

(No Model)

F. F. EMRICH.  
END GATE FOR WAGONS.

No. 582,814.

Patented May 18, 1897.

Fig. 1.

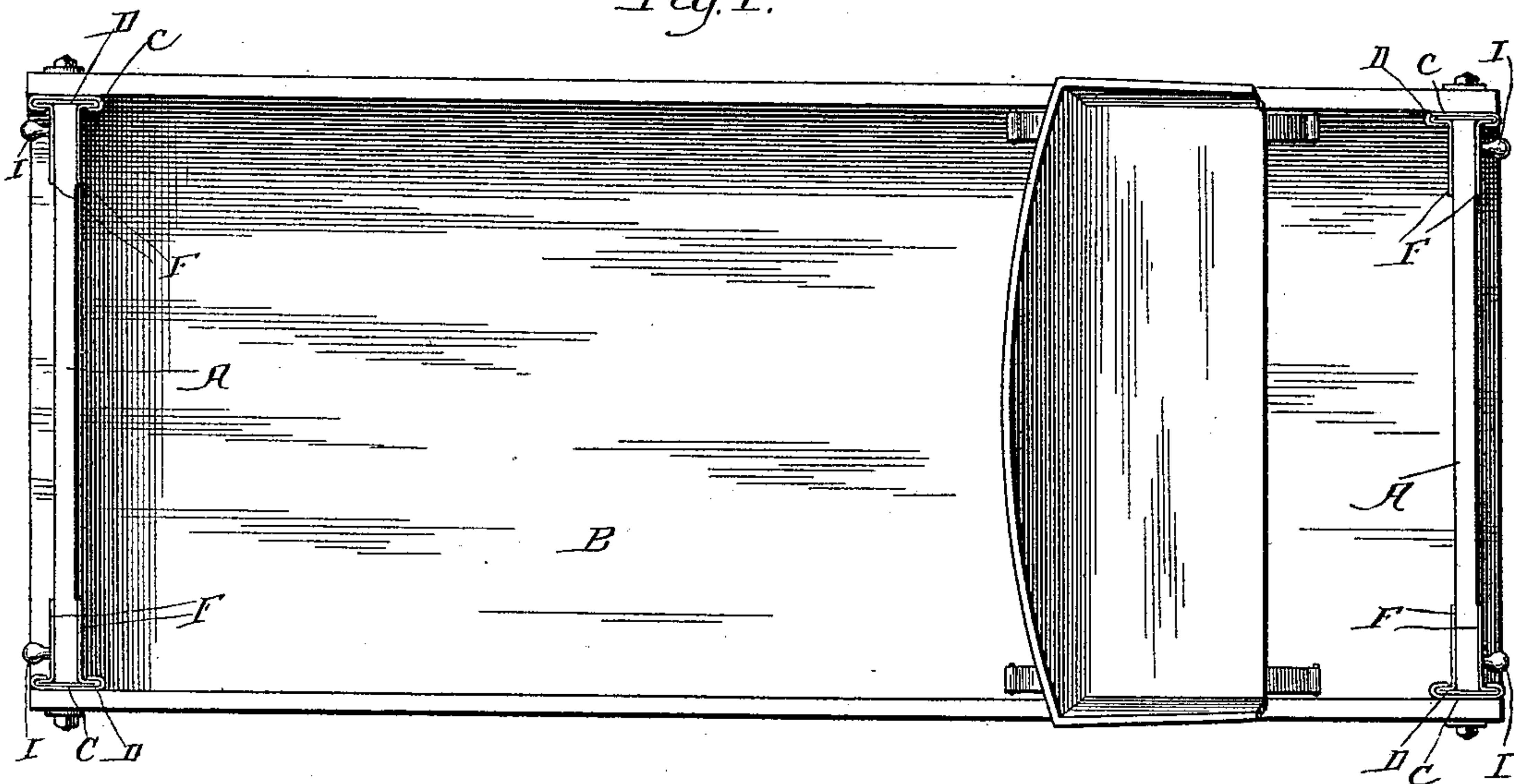


Fig. 2.

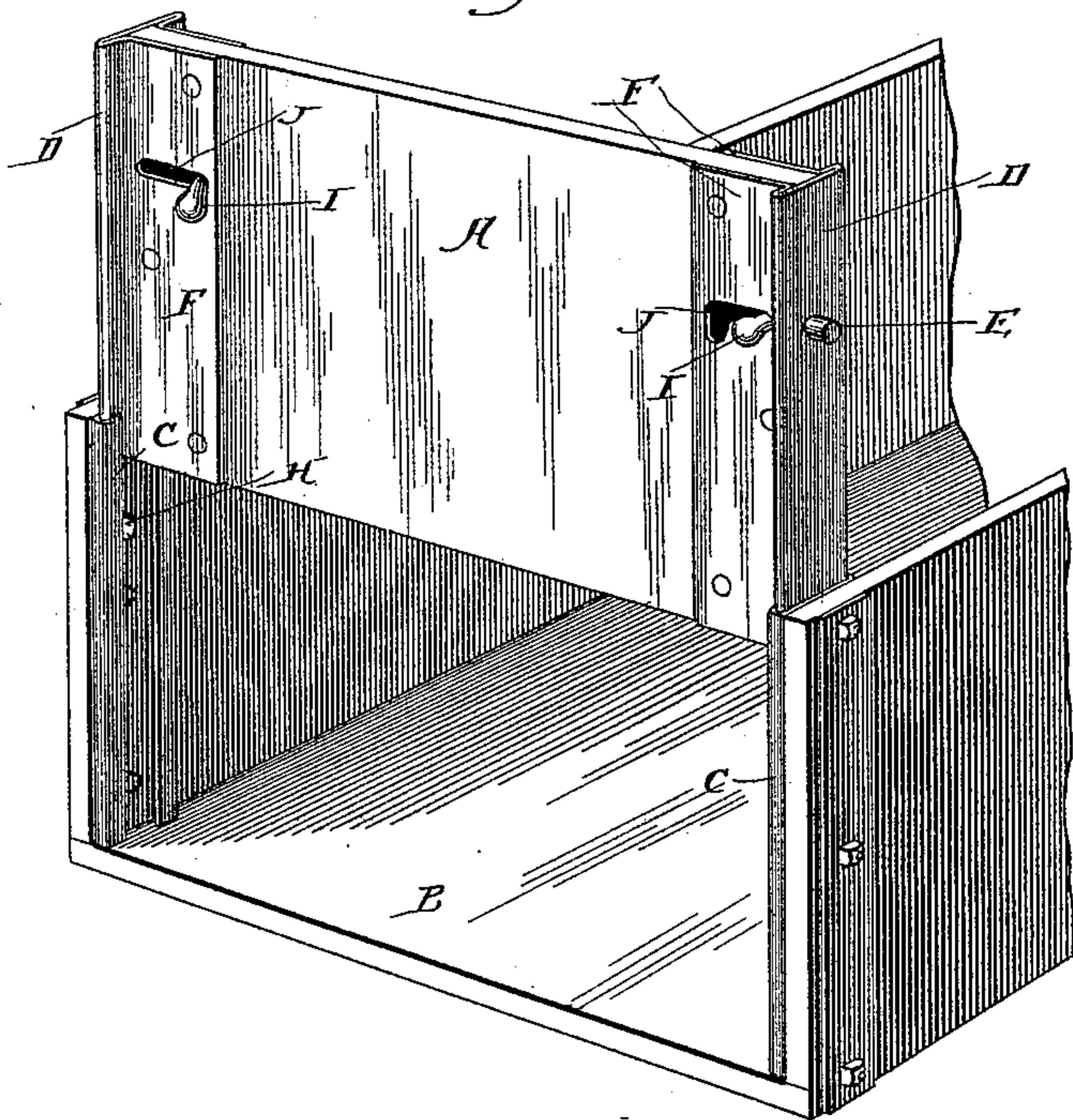
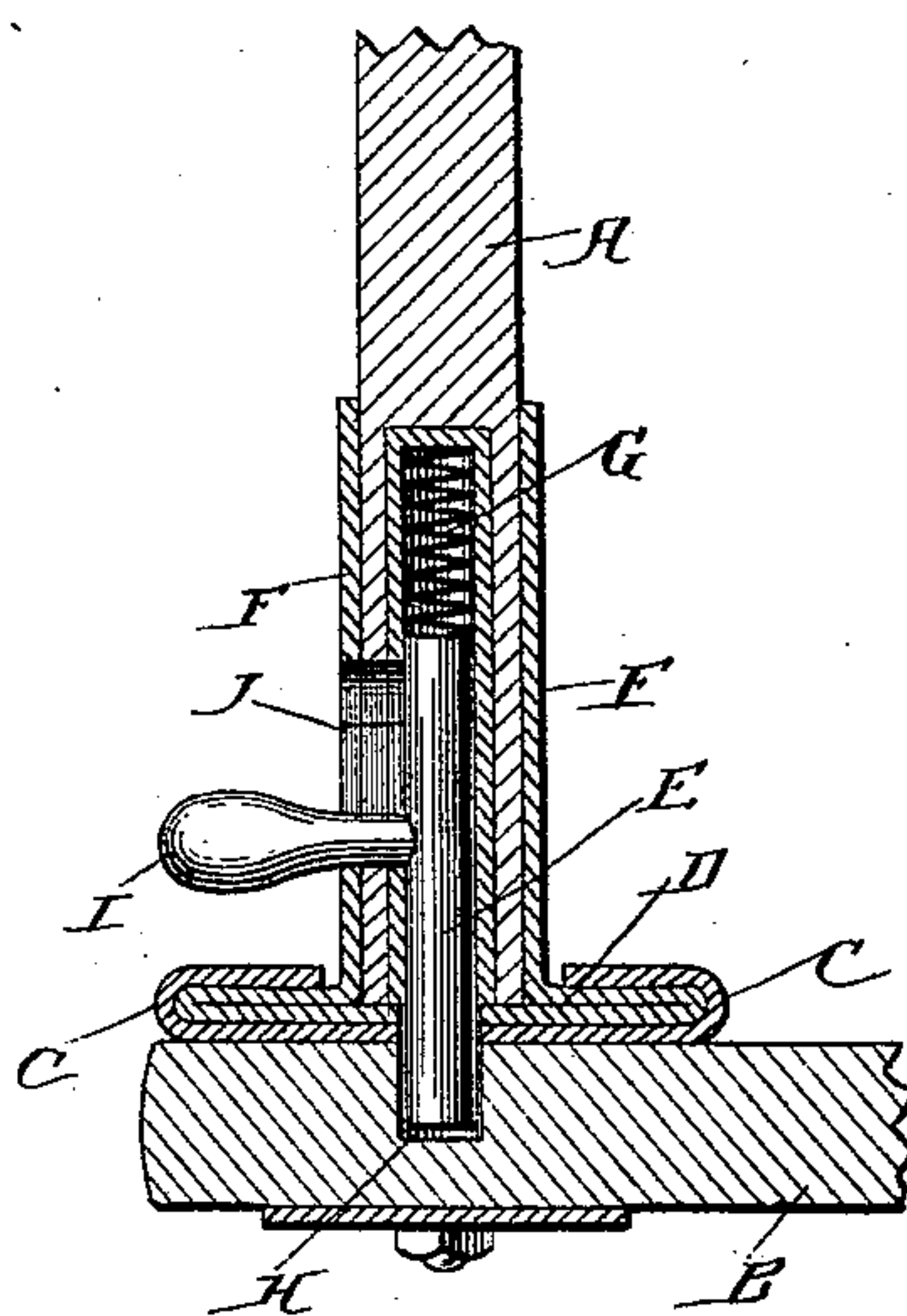


Fig. 3.



Witnesses:

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# UNITED STATES PATENT OFFICE.

FREDERICK F. EMRICH, OF LITTLE ROCK, ARKANSAS, ASSIGNOR OF ONE-THIRD TO ANGELO HILLMAN, OF SAME PLACE.

## END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 582,814, dated May 18, 1897.

Application filed August 7, 1896. Serial No. 602,016. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK F. EMRICH, a citizen of the United States, residing at Little Rock, in the county of Pulaski and State of Arkansas, have invented certain new and useful Improvements in End-Gates, Grain-Doors, and the Like, of which the following is a specification.

My invention relates to a new and useful improvement in end-gates for wagons and grain-doors for freight-cars, and has for its object to provide a device of this description which, when locked in position, will have no liability to become displaced and in connection with a wagon or other vehicle body will hold the sides thereof in their proper relative position to the bottom without the necessity of using cross-rods.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a plan view of a wagon-body, showing my improvement applied thereto; Fig. 2, a perspective of one end of said body, showing the gate elevated, fully illustrating the means for holding the sides in their proper relative position and the position of the bolts; and Fig. 3, a detail horizontal section of a portion of a gate, showing the bolt in position when locking said gate.

In carrying out my invention I provide a gate A, which may be adapted for use at either end of the body B, which latter is composed of a bottom and sides of any design, said sides having secured upon their inner surfaces at the ends thereof the flanged guideways C. These guideways may be secured in position in any suitable manner, such as by bolts or rivets, and are adapted to receive the T-shaped strips D, which latter are secured to the ends of the gate A. By this arrangement it will be seen that when the gate is in position

within the guideways the sides of the body cannot spread on account of the engagement of the strips D with the guideways, which obviously renders the use of stay-rods unnecessary. To hold the gate in position against upward movement, I provide the bolts E, which are located between the side plates F of the T-shaped strips, and these bolts are actuated by springs G, so that their noses are forced into engagement with the holes H, formed in the guide-strips and sides of the body.

In order to retract the bolts against their springs, knobs I project therefrom through the slots J, and these slots have an offset formed at their inner ends, by means of which the bolts may be held in a retracted position by turning the knobs into engagement with said offsets, as will be readily understood.

By my improvement as just described it will be seen that the sides of a wagon-body are made perfectly rigid and prevented from spreading or collapsing without the use of cross stay-rods, and when used in connection with a knockdown body will greatly facilitate the dismembering or assembling of said body, it being noted that the gates may be utilized at both ends of said body.

Having thus fully described my invention, what I claim as new and useful is—

In a device of the character described, an end-gate for wagons having T-shaped strips secured on the ends thereof, said strips being formed of sheet metal having the sides bent backward on the body portion to form flanges, and then bent out to form plates for attachment to the end-gate, guideways secured along the sides of a wagon, said guideways being formed of strips of sheet metal having their edges curved outward to form C-shaped slots to receive the T-shaped strips, as described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

FREDERICK F. EMRICH.

Witnesses:

S. S. WILLIAMSON,

CHAS. H. HALLEBURTON.