

(No Model.)

B. R. LEWIS.
GRAIN CAR DOOR.

No. 246,400.

Patented Aug. 30, 1881.

Fig. 1.

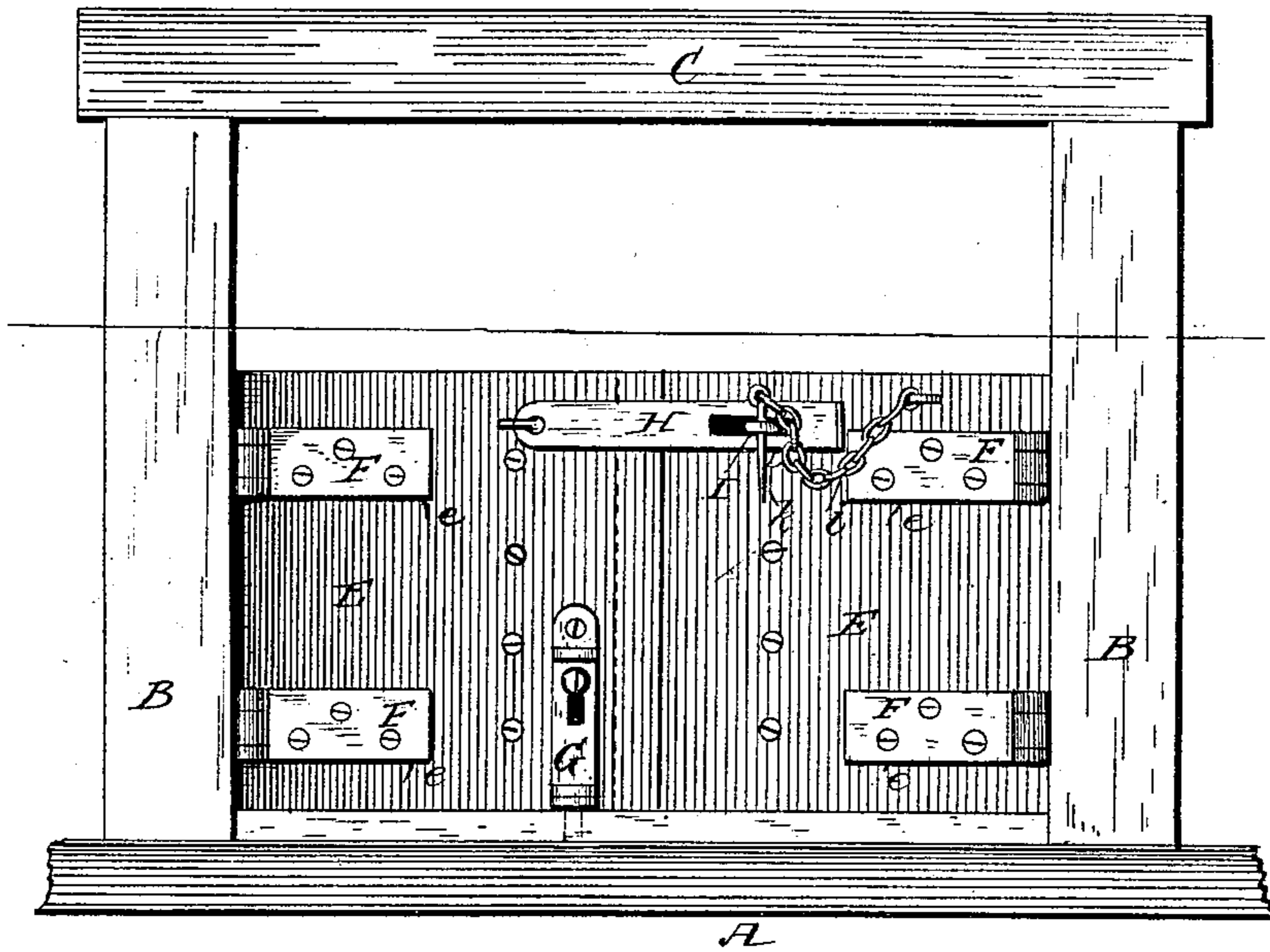


Fig. 2.

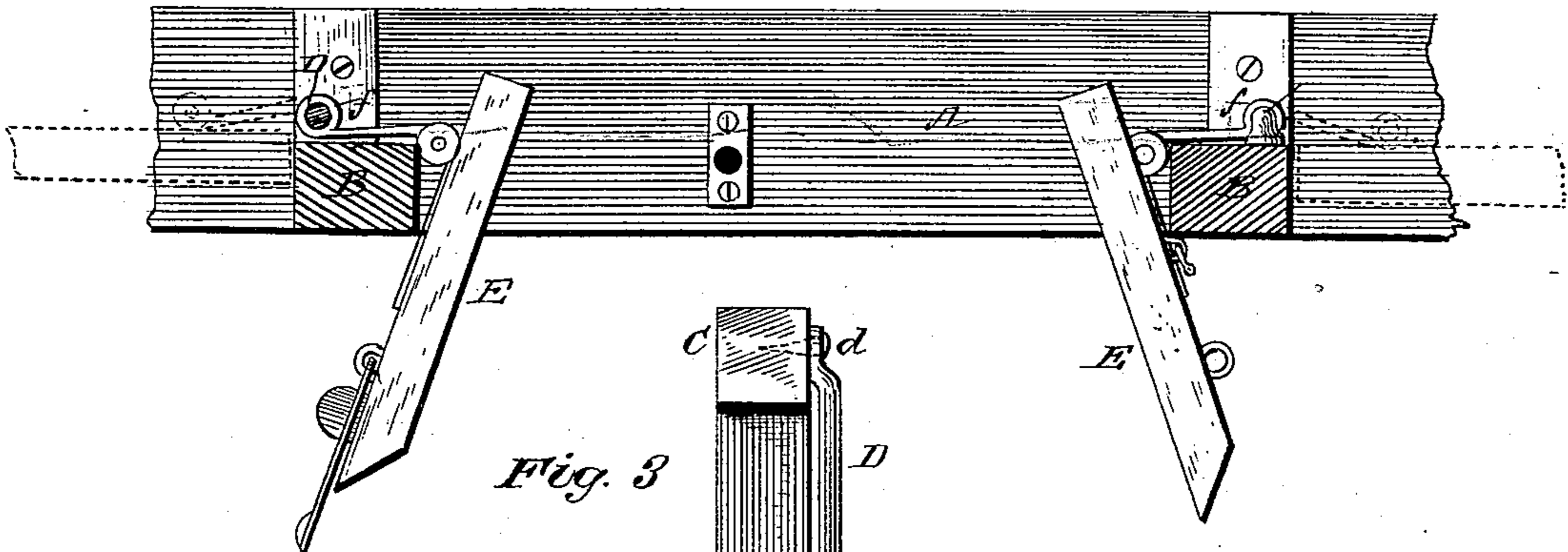
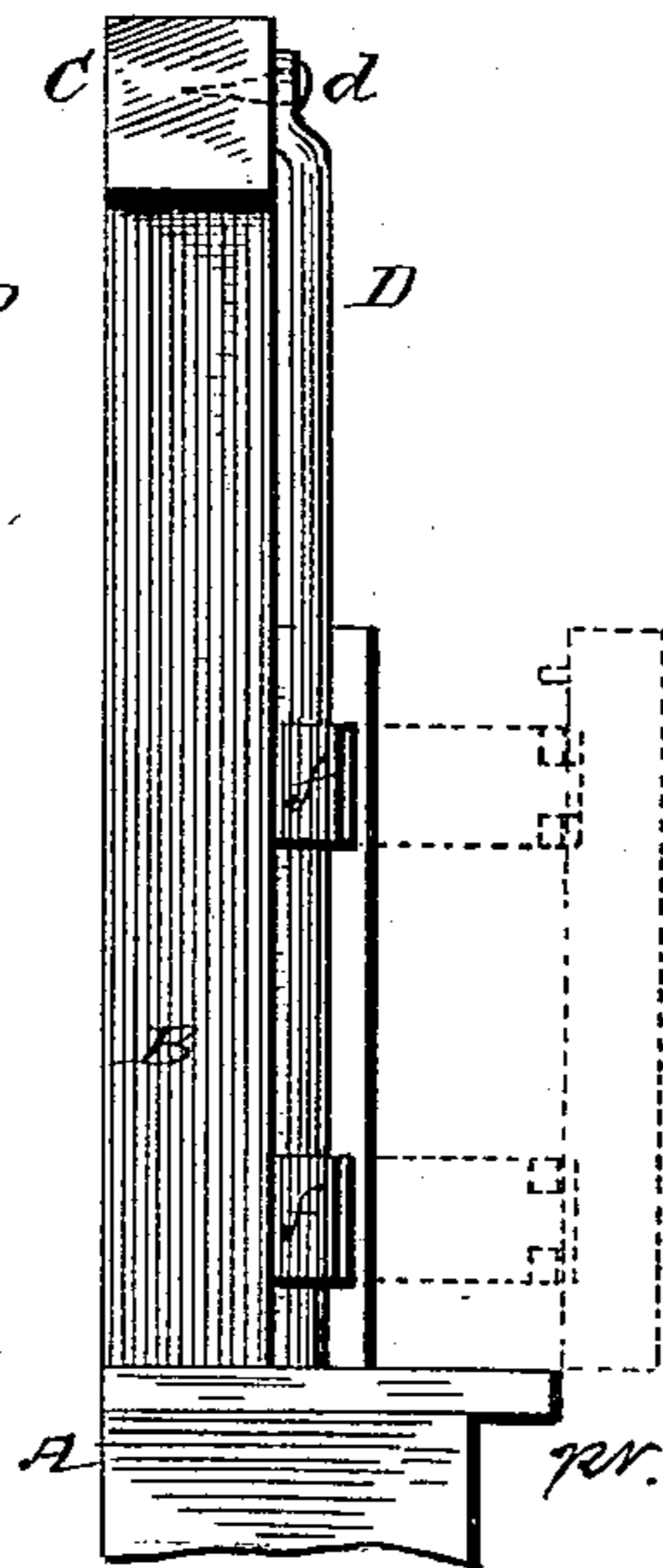


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

BENJAMIN R. LEWIS, OF SPRINGFIELD, ASSIGNOR OF ONE-HALF TO JAMES C. ESSICK, OF PANA, ILLINOIS.

GRAIN-CAR DOOR.

SPECIFICATION forming part of Letters Patent No. 246,400, dated August 30, 1881.

Application filed July 26, 1880. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN R. LEWIS, a citizen of Illinois, residing at Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Grain-Car Doors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to grain-car doors; and it consists of a grain-chute formed by car-doors opening outwardly, and in other parts, as will be hereinafter more fully explained.

In the accompanying drawings, Figure 1 is a front view of my grain-car doors; Fig. 2, a horizontal sectional view of the same, and Fig. 3 is an end view with the door swung open.

A represents the base or sill of the car-door; and B B, the posts, which are connected together at the top by means of a beam, C. To the sill or base aforesaid is rigidly secured one end of vertical rods D D, running parallel with the posts, and secured at their other ends to the said beam C by means of screws *d d*, leaving spaces between the posts and rods for double hinges to move freely in said spaces.

E E are car-doors, having recesses or grooves *e e e e* cut therein, in which double hinges F F F F are embedded and rigidly fixed by screws, &c., one-half of their length, one half of each hinge being free to turn loosely where they are jointed or hinged to the doors at their center, the other half of each hinge being loosely connected to the vertical rods D D

aforesaid by means of eyes *f f f f*, so as to enable a free and vertical as well as a horizontal movement uninterruptedly of the movable portions of the hinges around the said rods D D.

The doors E E are made to open at the center, and are cut at an angle or beveled at their ends and point of contact with each other, so as to make them fit more snugly together. Thus it will be seen that, by the construction of the hinges in the manner heretofore explained, the doors may be opened outwardly from their center, so as to form the sides of a chute for the delivery of grain, &c., and then swung back around the rods, so as to be out of the way within the car. Attached to one of these doors is an ordinary sliding bolt, G, and to the sill or base A of the door a hole is made for the reception of said bolt G, by which it may be securely fastened when closed. A hasp, H, is also connected to the same door that the bolt is secured to, which fits over a staple, I, in the other door, with a chain, *i*, and pin K, for assisting the bolt in more thoroughly fastening the door when closed.

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

In combination with the double hinges F F F F, the sill or base A, rods D D, posts B B, beam C, bolt G, hasp H, staple I, chain *i*, and pin K, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

BENJAMIN R. LEWIS.

Witnesses:

JAS. C. ESSICK,
S. R. TIPPIE.