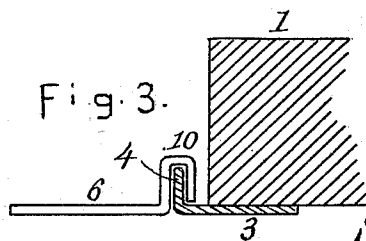
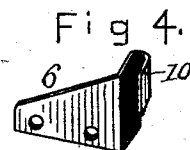
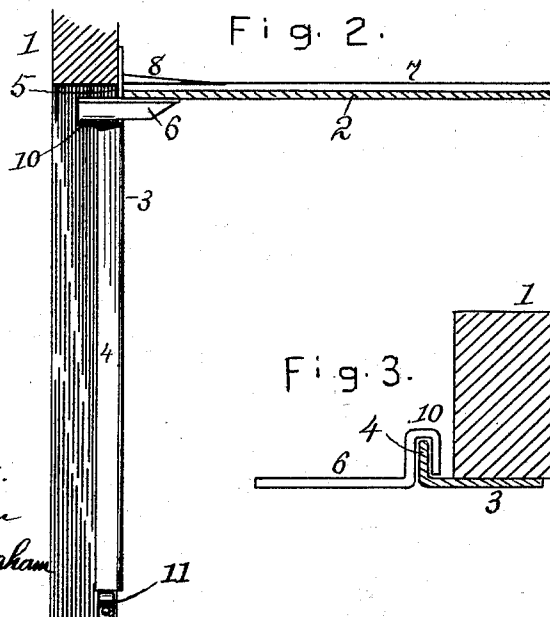
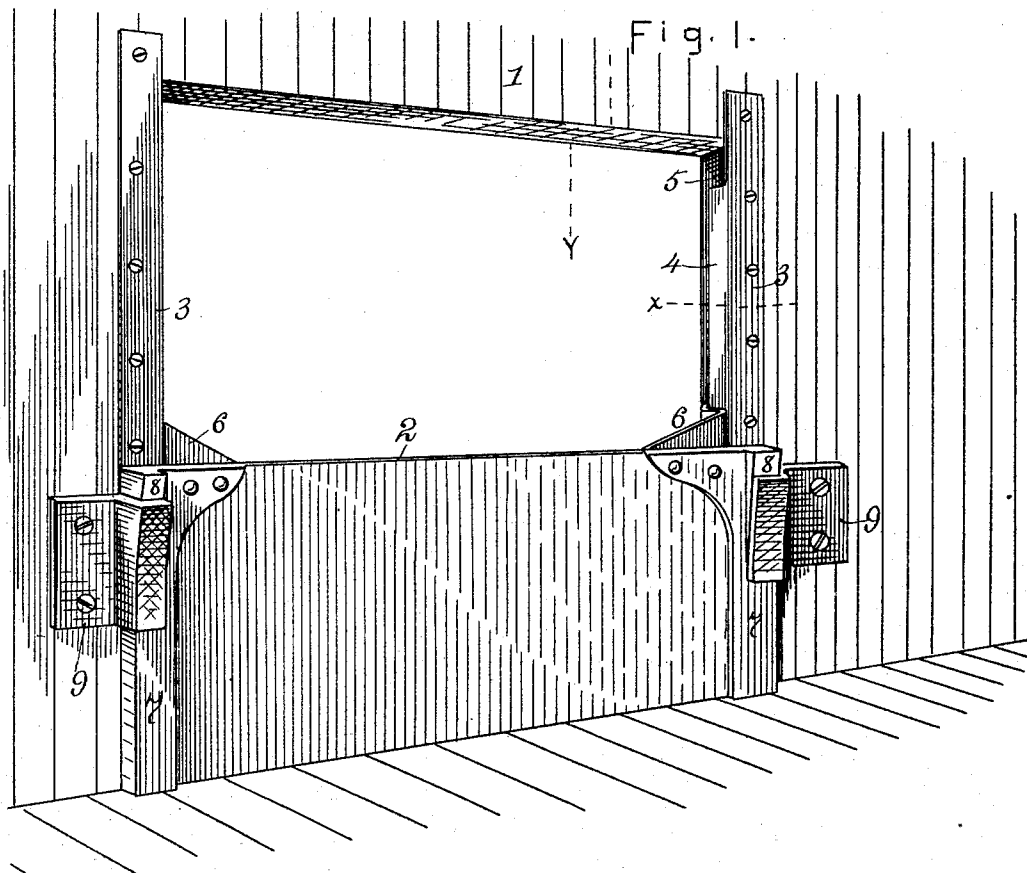


(No Model.)

S. W. GROSH.
CAR DOOR.

No. 485,007.

Patented Oct. 25, 1892.



ATTEST.
Kelton Graham
William Graham

INVENTOR
S. W. Grosh.
by his attorney
E. P. Graham

UNITED STATES PATENT OFFICE.

SILAS W. GROSH, OF DECATUR, ILLINOIS.

CAR-DOOR.

SPECIFICATION forming part of Letters Patent No. 485,007, dated October 25, 1892.

Application filed March 5, 1892. Serial No. 423,826. (No model.)

To all whom it may concern:

Be it known that I, SILAS W. GROSH, of Decatur, in the county of Macon and State of Illinois, have invented certain new and useful Improvements in Car-Doors, of which the following is a specification.

This invention relates to doors for grain-cars. It is designed to provide means for retaining the door in connection with the car when not in use. It does not obstruct the door-opening in a manner to subject itself to danger of breakage when the car is used for other material than grain. It holds the door firmly when said door is swung up out of the way, and it is embodied in the details of construction and combinations of parts herein-after set forth and claimed.

In the drawings accompanying and forming a part of this specification, Figure 1 is a perspective representation of the inside of the door, showing its connection with a car. Fig. 2 is a section on line Y in Fig. 1, showing the door raised and swung inward in position to be connected with the top of the car. Fig. 3 is a section on line X in Fig. 1, showing a rail and a guide in detail. Fig. 4 is a perspective representation of a guide.

A part of a side of a car is shown at 1. The door 2 has cleats 7, which are provided with wedges or wedge-shaped heads 8. The keepers 9 act as guides for the door when it is closing and they are shaped to coact with the wedges of the cleats for the purpose of holding the closed door in close contact with the casings of the door. The rails 3 are of sheet metal. They are secured to the inner faces of the inside vertical door-casings, and they have the outwardly-bent L portions 4 cut away or recessed at their upper ends, as shown at 5. The guides 6 are in the nature of brackets. They are securely attached to the outer surface of the upper corners of the doors, and they have each a hooked slide-bearing 10 above the upper end of the door and embracing a ledge 4 of a guide-rail. The rails extend from the top of the car-door opening to about the vertical center of such opening and they are provided at their lower ends with stops 11, which prevent the guides from sliding below and out of connection with the rails. The rails are secured to the side door-casings. The door-guides are slipped onto the

lower ends of the rails, and the stops 11 are secured in place. Then when it is desired to get the door entirely out of the way it is moved upward in a vertical position until the hooks of the guides are in the recesses of the rails, when it (the door) may be swung into a horizontal position, as seen in Fig. 2, and secured at its swinging end to the top of the car, the lower edge being sustained in the recess of the rail. The door bears against the inside of the casing and the guides bear against the outside edges of the rail, so that the door cannot be detached from the car without considerable difficulty, and consequently will always be ready for use when needed. The guides are flush with the inside surface of the door-casing, and the angle-irons of which they are composed are very stiff. Consequently the car may be used for carrying other freight without danger of incapacitating the grain-door. The door bears against the inside surface of the casing when elevated, as shown in Fig. 2, and firmly holds the slide-bearings in the recesses of the guides.

I claim—

1. A car-door adapted to bear against the inner surface of the door-casings, outwardly-projecting guide-rails parallel with the side casings, flush with the inner surface thereof, and having the outer portions of their upper ends cut away or recessed, and guides on the upper corners of the door, having hooked slides above the door embracing the outer edges of the rails, all in combination, as set forth.

2. A car-door adapted to bear against the inner surface of the door-casing, L-shaped rails, each having one part attached to a side casing flush with the inner surface thereof and the other part projected outwardly and cut away or recessed at its upper end, and guides on the upper corners of the door, having hooked slides above the door, embracing the outwardly-projecting parts of the rails, all in combination, as set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

SILAS W. GROSH.

Attest:

W. M. LEWIS,
L. P. GRAHAM.