

C. BARKER.  
DOOR FOR RAILWAY BOX CARS.

No. 103,126.

Patented May 17, 1870.

Fig. 1.

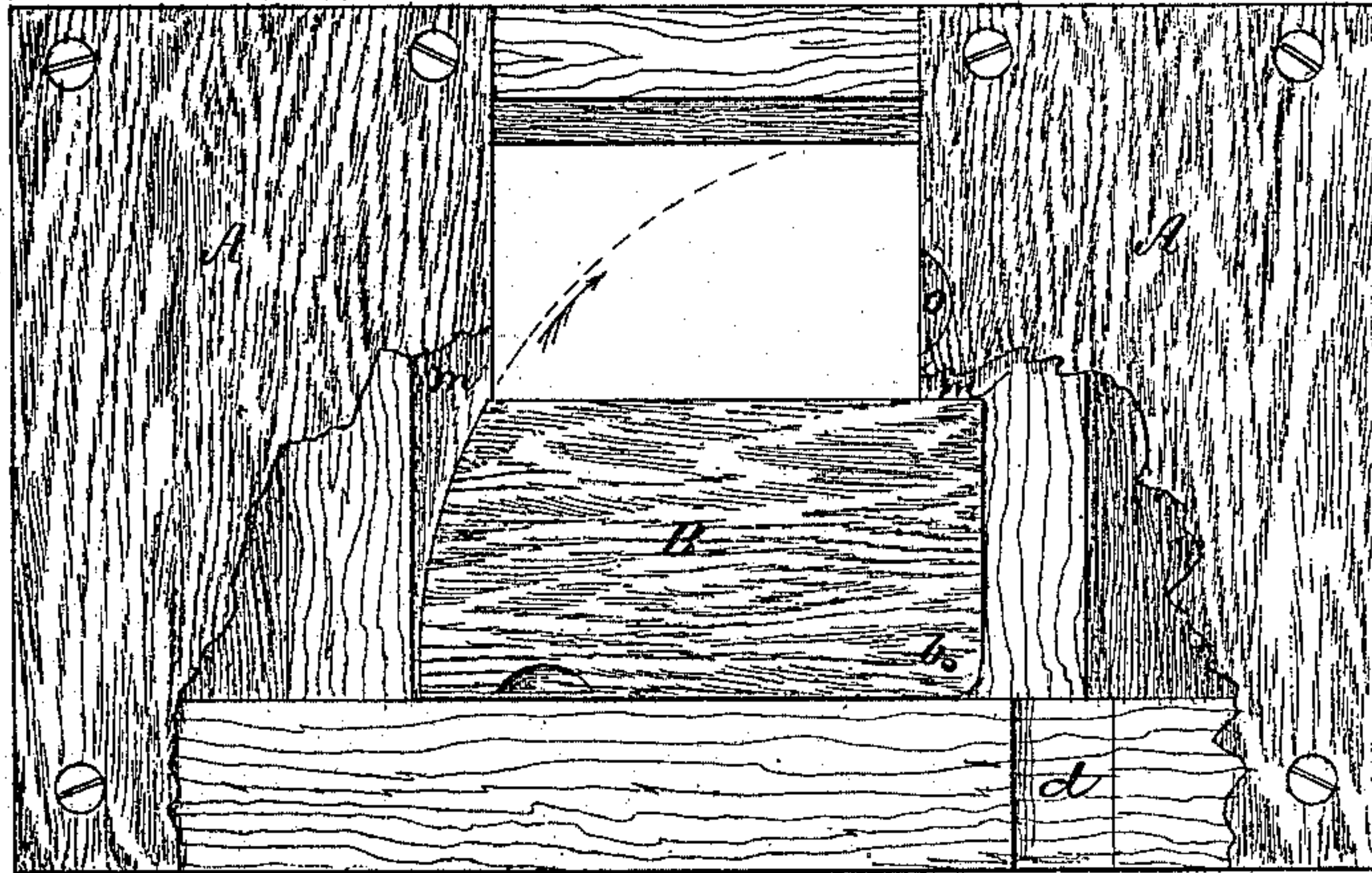


Fig. 4.

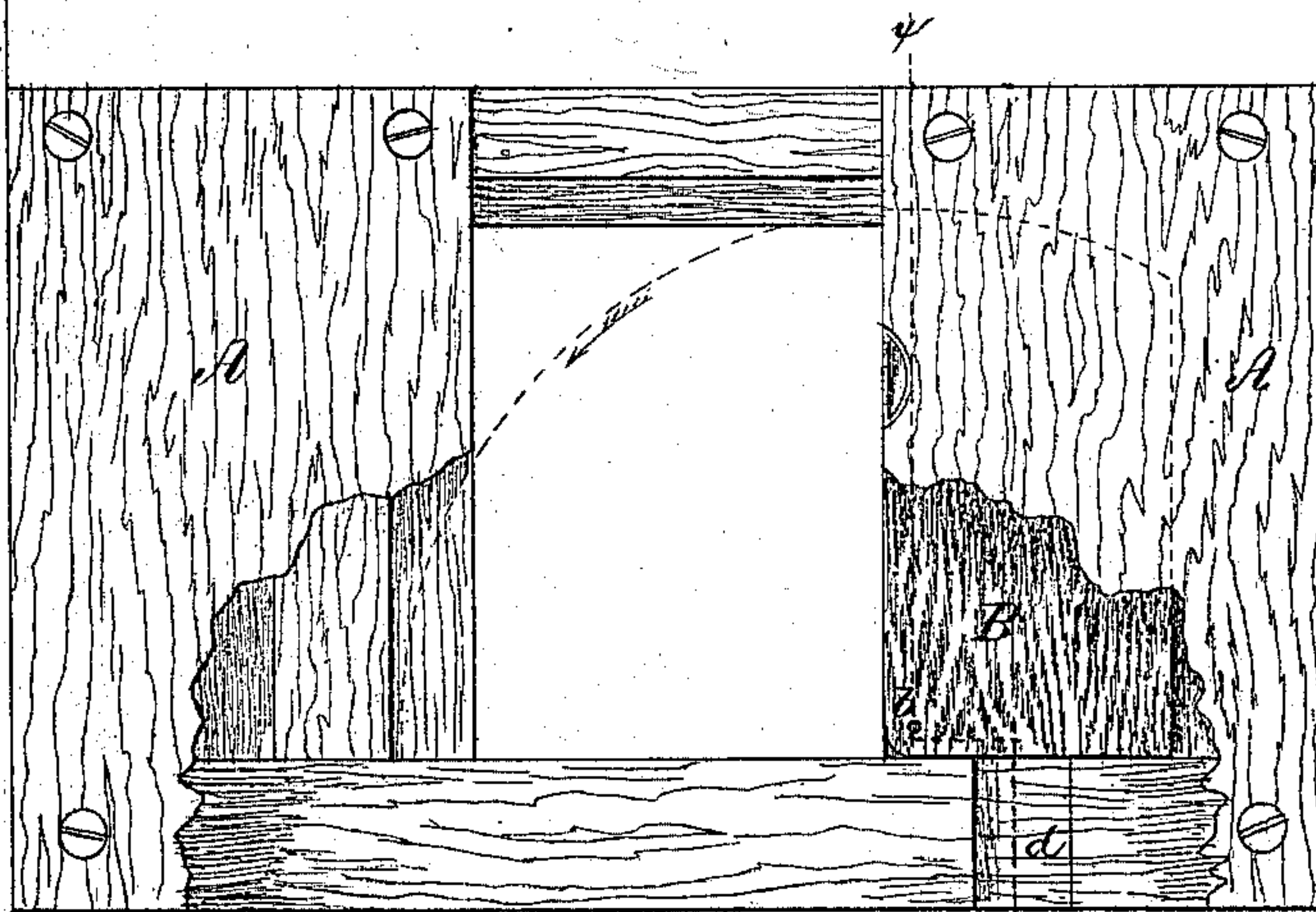
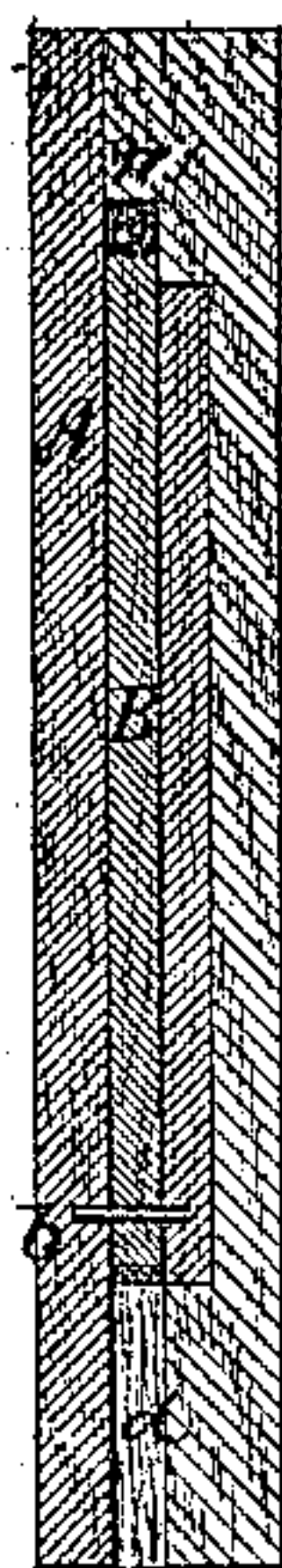


Fig. 3.



Fig. 2.



Witnesses:

Wm M. Evans  
Chas. C. Nelson

Inventor:

Chas. Barker  
by his attys  
A. H. & R. K. Evans



# United States Patent Office.

CHARLES BARKER, OF KNOX COUNTY, ILLINOIS, ASSIGNOR TO HIMSELF  
AND T. C. THOMAS, OF SAME PLACE.

*Letters Patent No. 103,126, dated May 17, 1870; antedated May 13, 1870.*

## IMPROVED DOOR FOR RAILWAY BOX-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, CHARLES BARKER, a citizen of Knox county and State of Illinois, have invented a new and improved Grain-Door for Box-Cars; and I do hereby declare that the following is a clear, full, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure I is a front view of my improved door.

Figure II is a vertical sectional view through the lines *x x*.

Figure III is a view of the door detached from the car.

Figure IV is a front view of the car-door, with my grain-door open.

The nature of my invention consists in supplying a door for cars designed for the transportation of grain in bulk, and so constructed that it can be conveniently opened, and when open will not be liable to be lost or broken up, and when only partially open or thrown up it will still retain its hold, and withstand the outward pressure of the grain, thus overcoming the impracticable features of doors now in use.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, as I have carried it out.

A is the side of a box-car constructed in the usual way.

B is the grain-door, pivoted at *b*, and so inclined at the opposite end C that each corner will be an equal distance from the pivot. This peculiar shape of the door enables it, when partially thrown up, to retain its hold, and at the same time withstand the outward pressure of the grain.

When the door B is in position, as in fig. 1, it fits snugly in the grooves *m m*, so as not to allow the grain to enter them.

The opening *d* in the lower part of the frame A and in the rear of the door B is for the escape of any grain which may chance to enter the groove or slot designed for the reception of the door when thrown up, thus securing at all times a free motion in the door.

There is a lining completely covering the inside of the section of the car in which the door is placed, and fitting so closely that grain cannot enter the cavities or grooves when the door plays.

*o* is a semicircular slot in the frame-work A, through which to reach the door B when thrown back in an open position and it is required to be closed.

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

The revolving door B, when applied to a railroad box-car, substantially as and for the purpose described.

Also, the revolving door B, when applied to a railroad box-car, in combination with the opening *d*, for the escape of grain, which would prevent the opening of the door, when arranged with reference to each other, substantially as set forth.

Also, constructing a revolving grain-door for box-cars with the outer points of the door equidistant from the pivot on which it turns, substantially as and for the purpose set forth.

CHARLES BARKER.

Witnesses:

DAVID WILTSE,  
T. C. THOMAS.