

(No Model.)

J. B. MAINES.
CAR COUPLING.

No. 480,110.

Patented Aug. 2, 1892.

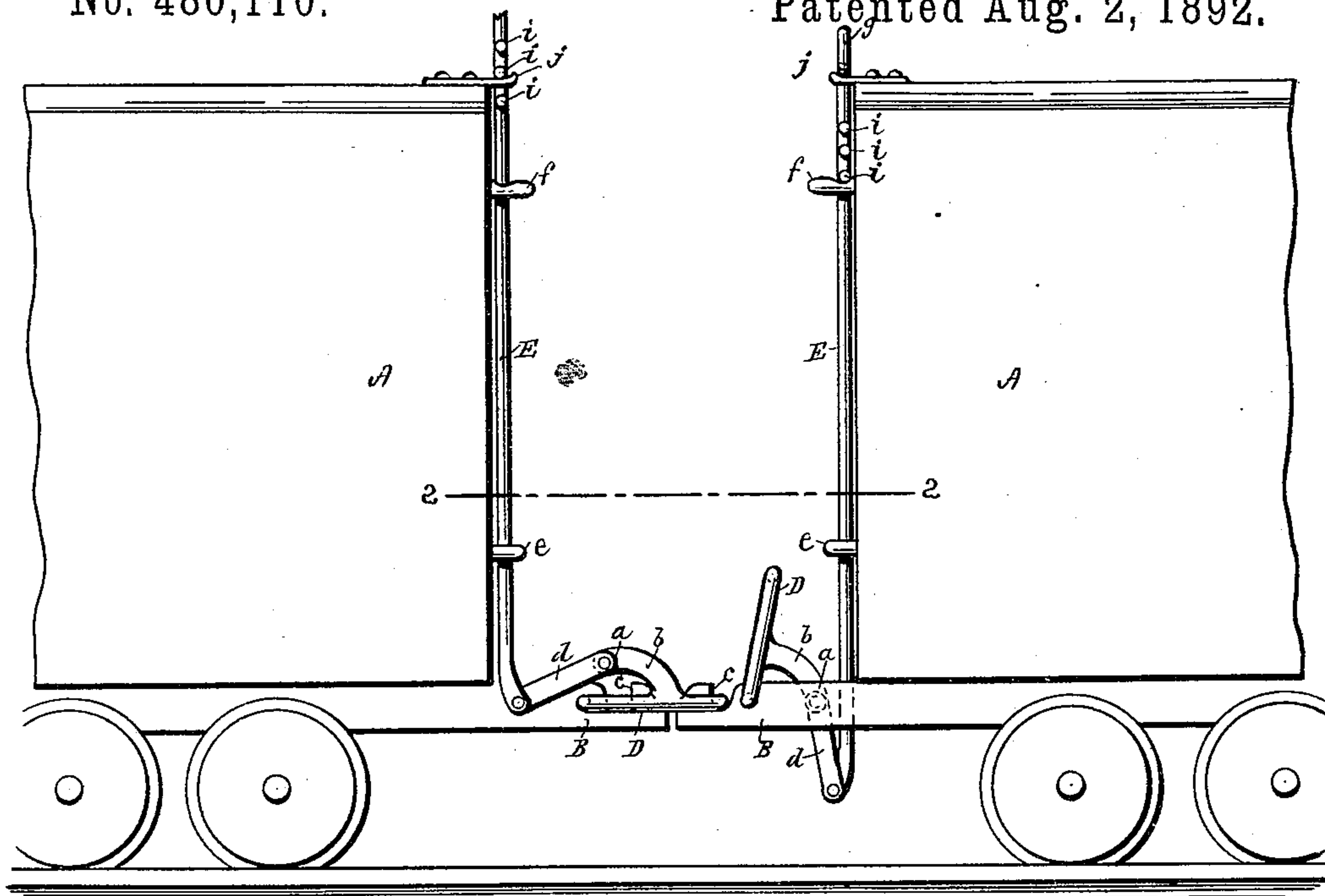


Fig. 1.

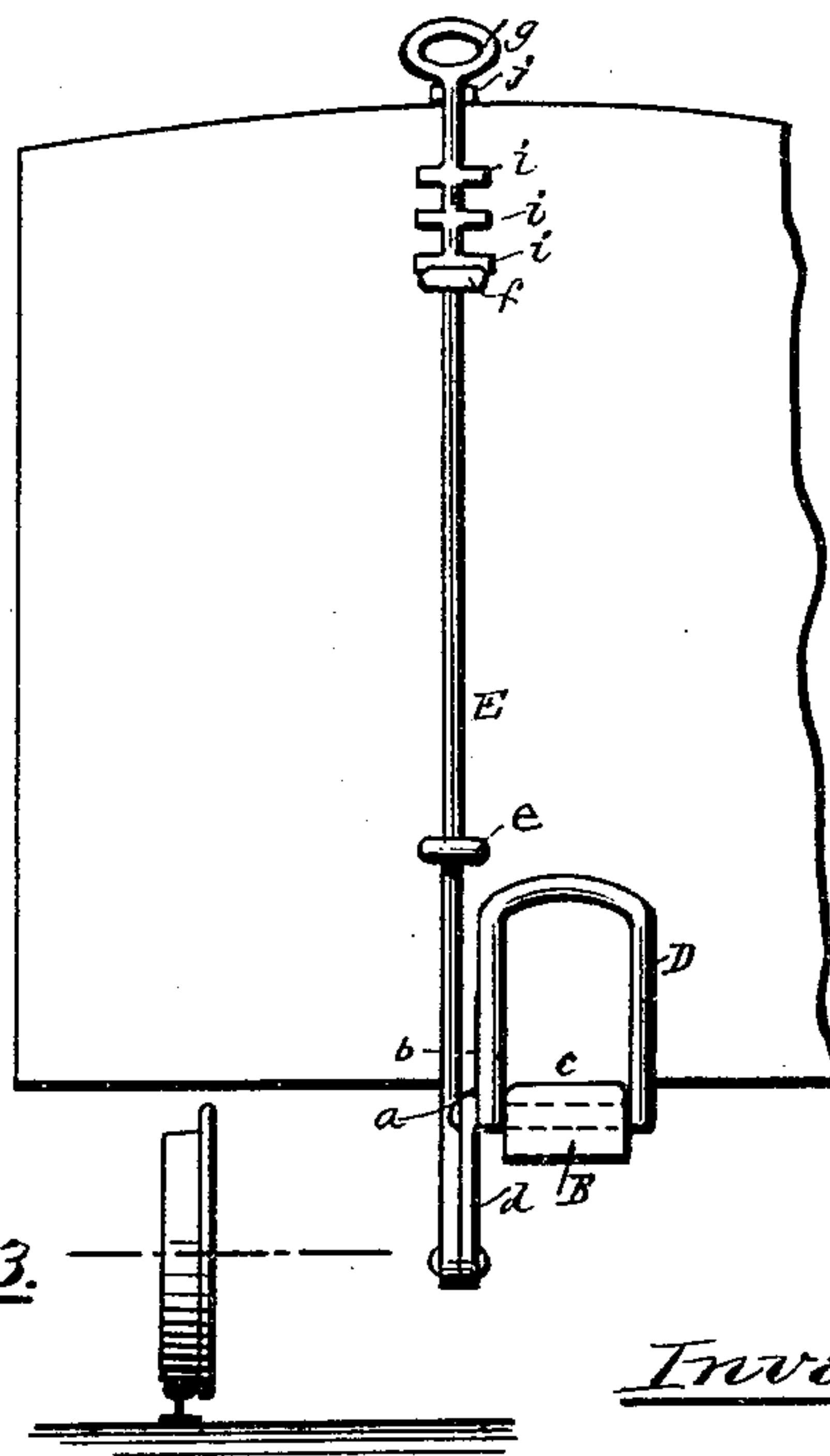
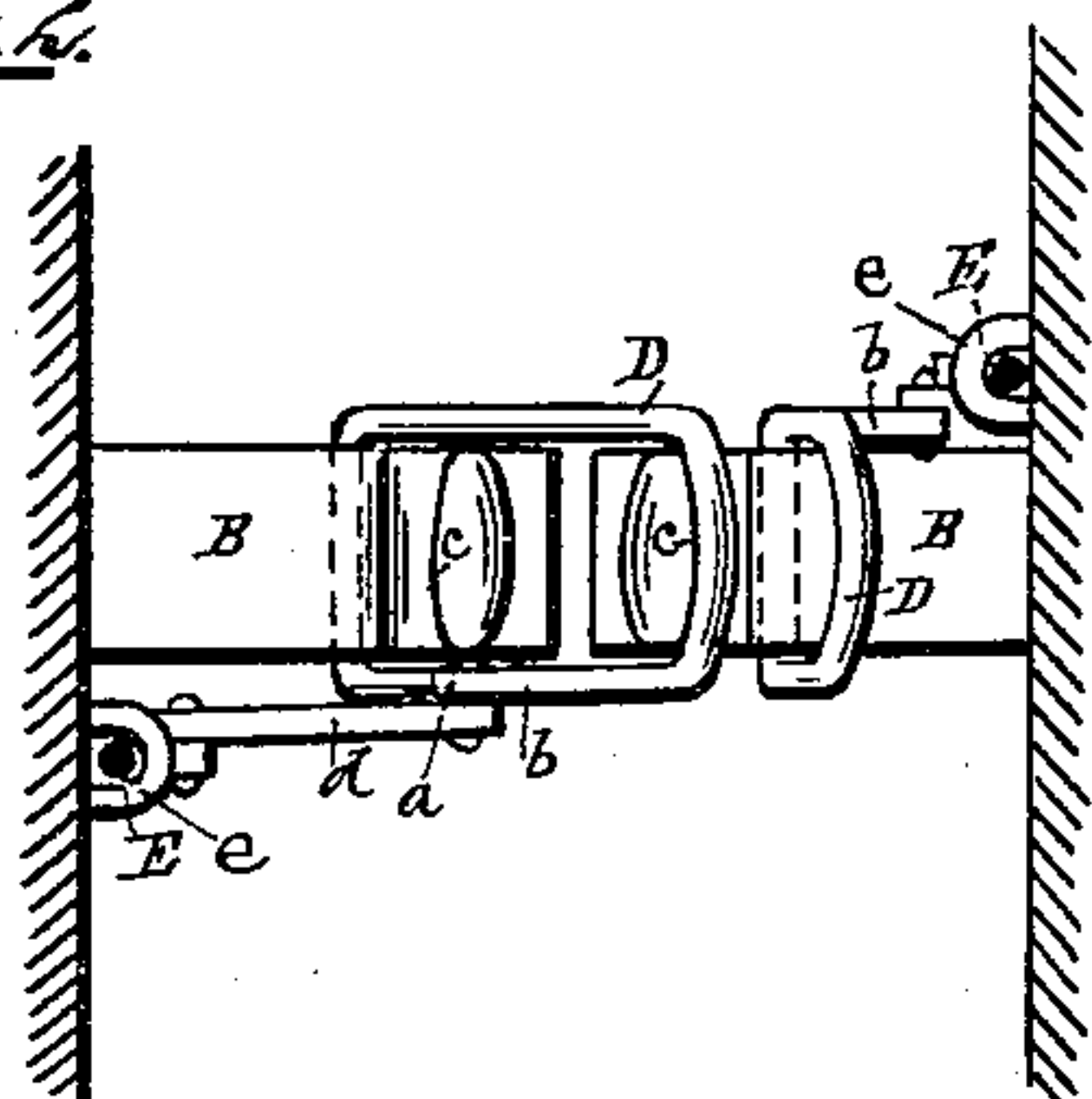


Fig. 3.

Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN B. MAINES, OF PROVIDENCE, RHODE ISLAND.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 480,110, dated August 2, 1892.

Application filed March 16, 1892. Serial No. 425,170. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. MAINES, a citizen of the United States, residing at Providence, in the State of Rhode Island, have invented a new and useful Improvement in Car-Couplings, of which the following is a specification.

The object of my invention is to provide simple and efficient means for coupling freight-cars without danger to the brakeman; and it consists in the improved construction of the coupling for convenient and safe operation, as hereinafter fully set forth.

Figure 1 represents a side elevation of the end portion of two coupled railroad-cars. Fig. 2 represents a transverse section taken in the line 2 2 of Fig. 1, showing a top view of the hook-bars. Fig. 3 represents a partial end view of a car, showing the coupling-link in its elevated position.

In the accompanying drawings, A represents the body of the car, and B the hook-bar provided with the engaging notch or hook *c*, adapted to receive the coupling-link D of the opposite car. To the hook-bar B is pivoted the coupling-link D, provided at one side with a rigid arm *b*, to the end *a* of which is jointed the connecting-link *d*, which is also jointed to the operating-rod E, the said rod being made to pass vertically through the guide-eyes *e* and *f* at the end of the car and terminating in the handle *g* for convenient manipulation. At the side of the rod E are placed the pins *i i* at suitable distances apart, which, when the brakeman moves the rod E back and forth in the elongated guide-eye *f*, will catch over the hook-rest *j* at the top of the car and serve

to lock the coupling-link D in its set position, as shown in Fig. 1, each of the pins *i* being used, according as the hook-bar B of the opposite car is in the same horizontal plane or higher or lower than the hook-bar to which the coupling is pivoted, and when the coupling-link D is in engagement with the hook-bar B of the opposite car the coupling-link belonging thereto will be held in its raised position, as shown in Figs. 1 and 3.

In coupling the cars the coupling-link D is held in its elevated position until the hook-bars B of the cars touch each other. The brakeman then raises the rod E upon one of the cars, which, through the action of the link *d* upon the arm *b* of the coupling-link D, will cause the said coupling-link to be thrown over the hook *c* of the hook-bar B of the opposite car, and the said coupling-link will be held in its place by means of one of the pins *i*, which will catch over the hook-rest *j* and serve to hold the coupling-link in proper engagement with the hook *c*. The coupling of the cars can thus be effected from the roof of the car and with entire safety to the brakeman.

I claim as my invention—

In a car-coupling, the combination, with the hook-bar B, of the coupling-link D, provided with the arm *b*, the connecting-link *d*, the operating-rod E, provided with the pins *i i* and the handle *g*, the elongated guide-eye *f*, and the hook-rest *j*, adapted to engage with the pins *i i*, substantially as described.

JOHN B. MAINES.

Witnesses:

CHARLES HANNIGAN,
SOCRATES SCHOLFIELD.