(No Model.)

R. J. WALKER.

GRAIN DOOR.

No. 271,957. Patented Feb. 6, 1883.

Fig. 1

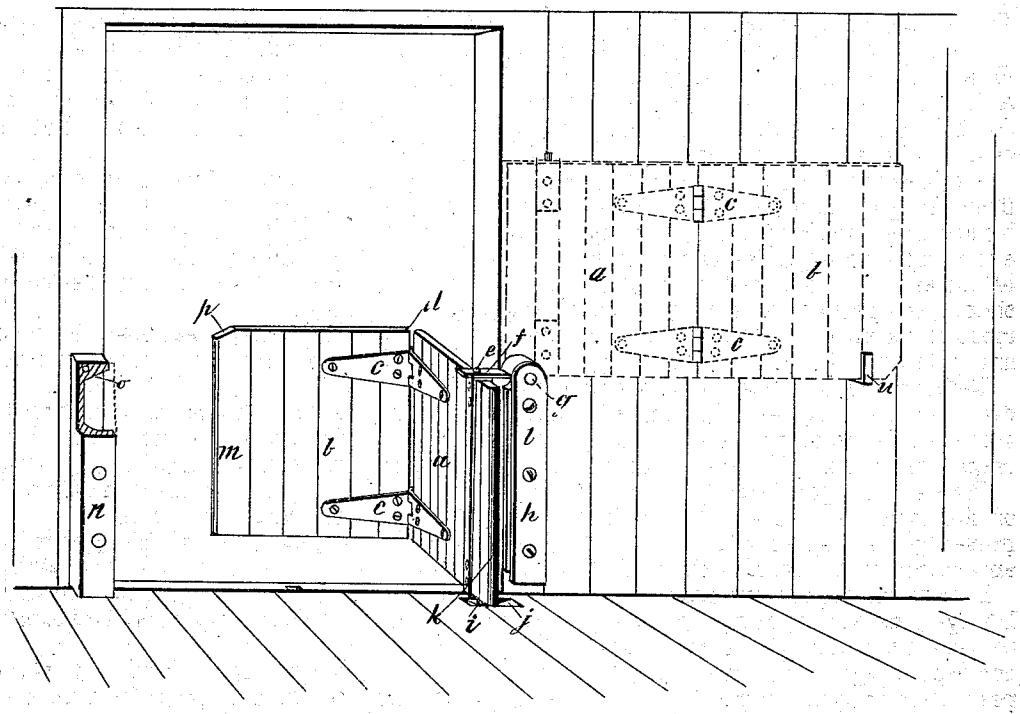
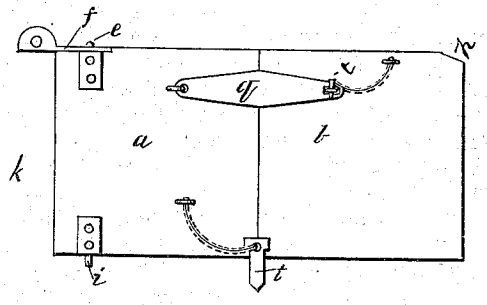


Fig. 2



WITNESSES:

Chas. F. Howell.
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INVENTOR:

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UNITED STATES PATENT OFFICE.

ROBERT J. WALKER, OF GIRARD, ILLINOIS.

GRAIN-DOOR.

SPECIFICATION forming part of Letters Patent No. 271,957, dated February 6, 1883.

Application filed June 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. WALKER, of Girard, in the county of Macoupin and State of Illinois, have invented a new and Improved Grain-Door, of which the following is a full, clear, and exact description.

My invention relates to improvements in doors for grain-cars; and it consists in a door hinged to a swinging plate to adapt it to be swung upward edgewise and against the side of the car when not in use; and it also consists in the peculiar construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of a portion of the inside of a car-body having my improved grain-door applied to it, and Fig. 2 is an exterior side elevation of the door.

I make the door in two parts, *a* and *b*, which I hinge together by inside hinges, *c*, preferring to groove the edge of one part, as at *d*, and to correspondingly curve the edge of the other part to fit closely in the groove and make a tight joint, although square edges may be employed. Inside of the door-jamb I hinge the part *a* of the door, by a pivot, *e*, at the top, in a plate, *f*, which is also pivoted at *g* in the top of the post *h* and in the door-jamb. The lower end of the door has a similar pivot, *i*, lodged in a slot, *j*. Both of these pivots *e* and *i* are located a suitable distance from the edge *k* to allow it to swing into a groove, *l*, in the side of post *h*, said edge *k* being curved to fit snugly in the groove, which is to be correspondingly formed. The pivot *g* is to be slightly lower than the top of the door, so as to cause the hinge-plate *f* to draw the door down tightly on the floor. The edge *m* of door *b* is slightly curved to swing into a correspondingly-curved groove in the post *n*, and the top of said groove is beveled at *o*, so that the beveled corner *p* of the door will be borne down tightly on the floor.

The door is fastened shut by the hasp *q* and pin *t* on the outside. If desired, the slot *j* in the floor for the pivot *i* may be elongated and suitably sloped on the bottom to allow the door to swing upon the pivot *g* into the position represented by the dotted lines and lodged on the hook-stud *u* when the door is not required to be shut.

I am aware that car-doors made in two parts and hinged together have been secured to sliding hinges; and I am also aware that doors hinged together and sliding in ways of the door-jamb are old, and I therefore do not claim such invention.

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

1. A car-door hinged to a swinging plate, substantially as herein shown and described, whereby the door is adapted to be swung upward edgewise and against the side of the car when not in use, as set forth.

2. The combination of the grooved posts *h* and *n* with the door made in two parts, *a* and *b*, and hinged together, and also hinged to the interior of the door-jamb, substantially as described.

3. The pivots *e* and *i*, arranged with respect to edge *k* of the door, and the grooved post *h* to enable said edge *k* to swing into the groove of the post, substantially as described.

4. The door *a b*, hinged to post *h* by pivot *e*, and hinge-plate *f*, said plate *f* being pivoted to the post and door-jamb, substantially as described.

5. The door *a b*, hinged to post *h*, and pivoted in the slot *j* on the floor, substantially as described.

6. The door *a b*, arranged in the slot *j*, and on the pivot, substantially as described, for lodgment on the stud-hook *u*, substantially as specified.

7. The hinge-plate *f*, arranged with respect to post *h* and door *a* for bearing said door on the floor, substantially as described.

ROBERT J. WALKER.

Witnesses:
W. J. WOODS,
M. A. DELANEY.