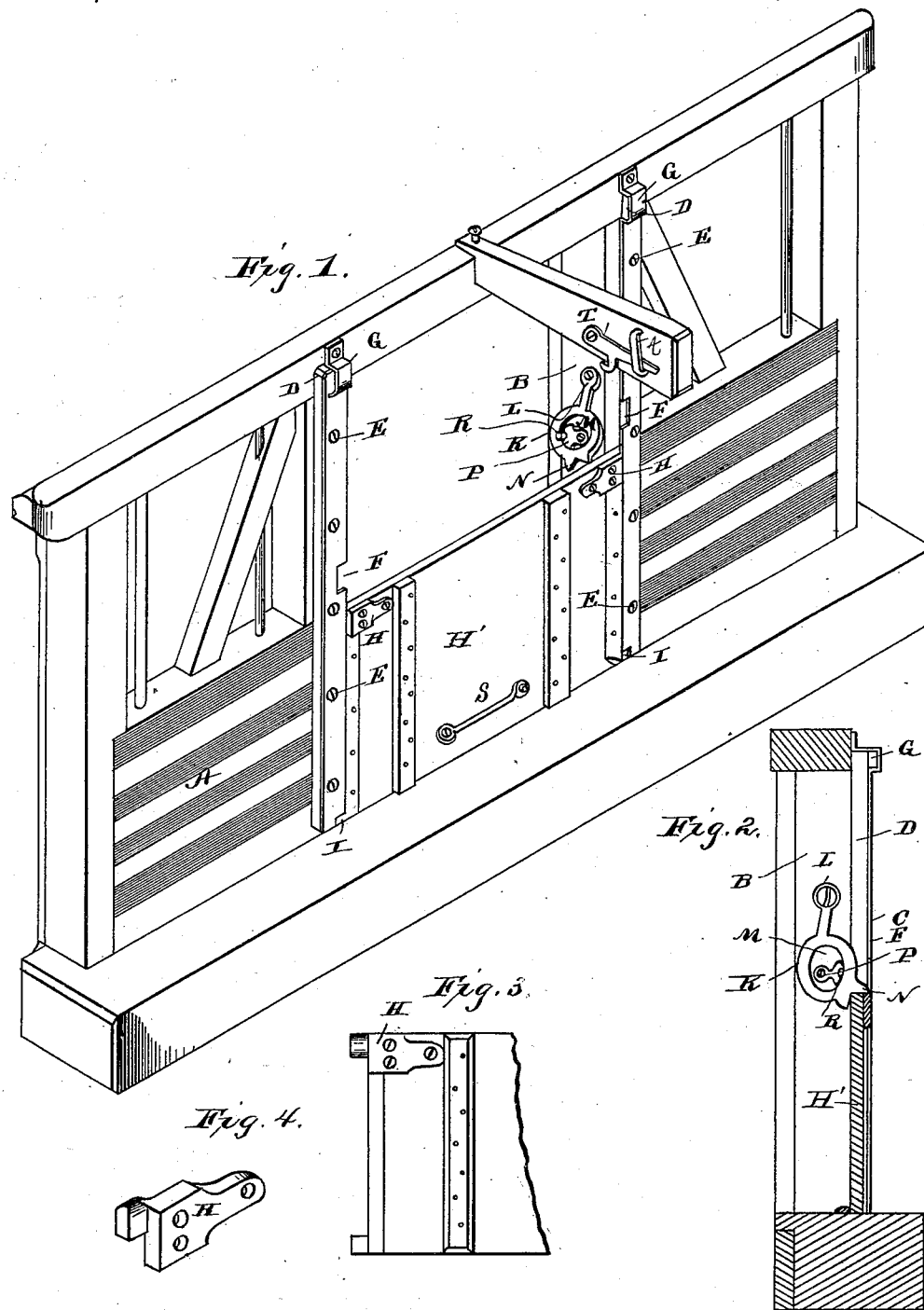


(No Model.)

L. MANCY.
GRAIN CAR DOOR.

No. 265,838.

Patented Oct. 10, 1882.



Witnesses,
Edwin L. Jewell,
J. J. McCarthy.

Inventor,
Leonard Mancy,
per O. M. Alexander,
Attorney.

UNITED STATES PATENT OFFICE.

LENARD MANCY, OF SEDALIA, MISSOURI.

GRAIN-CAR DOOR.

SPECIFICATION forming part of Letters Patent No. 265,838, dated October 10, 1882.

Application filed October 10, 1881. Renewed September 5, 1882. (No model.)

To all whom it may concern:

Be it known that I, LENARD MANCY, of Sedalia, in the county of Pettis, and in the State of Missouri, have invented certain new and useful Improvements in Grain-Car Doors; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements upon the invention for which Letters Patent were granted to me the 13th day of September, 1881, No. 247,081, for improvement in doors for cars and other structures for the reception of grain; and it has for its objects, first, to provide an improved means whereby the vertically-sliding door may be swung back and held out of the way when opened for the discharge of the grain or contents of the car or structure or for charging the same; and, second, in an improved locking device for fastening the door in position when closed, as more fully hereinafter specified.

The above-mentioned objects I attain by the devices illustrated in the accompanying drawings, in which—

Figure 1 represents a perspective view of a portion of a car showing my invention applied thereto. Fig. 2 represents a vertical sectional view, showing the improved locking device. Fig. 3 represents an elevation of a portion of the door detached, and Fig. 4 a detached perspective view of one of the castings attached to the upper corners of the door.

The letter A indicates the body of the car or other structure, and B the door-frame, which is constructed in the usual manner. To the sides of the frame, on the inside, are secured in any convenient manner the vertical ways or guides C, consisting of metallic plates secured to the vertical strips D by means of screws E or otherwise. Midway between the upper and lower ends of the metallic plates they are slotted, as indicated by the letter F, and at the upper ends of said plates, at the termination of the ways or guides C, are formed brackets G, which form bearings for the lugs H on the sliding door, whereby it can be swung back when elevated. The lugs H are secured

to the upper corners of the door H' by means of screws or otherwise, and they set and are adapted to travel in the ways C. The lower corners of the door are provided with lugs I, which also set and are adapted to work in the ways or guides C.

The letter K indicates a pawl pivoted to the door-frame at L. The said pawl is provided with an elliptical opening, M, and with a dent, N. Within the elliptical opening, and pivoted to the door-frame, is a dog, P, provided with a projection, R, by means of which it may be moved. The said dog is pivoted eccentrically to the opening in the pawl, so that when shifted it will either disengage the dent of said pawl from the door or cause it to engage the upper edge of the same and lock it in place, as may be desired.

The letter S indicates a staple secured to the inside of the door near the lower edge of the same, and T a pivoted latch secured to one of the upper cross-beams of the car or structure in such position as to engage the staple and hold the door in a horizontal or approximately horizontal position when elevated and swung back. The latch T consists of a horizontal pawl pivoted at one end to one of the top transverse beams of the car, and provided with a downwardly-extending hook to engage the staple S of the door. The free end of the pawl is adapted to move in a suitable guide, T, which limits its motion.

The operation of my invention is as follows: When the door is closed the lugs at the top and bottom lie in the ways C, the locking devices setting over its upper edge and confining it in position. To open the car or structure, the locking devices are thrown back and the door is elevated until the lugs at the upper corners enter bearings G, permitting the door to be swung inward and retained by the latch.

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

1. In combination with the vertical ways secured to the door-frame, the brackets at the upper ends of said ways, the sliding door, its lugs and staple, and the latch, constructed as described, and adapted to hold the door when elevated, substantially as specified.

2. In combination with the sliding door located in vertical ways, the pivoted detent-pawl provided with an elliptical opening, and the eccentrically-pivoted locking-pawl adapted to work in said opening, substantially as specified.

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In testimony whereof I affix my signature, in

presence of two witnesses, this 1st day of October, 1881.

L. MANCY.

Witnesses:

D. J. SLATER,

JERRY SULLIVAN.