

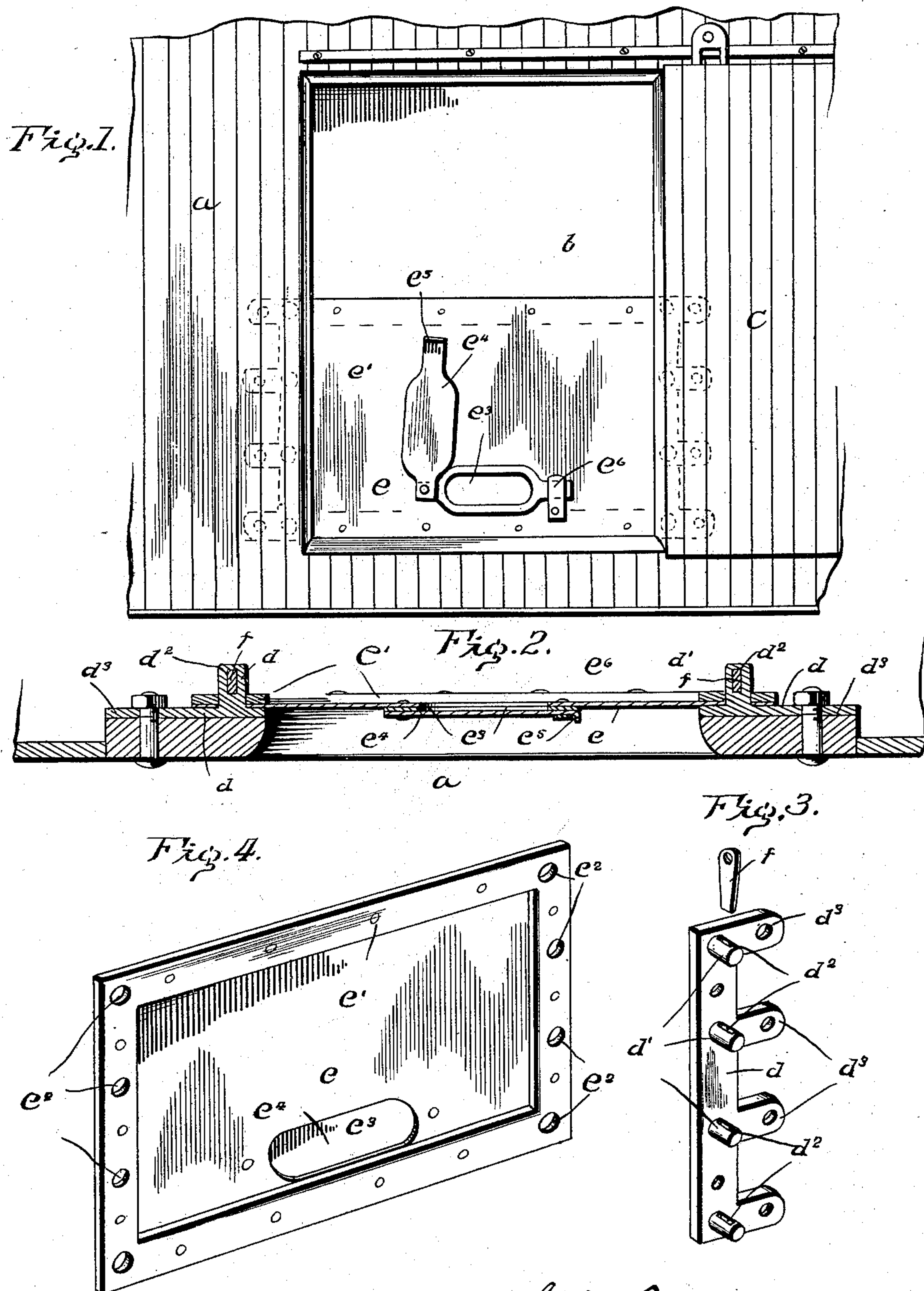
No. 750,431.

PATENTED JAN. 26, 1904.

S. A. BUSHEY.
GRAIN CAR DOOR.

APPLICATION FILED SEPT. 4, 1903.

NO MODEL.



Witnesses:

Flora Pierce
J. J. Johnson

S. A. Bushey

Inventor

By his Attorney

J. R. Nottingham

UNITED STATES PATENT OFFICE.

SYLVESTER A. BUSHEY, OF DENTON, TEXAS.

GRAIN-CAR DOOR.

SPECIFICATION forming part of Letters Patent No. 750,431, dated January 26, 1904.

Application filed September 4, 1903. Serial No. 171,944. (No model.)

To all whom it may concern:

Be it known that I, SYLVESTER A. BUSHEY, a citizen of the United States, residing at Denton, in the county of Denton and State of Texas, 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.

This invention relates in general to doors for grain-cars, and particularly to that type commonly known as "removable" doors; and it consists, essentially, in providing the opposite sides of the door-opening with novel-ly-constructed devices, whereby the door may be securely attached thereto.

The invention further consists of the general arrangement and combination of the several parts, as will be hereinafter described and stated in the claims.

One of the objects of the invention is to provide the usual grain-car with a durably-constructed door that may be easily and quickly secured in place and readily detached when occasion demands. Other objects of the invention will become apparent upon further description thereof.

In the drawings, Figure 1 is a side view of a portion of a car, showing my improved grain-door applied thereto; Fig. 2, a horizontal sectional view through one of the doors and door-frame of the car; Fig. 3, a perspective view of one of the stud-plates to which the door is secured; and Fig. 4, a similar view of the door detached, showing the reverse side.

In the several views the letter *a* indicates the side of a car, *b* the door-opening, and *c* the ordinary sliding door, which is shown moved back from the door-opening.

Secured to the inner side of the door-frame at each side of the opening is a plate *d*, having a plurality of studs *d'* projecting therefrom, each stud being provided with an aperture *d''*, preferably rectangular in shape, for a purpose to be hereinafter explained. One side edge of each plate *d* is preferably provided with a plurality of separated lips *d'''*, having suitable apertures for the reception of lag

screws or bolts, by means of which the plates are more securely fastened to the door-frame of the car.

The letter *e* indicates the grain-door, preferably constructed of metal and provided on its inner side with a marginal frame *e'* of metal to strengthen the same. The respective ends of the grain-door are provided with apertures *e''*, adapted to receive the studs *d'* of the plates *d*. A suitable grain-exit *e'''* is provided in the grain-door for the passage of the grain, said exit being provided with a swinging cover *e''''*, having its free end formed with an extension *e'''''*, adapted to engage a catch *e''''''* to secure the cover against accidental displacement.

When the door is placed in position with the studs *d'* projecting through the apertures *e''*, suitable wedges or pins *f*, suspended by chains from the sides of the door-frame, are inserted into the apertures *d''* of the studs and the door is securely and firmly held in place.

When the car is to be unloaded, the exit *e'''* is uncovered, which allows the grain to run out until sufficient grain has passed through said exit to permit the removal of the grain-door. To remove the grain-door, all that is necessary is to withdraw the wedges *f* from the apertures in the studs, when the door can be easily detached from the studs.

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

1. In combination with the door-frame of a car having plates secured thereto, at opposite sides thereof, said plates being provided with a plurality of studs having apertures therein, of a grain-door having its respective ends provided with apertures to receive said studs, and wedges or pins adapted to be inserted into the apertures in the studs to secure the door in position.

2. The combination with the door-frame of a car having plates secured thereto, at opposite sides thereof, said plates being provided with a plurality of studs having apertures therein, of a grain-door provided with a marginal frame of metal to strengthen the same, and having its respective ends provided with apertures to receive said studs, and wedges or

pins adapted to be inserted into the apertures in the studs to secure the door in position.

3. The combination with the door-frame of a car having plates secured thereto, said plates
5 being provided with a plurality of studs having apertures therein, of a grain-door provided with a grain-exit and a cover thereto, and having its respective ends provided with apertures to receive said studs, and wedges or pins

adapted to be inserted into the apertures in the studs to confine the door in place.

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

SYLVESTER A. BUSHEY.

Witnesses:

J. W. MALONE,
ED. F. BATES.