

No. 734,801.

PATENTED JULY 28, 1903.

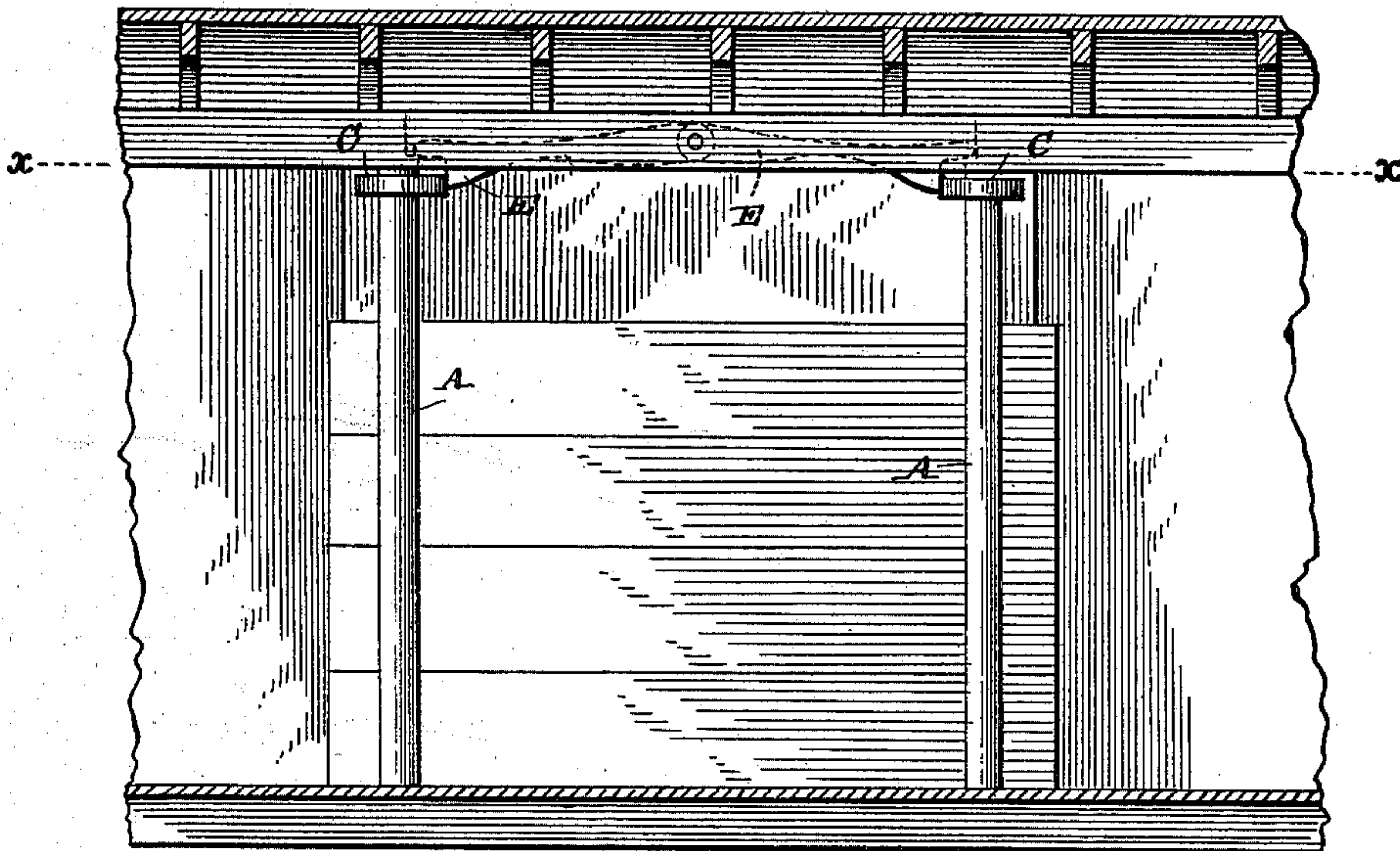
F. H. BENNETT.

DEVICE FOR FASTENING GRAIN DOORS IN CARS.

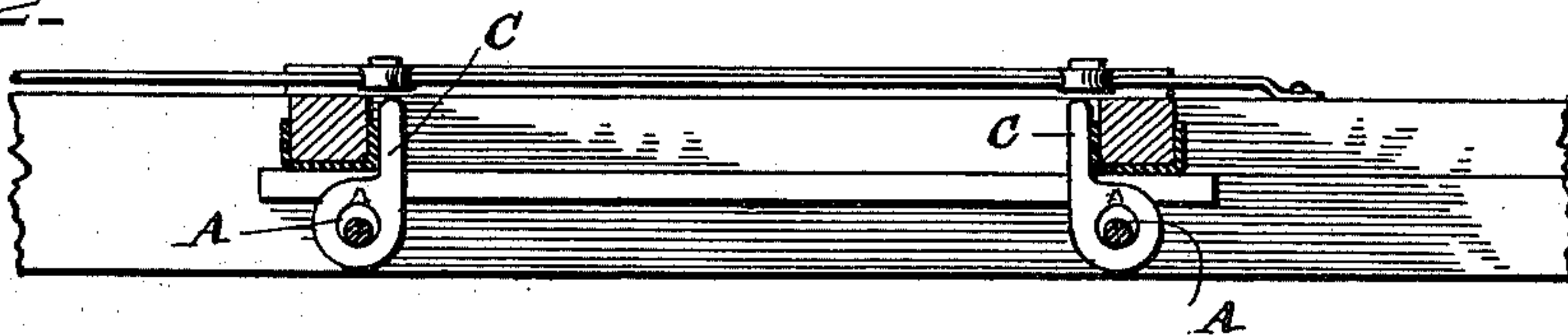
APPLICATION FILED JULY 26, 1902.

NO MODEL.

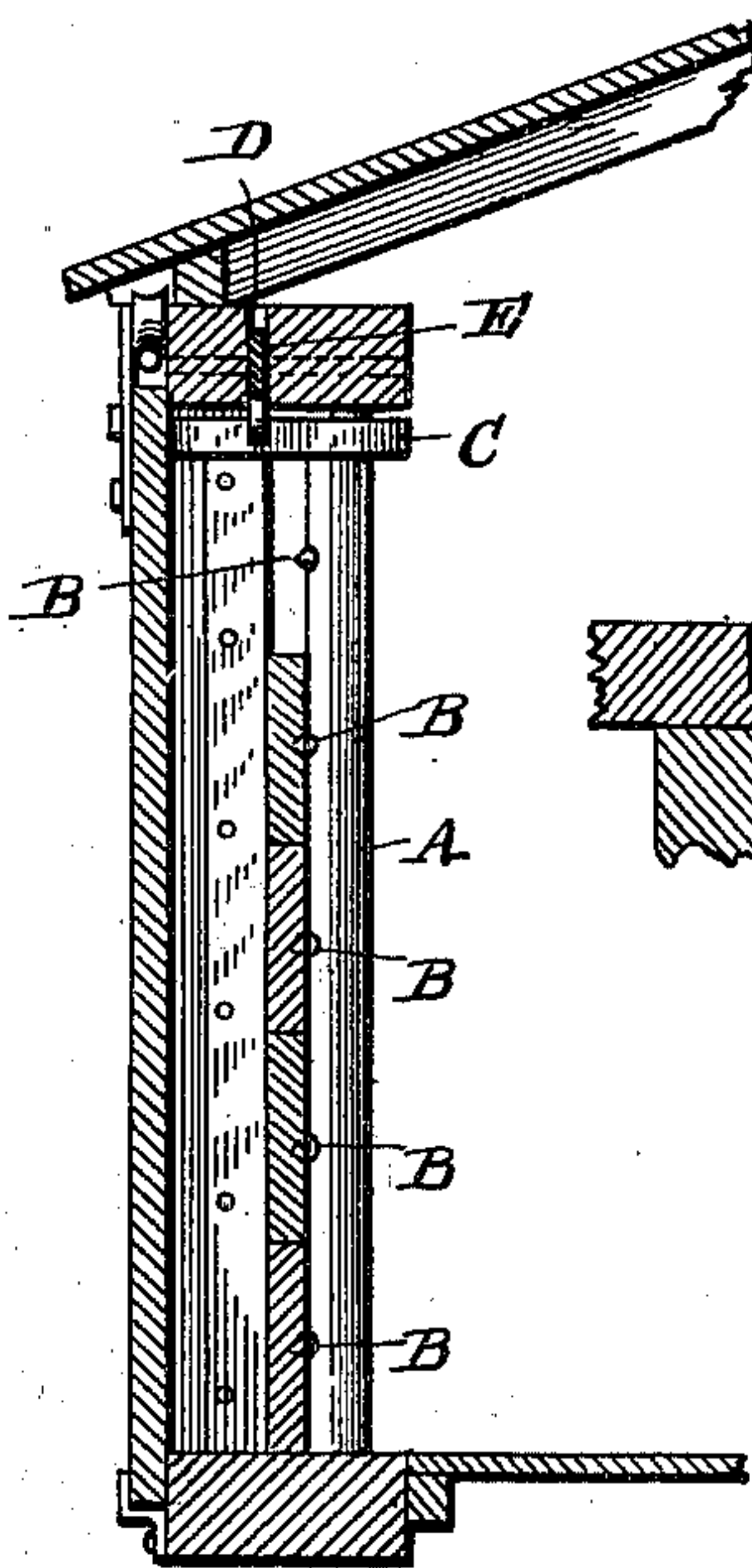
*Fig. 1.*



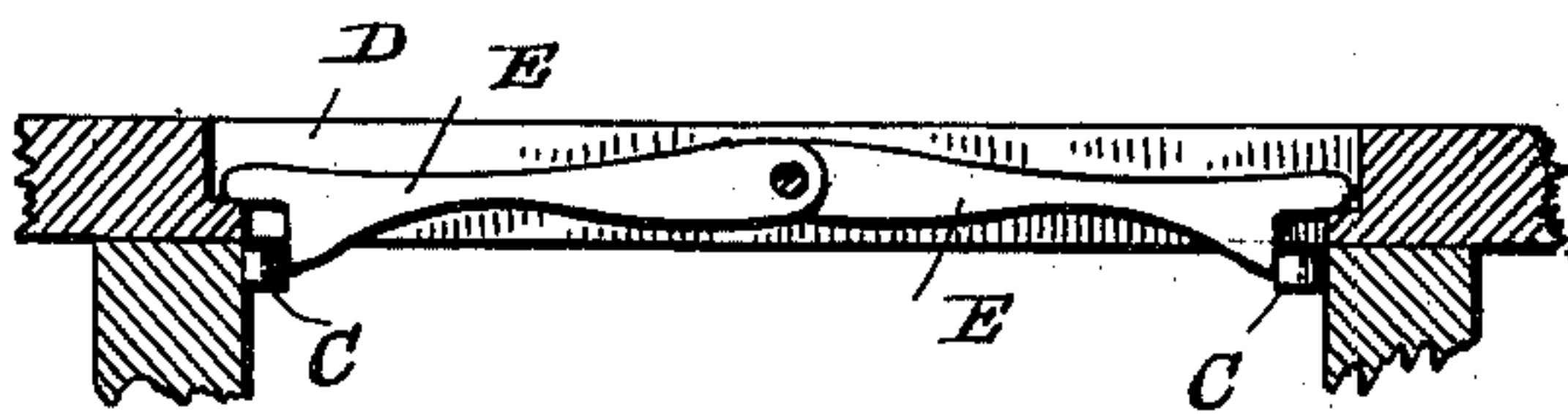
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES

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# UNITED STATES PATENT OFFICE.

FAYETTE H. BENNETT, OF TOPEKA, KANSAS.

## DEVICE FOR FASTENING GRAIN-DOORS IN CARS.

SPECIFICATION forming part of Letters Patent No. 734,801, dated July 28, 1903.

Application filed July 26, 1902. Serial No. 117,196. (No model.)

*To all whom it may concern:*

Be it known that I, FAYETTE H. BENNETT, a citizen of the United States of America, residing at Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Car-Doors, of which the following is a specification.

This invention relates more particularly to improvements in doors for grain and other freight cars; and it consists in certain novel features of the device illustrated in the accompanying drawings, as will be hereinafter first fully described and then distinctly pointed out in the claim.

In the drawings just mentioned, Figure 1 is a side elevation of a car-door embodying my invention looking from the interior of the car. Fig. 2 is a horizontal section of the same taken on the line *xx* of Fig. 1 and looking downward. Fig. 3 is a transverse vertical section, and Fig. 4 is a detail view, of the gravity locking-dog or drop-latch.

In carrying out my invention I employ a locking-bar A, which is journaled eccentrically in the floor of the car and in the roof or the supporting-frame. This locking-bar is arranged flush with and to the inner side of the door-post, a space being left between the door-post and the locking-bar sufficient to admit the grain-door. The locking-bar is provided with a series of short spurs or teeth B, adapted to enter into the grain-door in the operation of the device, and at its upper end it is provided with a handle or lever C, which is adapted to project into and play in the door-opening, as clearly shown. In the frame of the car over the door-opening I form a longitudinal slot D, in which is pivotally mounted a drop-latch or locking-dog E, adapted to bear against the side of the lever C when the door is locked and hold it against any movement or jarring caused by vibration of the car when in motion. The inner faces of the door-posts are preferably faced with metal to furnish a strong bearing to receive the pressure exerted by the locking-bars and also to prevent nailing of the door to the posts.

The operation of the device will be readily

understood. The grain-door (or the boards used for that purpose) is placed in position with its end between the door-post and the locking-bar, after which the lever on said bar is turned toward the outer side of the car, thus bringing the eccentric portion of the bar to bear upon the door and binding it against the door-post so as to hold it. The same movement forces the spurs or teeth on the locking-bar into the door, so as to effectually prevent any rising or slipping of the same. As the lever or handle is moved outward it will push the dog or gravity drop-latch upward until it has cleared the same, when the dog will drop by its own weight into engagement with the outer side or edge of the lever and positively prevent a reverse movement thereof. When it is desired to open the door, the dog is pushed upward and the lever then swung toward the inner side of the car, thereby releasing the pressure of the locking-bar on the door. The door may then readily be removed.

It will be seen from the foregoing description that I have provided a very simple construction by which the door will be positively held in its closed position and which will not destroy the boards, thus permitting their repeated use. The automatic drop-latch is entirely within the wooden frame of the car and is consequently protected against bending or other injury. The operating lever or handle is of such a length that while it may be easily manipulated yet it will not project beyond the weather-boarding of the car when the door is closed, so that it will not interfere in the least degree with the movement of the outer door.

While I have shown two locking-plates, one at each side of the door, it will be understood that only one might be used, the opposite side or edge of the door being held in a groove or keeper in the door-frame.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a car-door, the combination with the frame, and the door, of a vertically-disposed locking-bar adapted to bind the door against

the frame, a lever projecting horizontally from the upper end of the locking-bar into the door-opening, and a dog pivotally mounted in the frame above the door-opening and  
5 adapted to ride over the said lever and bear against the side of the same.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

FAYETTE H. BENNETT.

Witnesses:

A. H. BENNETT,

E. E. ROUDEBUSH.