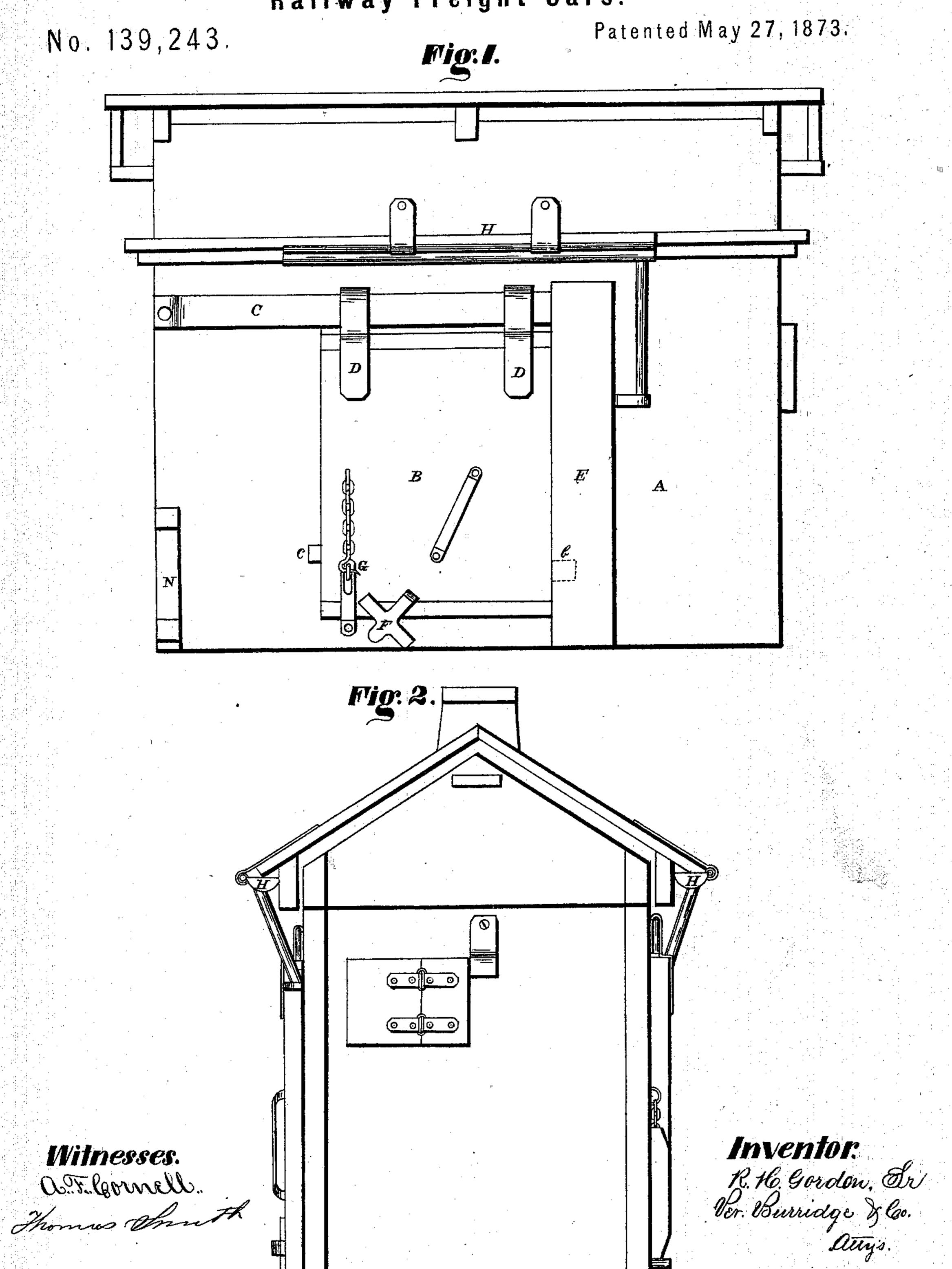
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R. H. GORDON, Sr. Railway Freight Cars.



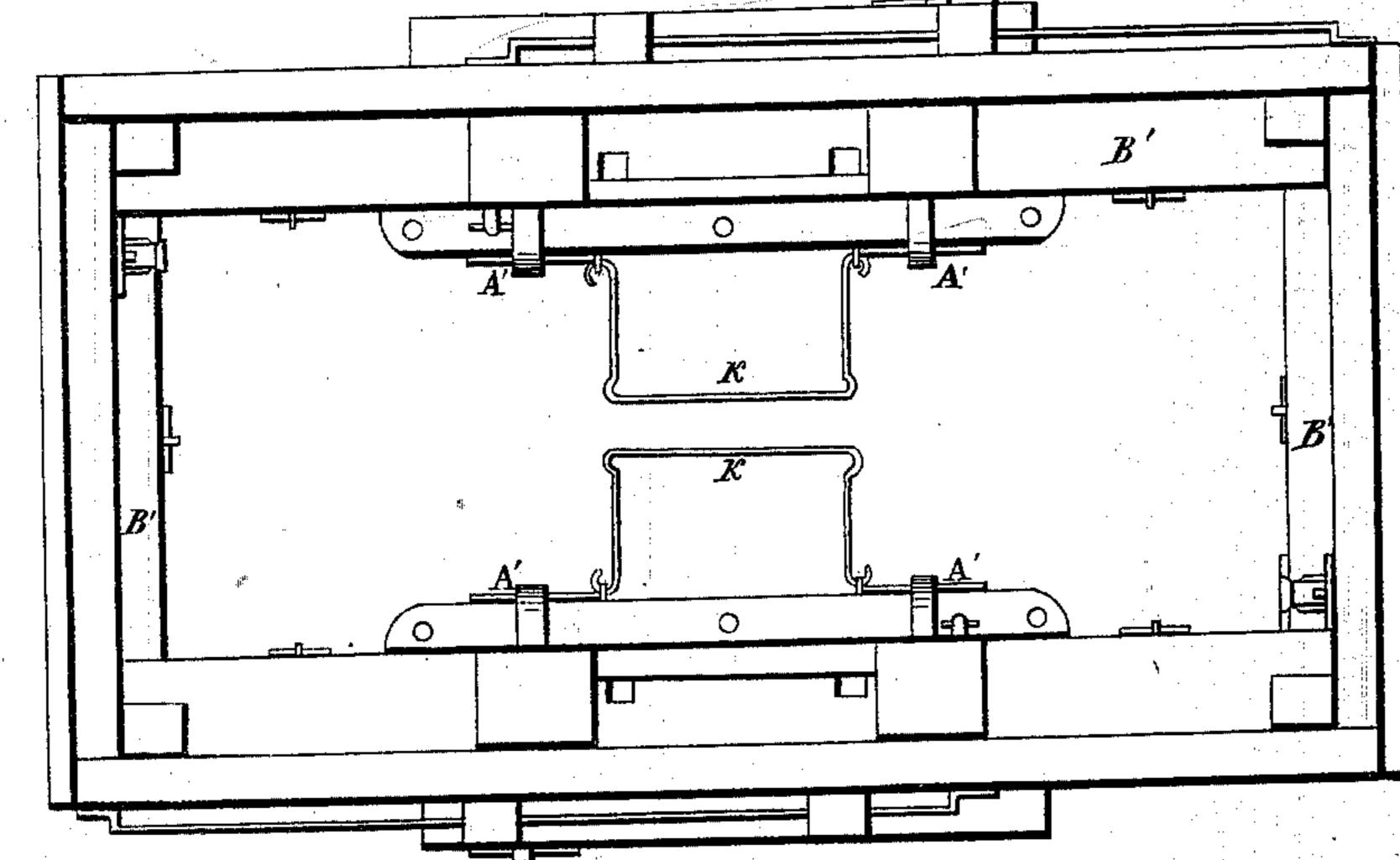
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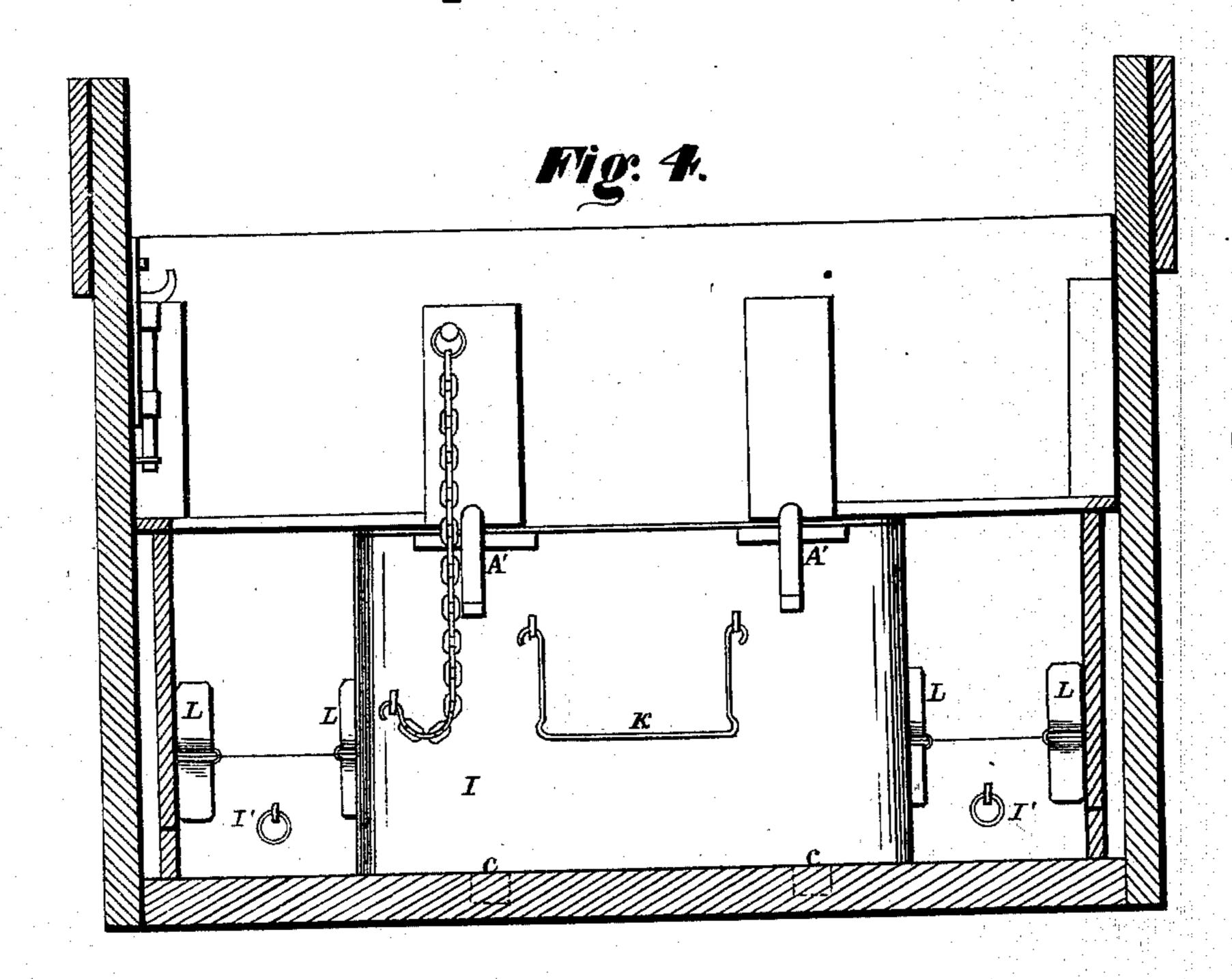
R. H. GORDON, Sr. Railway Freight Cars.

No. 139,243.

Patented May 27, 1873.







Witnesses.

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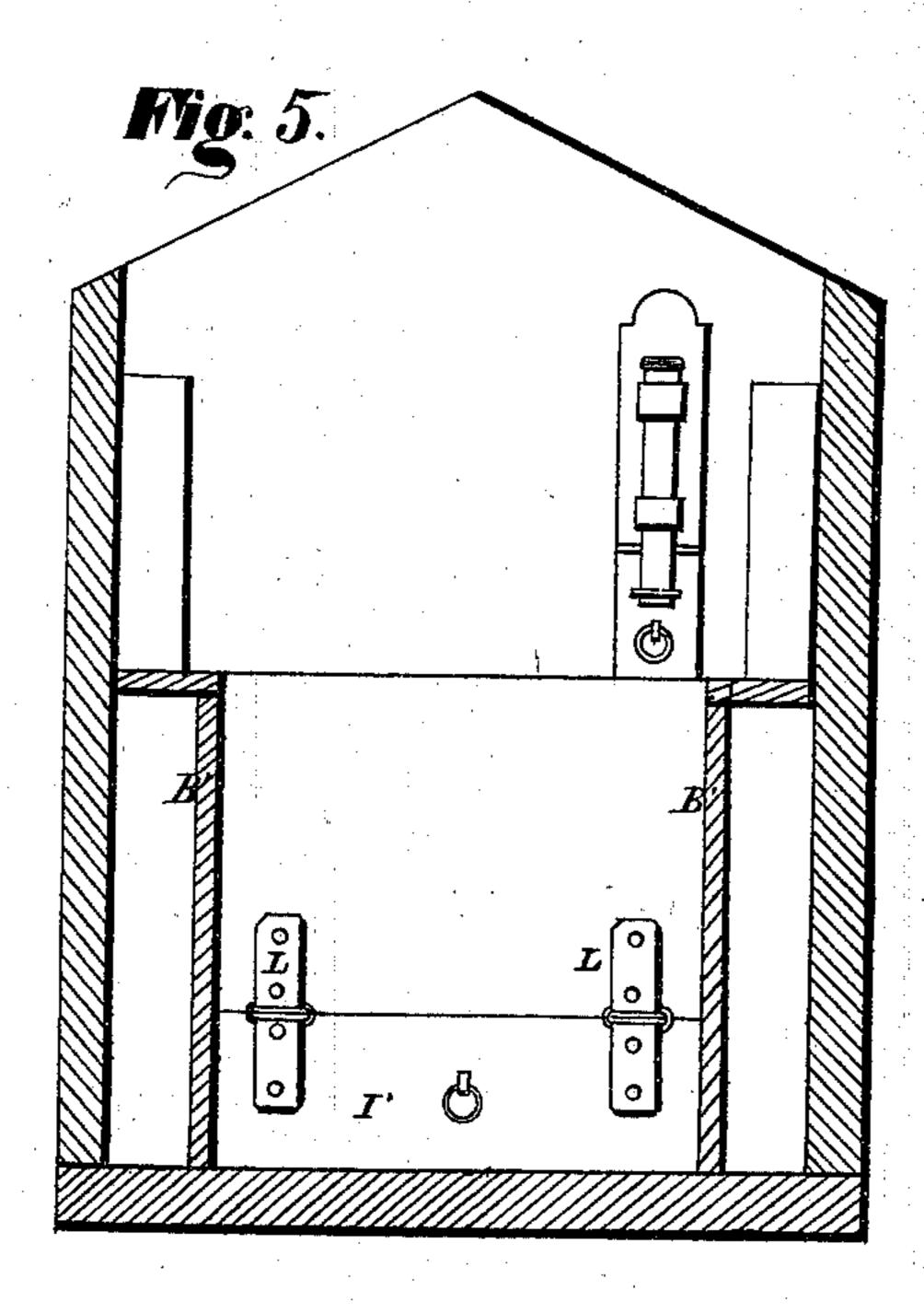
Inventor. R. H. Gordon, Se Ver Burridge 860.

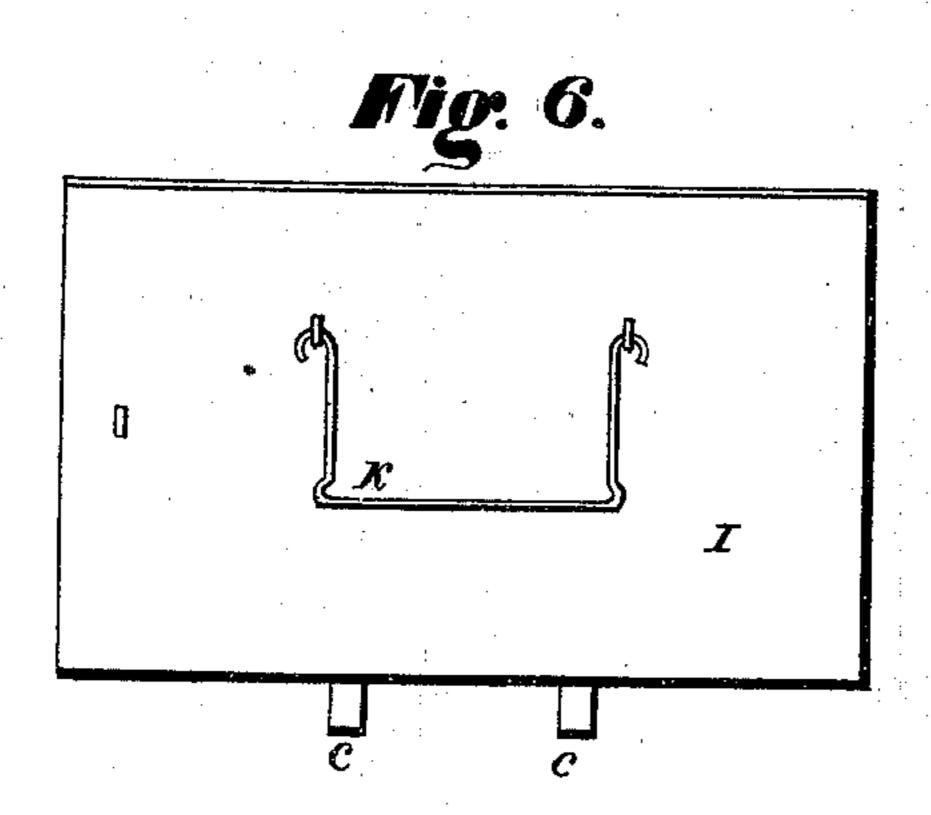
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Witnesses.

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UNITED STATES PATENT OFFICE.

RICHARD H. GORDON, SR., OF CLEVELAND, OHIO.

IMPROVEMENT IN RAILWAY FREIGHT-CARS.

Specification forming part of Letters Patent No. 139,243, dated May 27, 1873; application filed March 24, 1873.

To all whom it may concern:

Be it known that I, RICHARD H. GORDON, Sr., of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements on Railway Cars, of which the following is a full and complete

description. Figure 1 is a side elevation of the car. Fig. 2 is an end elevation. Fig. 3 is a plan view of the inside. Fig. 4 is a vertical longitudinal section, showing one side of the inside of the car. Fig. 5 is a vertical transverse section, showing one end of the inside. Fig. 6 is a de-

tached section.

Like letters of reference refer to like parts

in the several views.

The nature of this invention relates to a railway freight-car, and the object thereof is to construct a car in which grain can be carried with safety, the doors being so hung and secured that they can be easily opened and closed, and at the same time be tight against the escape of grain, and which offers no obstruction to the stowing and handling of freight. It also relates to the walls of the car, which are made double, and to certain supplementary doors or guards, and the manner of fastening them in place for the further security against the loss of grain, all of which is

more fully set forth as follows:

The general outside construction of the car is similar to those in ordinary use, and of which A, Fig. 1, shows a side view; B is the door, and which is hung from the bar C by the straps D, and whereon it slides for being opened and closed, and whereby the top is secured in close contact with the doorway. The bottom of the door is secured, when closed, by a lug, indicated by the dotted lines b, Fig. 1, projecting from the edge of the door into the cleat E, fastened to the side of the doorway, a mortise being cut in the cleat for its admission. A corresponding lug, c, projects from the opposite end of the door, the purpose of which will presently be shown. The opposite lower corner of the door is secured, when shut, by a cross-hook, F, on the stem of which is cut a thread, which is screwed into the side of the car, thereby drawing one of the arms of

the hook hard against the door and forcing it tight to the side of the car. A nut is let into the edge of the side of the car, and into which the stem of the hook screws on being turned, and which is kept from being screwed entirely out from the nut by a ring passed through the end of the stem outside the nut. The arms of the hook being turned down away from the door, the lower end of the door can then be pushed outward so far as to admit a person into the car. This provision for moving out the bottom of the door is to allow of its being opened in the event that the freight the car contains presses so hard against the door as to prevent it from sliding. In the event that one of the arms does not catch the door to the degree to hold it tight, the next arm in order will, so that the hook, on being turned from one arm to the other, will catch the door and hold it. The door is locked at the lower corner by a strap and staple, G, in which a lock may be used or hook. Across the inside of the doorway is placed a guard, I, Fig. 4, a detached view of which is shown in Fig. 6. The bottom of said guard is retained in place by lugs c depending from its lower edge, and which are received into mortises cut in the floor of the car. The top of the car is secured in place by a pair of cross-hooks, A', in the same way as the door, and which hooks are screwed into nuts let in the wood, as above described. K is a handle whereby the guards are lifted about and by which they are hung up in the car when not in use.

In the event some grain may have found its way between the wainscoting and the wall it can be removed therefrom by opening the lower part I' of the wainscoting, which is attached to the wall by hinges L, thereby allowing them to be raised upward to obtain access to the inside for the purpose specified.

The run-board projects over the ends of the car, so that it is easier and less dangerous to pass from one to the other than in the ordinary way. The lower end of the door is held from flapping when pushed back by the lug c referred to, which enters a mortise made in the cleat N.

By the use of the guards above described

the grain in the car is held back from pressing against the door, hence no strain is exerted upon it, thereby making the car grain-tight.

Claim.

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

1. The car-hook F having a screw-stem, in combination with the railway car-door B hav-the lugs c b, substantially as set forth.

2. The guard I, having the lugs c c secured to the inner side of the doorway-frame by means of the cross-hooks A', substantially as set forth.

3. In a railway freight-car constructed with wainscoting, the lower hinged section I of the wainscoting, substantially as and for the purpose specified.

4. A railway freight-car constructed with wainscoting, having the lower sections I' thereof hinged to the side of the car, to allow of their being opened for the purpose specified.

RICHARD H. GORDON, SR.

Witnesses:

W. H. BURRIDGE, A. F. CORNELL.