

L. F. Frazer's
Improved
Grain Doors for Cars

114661

PATENTED MAY 9 1871

Fig. 1.

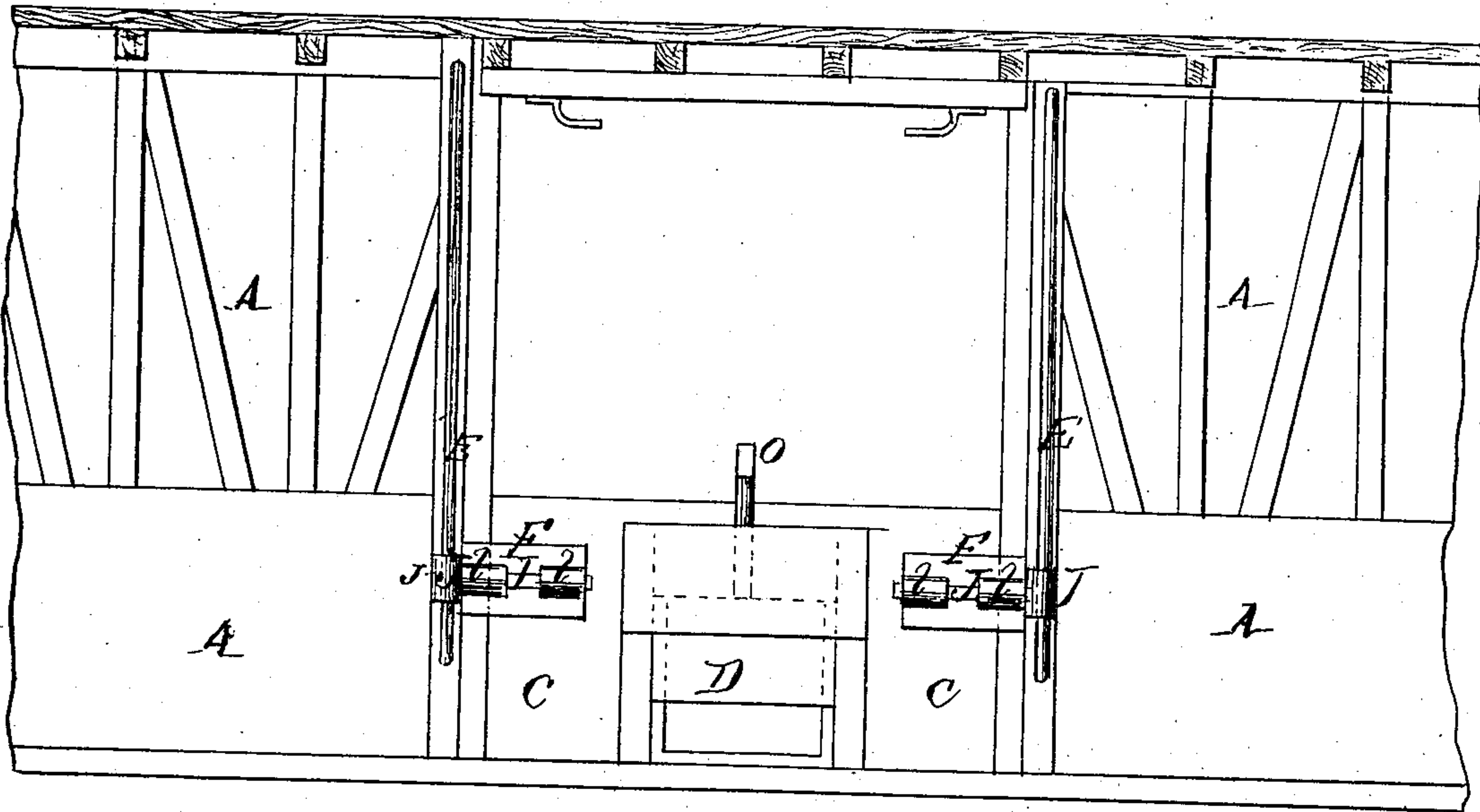


Fig. 2.

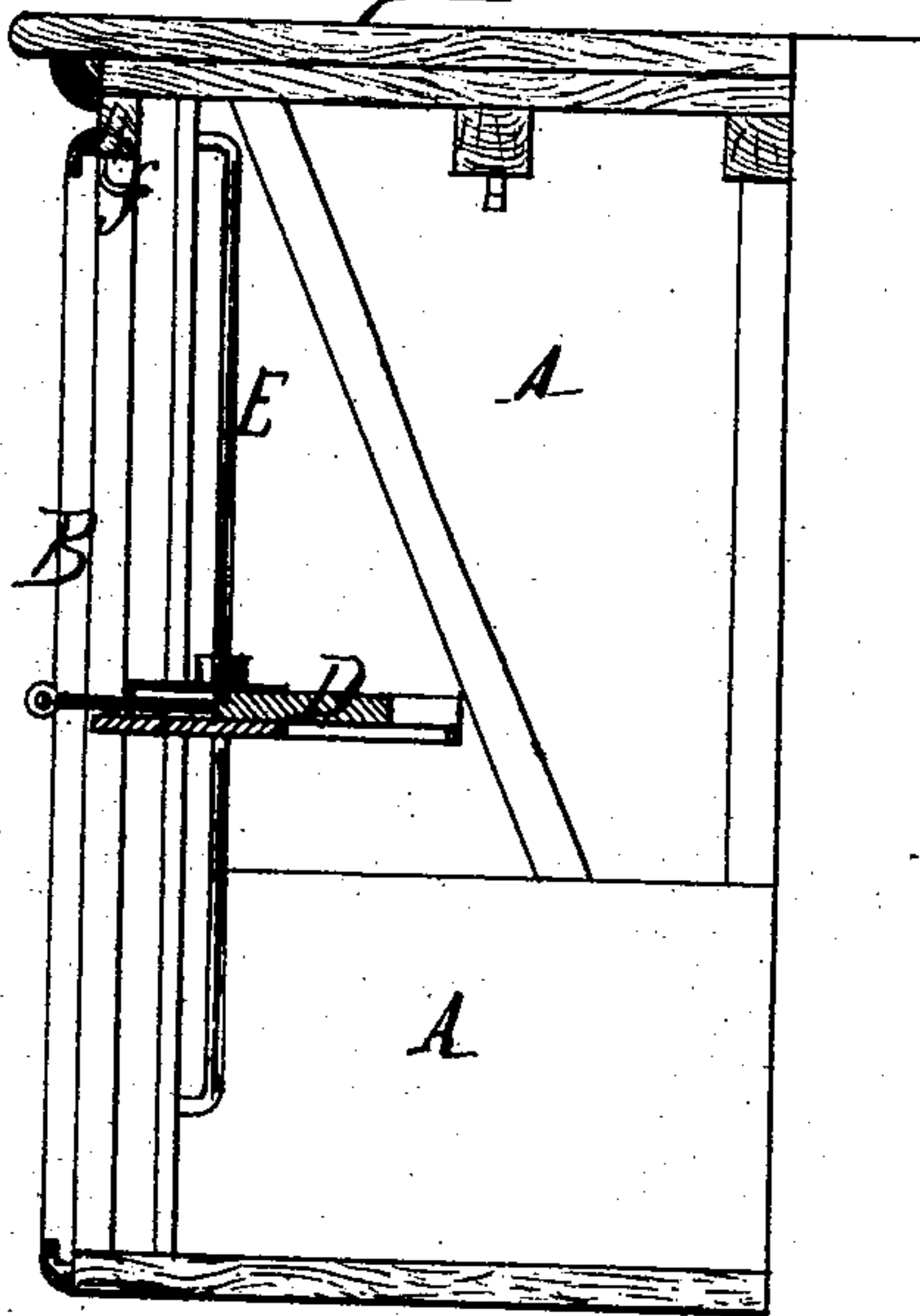
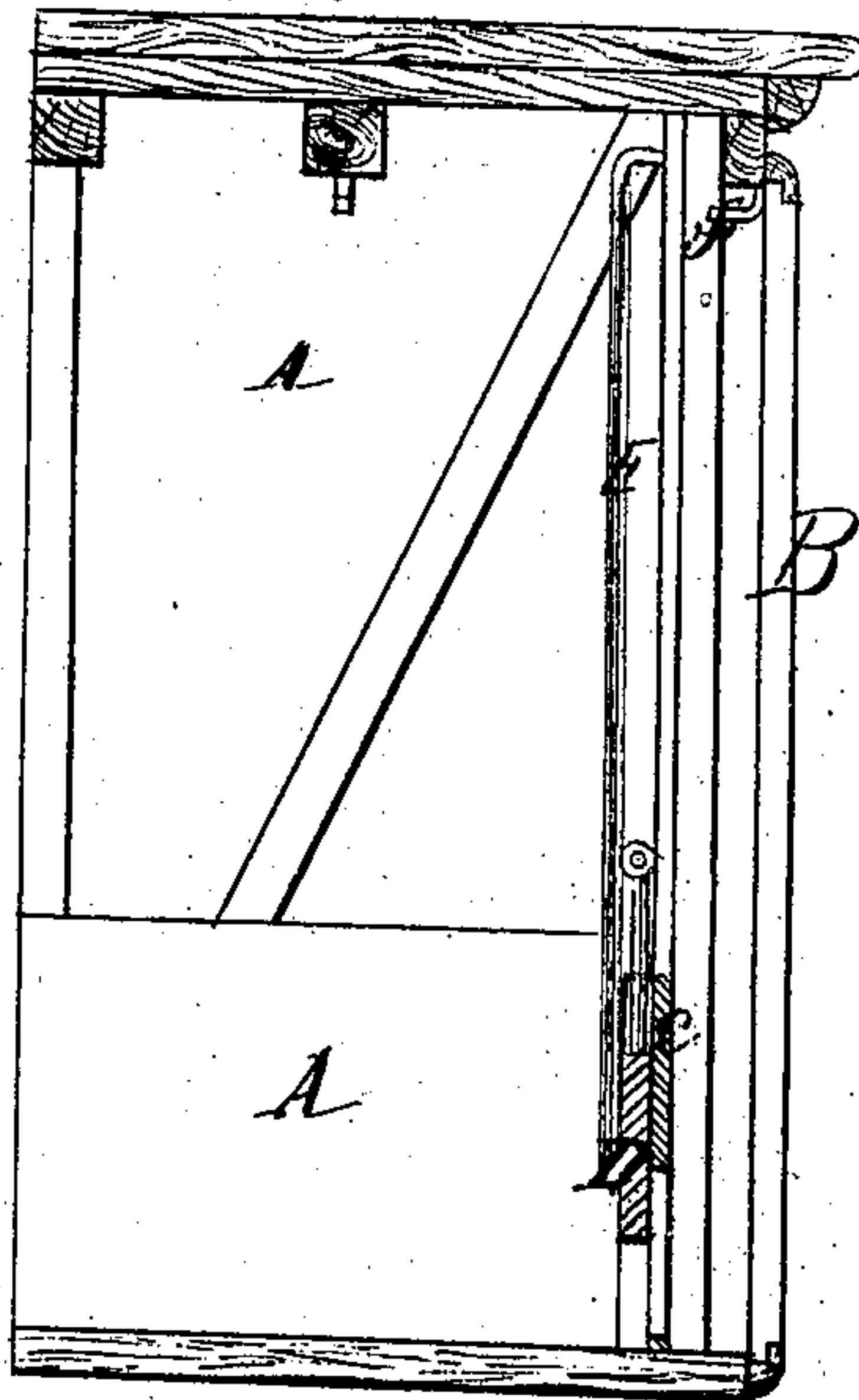


Fig. 3.



Witnesses

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United States Patent Office.

LAURENCE F. FRAZEE, OF JERSEY CITY, NEW JERSEY.

Letters Patent No. 114,661, dated May 9, 1871.

IMPROVEMENT IN GRAIN-DOORS FOR 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, LAURENCE F. FRAZEE, of Jersey City, in the county of Hudson and State of New Jersey, have invented a certain new and useful Improvement in Grain-Cars; and I do hereby declare the following to be such a full, clear, and exact description of the same as will enable any one skilled in the arts to which my invention appertains to make and use the same, reference being had to the accompanying drawing making part of this specification, in which—

Figure 1 is a longitudinal vertical section through a car with my improvement applied thereto, and

Figures 2 and 3 are transverse vertical sections through said car, showing two different aspects of the improvement aforesaid.

My invention consists in a novel construction and application of the door of the car, by which said door, when the car comes to be unloaded, is gradually relieved of the pressure against it, and can be readily raised and removed out of the way of the workmen engaged in discharging the car.

In the drawing—

A represents the body of the car.

B represents the outside door thereof, arranged to slide horizontally outside of the car.

Inside of this door the grain-door C is arranged. It is rectangular in form, and consists of planks duly joined together, and is arranged to slide up and down in grooves made in the side-door post in the manner shown. Each end of this door is hung upon a pivot-hinge, consisting of the socket-pivot J and the socket

L, which last is raised upon the plate F bolted to the outside of the door aforesaid.

The socket end of each pivot J is made to slide up and down upon a long staple fixed to the inside of each side-door post, so that the door, when raised up or let down, is held in position by these straps and pivot-hinges.

Now, this door, when the car is filled with grain, is pressed so hard against its bearing that it is impossible to raise it without injury to the body or door. To avoid this I make a slide-gate, D, in the door, and fit it with a connecting-rod, O, to which I attach a block and fall or screw, by which I can readily open it and let out enough of the grain to relieve the grain-door proper sufficiently to allow it to be raised with ease, and so allow the grain to be discharged without injury to the door or cars.

After the grain-door has been thus raised, as above described, it is swung over in a horizontal position, as shown in fig. 2, and is then raised up and fastened under the roof of the car by means of the staples *ff*.

Having now described the nature and extent of my invention,

I claim as new herein and desire to secure by Letters Patent—

The door C, fitted with a gate, D, and arranged on pivot-hinges and sliding rods, as described, when combined with the body of a car suitable for the transportation of grain or other similar substance in bulk.

Witnesses: LAURENCE F. FRAZEE.

AMOS BROADNAX,
PETER D. KENNY.