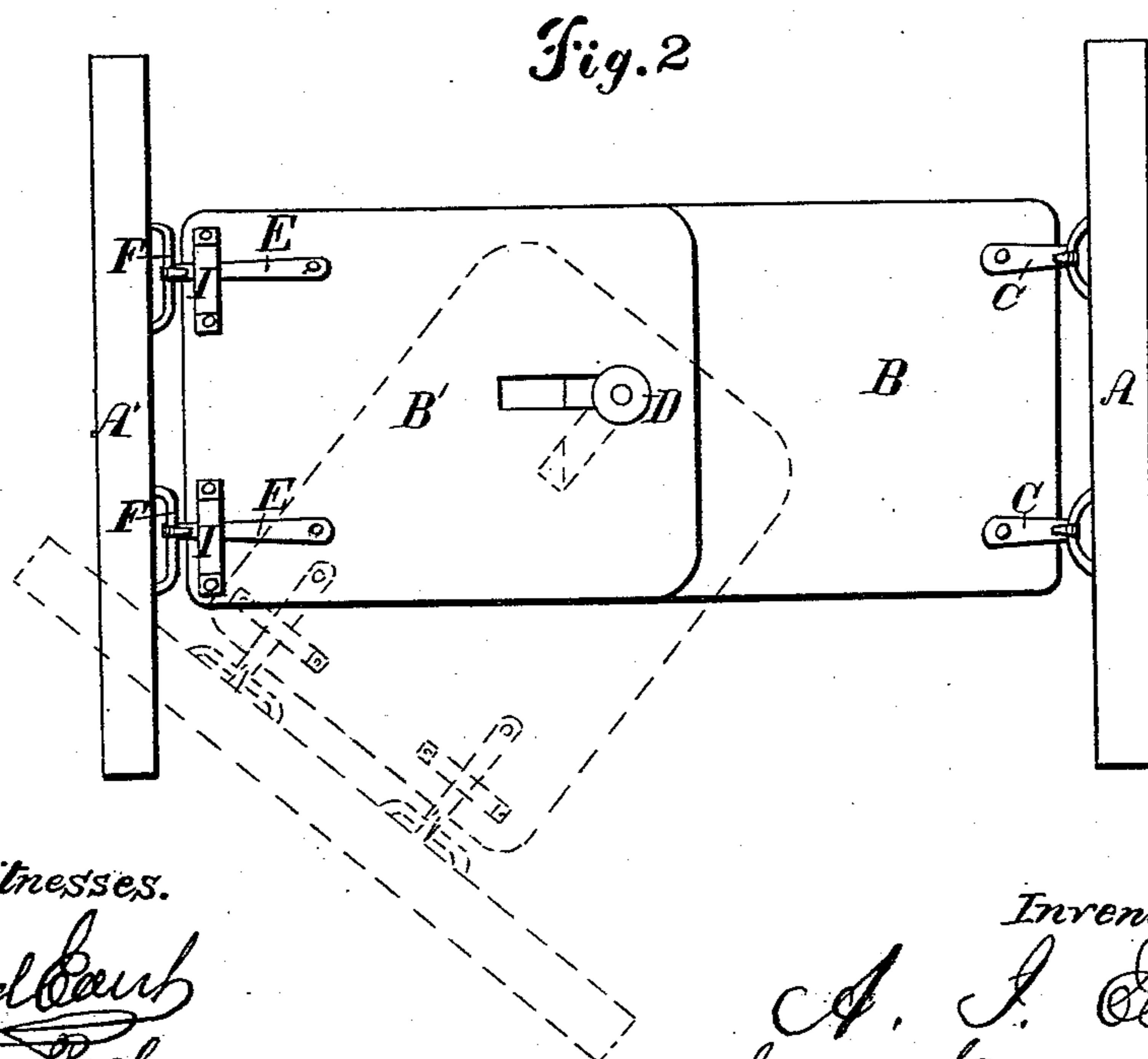
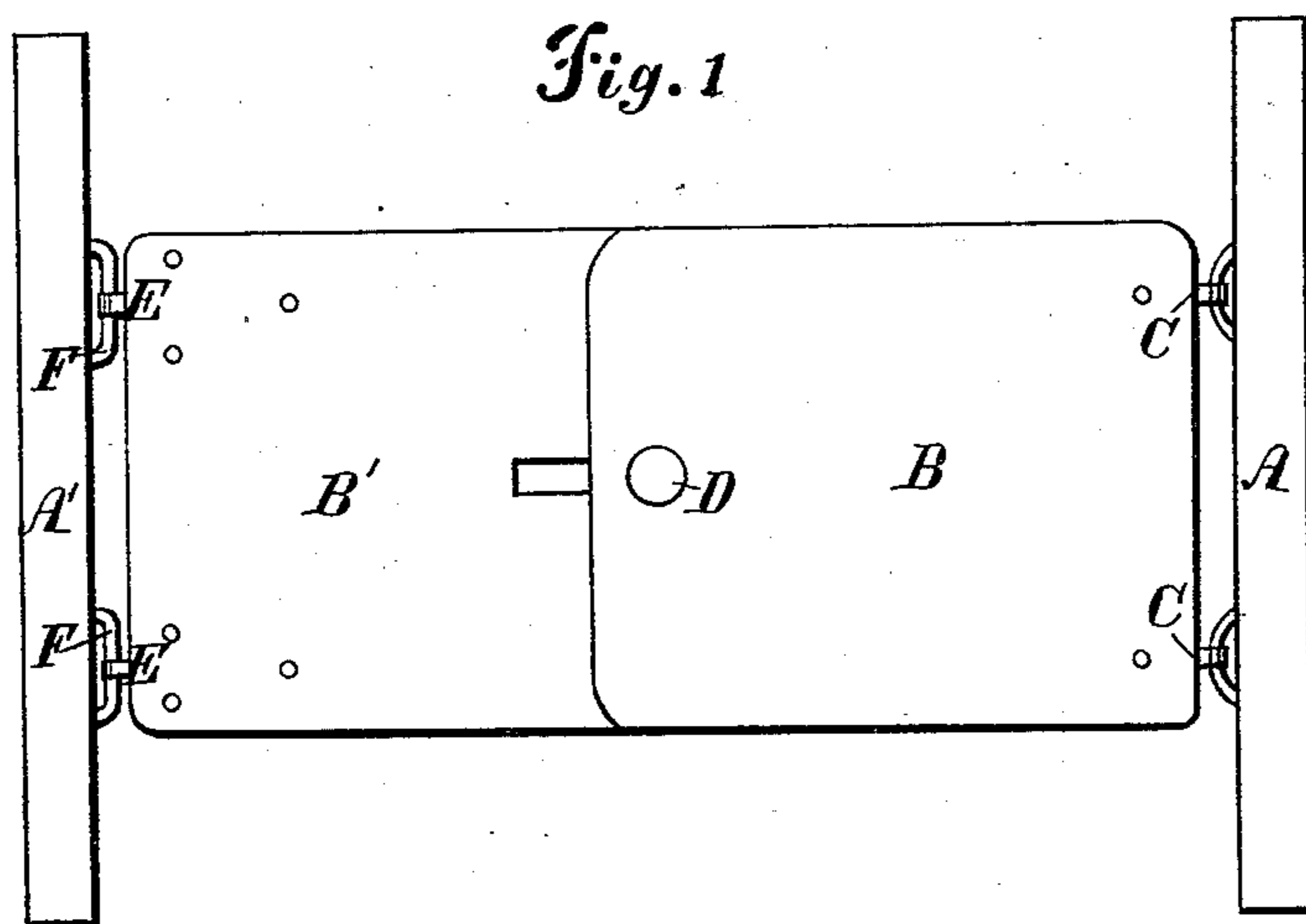


A. J. ELDER.

Safety Bridge for Railroad Cars.

No. 84,808.

Patented Dec. 8, 1868.



Witnesses.

Leopold Baer
S. W. Pool.

Inventor.

A. J. Elder
per Alexander T. Mason
Atty.



ALBERT J. ELDER, OF KANSAS CITY, MISSOURI.

Letters Patent No. 84,808, dated December 8, 1868.

IMPROVED SAFETY-BRIDGE FOR RAILWAY-CARS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ALBERT J. ELDER, of Kansas City, in the county of Jackson, and in the State of Missouri, have invented certain new and useful Improvements in Safety-Bridges or Platforms for Railroad-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a safety-bridge or platform for connecting railroad-cars, so that passengers may pass from one car to another with perfect safety, thereby avoiding many accidents which are always liable to occur while the cars are in motion.

In order to enable others skilled in the art to which my invention appertains, to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a plan view, and

Figure 2, a bottom view.

A represents the front end of the platform of a railroad-car, to which a plate, B, is hooked, by means of the hooks C C, as shown in the drawings.

At the centre, near the front end of the plate B, a headed bolt, D, is placed, which bolt, in passing downwards, goes through a slot in a similar plate, B', and there secured by some suitable means, thus holding the two plates, B B', together, but allowing them to turn sideways, and also to contract or separate, according to the motion of the cars.

The plate B' is attached to the platform A' of a succeeding car, by means of hooks E E, which are pivoted to the under side of said plate, and inserted into oblong eyes or bent metal bars F F, on the end of the platform A'.

I also place bent bars I I on the under side of the plate B', as shown in fig. 2, which protect the hooks E E, and allow them to turn sufficiently towards each side, so as to conform to the motion of the cars at all times.

It will thus be seen that whichever way the cars may turn, the safety-bridge will accommodate itself to the movement, and also the necessary contraction and expansion are provided for.

When coupling or uncoupling the cars, the plates B B' are easily removed, by merely unhooking the same, or they can be turned up, as is easily seen, by unhooking the pivoted hooks E E, and allowing the hooks C C to act as a hinge, in which case the two plates may be stowed away on top of the stationary platform of the car.

Having thus fully described my invention,

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

1. Two plates, B B', one provided with a headed bolt, D, and the other with a slot, when hooked to the opposite ends of two railroad-cars, substantially as and for the purposes herein set forth.

2. The pivoted hooks E E, held in place by the stirrups I I, and secured to the platform A' by the eyes F F, in combination with the slotted plate B' and plate B, to operate substantially as herein set forth.

3. The combination of the plates B B' with the headed bolt D passing through the slotted plate B', hooks E and C, stirrups I, and eyes F, all substantially as shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand, this 21st day of September, 1868.

A. J. ELDER.

Witnesses:

EDM. F. BROWN,
LEOPOLD EVERT.