

(No Model.)

A. H. NOYES & E. S. GARDNER.

WAGON END GATE.

No. 338,545.

Patented Mar. 23, 1886.

Fig:1.

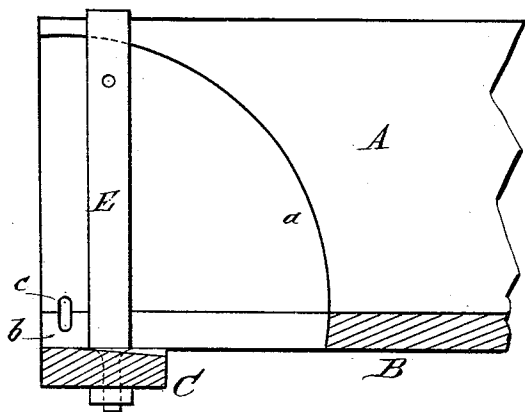


Fig: 2.

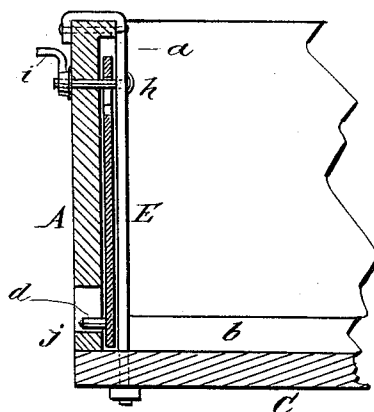


Fig: 3.

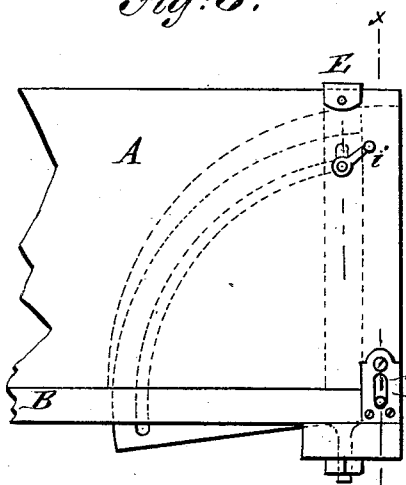


Fig: 4.

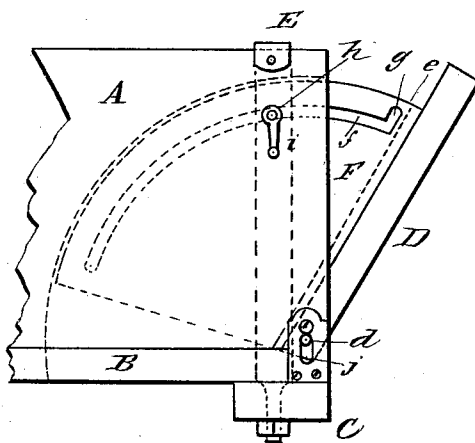
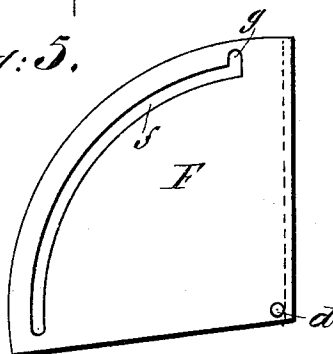


Fig: 5.



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WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 338,545, dated March 23, 1886.

Application filed January 13, 1886. Serial No. 189,743. (No model.)

To all whom it may concern:

Be it known that we, ADELBERT H. NOYES and ELMER S. GARDNER, of Jefferson, in the county of Jefferson and State of Wisconsin, have invented a new and useful Improvement in End-Gates for Wagon-Boxes, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a longitudinal section of a part of a wagon-box, showing the inner surface of one of the side-boards. Fig. 2 is a transverse section of a part of a wagon-box, taken on line *x x* in Fig. 3. Fig. 3 is a side elevation of the rear portion of the wagon-box, showing the end-gate closed. Fig. 4 is a side elevation of the rear end of the wagon-box, showing the end-gate partly open. Fig. 5 is a detailed view of one of the side plates of the end-gate. Similar letters of reference indicate corresponding parts in the different figures of the drawings.

The object of our invention is to provide an end-gate for wagon-boxes, which may be securely fastened, so as to retain the contents of the box, and which, when opened, will form a continuation of the floor of the wagon-box, with side pieces connecting the ends of the end-gate with the sides of the wagon-box, to prevent the escape of the contents of the box over the ends of the end-gate.

Our invention consists in a wagon-box provided with a pivoted end-gate having sectoral end plates, which enter a recess on the sides of the wagon-box when the end-gate is closed, and which, when the end-gate is open, form side pieces which prevent the escape of the contents of the box over the ends of the end board.

The side-boards A of the wagon-box are each provided on their inner surfaces, at the rear end of the box, with a sector-shaped recess, *a*, and the floor B of the wagon-box is the thickness of the end-gate shorter than the side-board A. A cleat, C, extending across the under surface of the rear end of the wagon-box, supports the end of the bottom B, and forms a rabbet, *b*, which receives the lower edge of the end-gate D. A strap-bolt, E, ex-

tends upward over the recess *a*, the lower end passing through the cleat C, the upper end hooking over the upper edge of the side-board A, leaving a space between the body of the strap-bolt E and the side-board equal to the thickness of the recess *a*. The side-boards A at their rear ends and near the bottom of the box are provided with slots *c*, for receiving the pivots *d* of the end-gate D. To opposite ends of the end-gate D are secured plates F, which are preferably made of cast-iron and formed with a flange, *e*, which rests against the inner surface of the end-gate D. The plates F are sector-shaped, and fit into the recess *a*, formed in the side-boards A. The angle formed by the straight sides of the sector-shaped plates F is a little greater than ninety degrees, so that when the end-gate D is let down into a horizontal position, in a manner presently to be described, the edge of the plate will overlap the sides of the wagon-box so as to complete the wagon-box side to the end of the end-gate. A curved slot, *f*, is formed in each side plate, F, and at the end of each slot *f* is formed a lateral notch, *g*, and the bolts *h* pass through the strap-bolts E, through the slots *f* of the end plate, F, and through the side-boards A, and are provided with lever-nuts *i*.

When the end-gate D is closed, the bolt *h* is received in the notch *g*, the lower edge of the end-gate drops down into the rabbet *b*, and the pivot *d* rests in the bottom of the slot *c*, and the bolts *h*, being tightened, draw the side-boards of the wagon-box together. When it is desired to let down the end-gate the bolts *h* are loosened, the end-gate is raised so as to bring the pivots *d* into the upper ends of the slots *c*, when the end-gate may be let down into a horizontal position, the bolts *h* being received in the curved slots *f*.

It will be observed that when the end-gate is in a horizontal position the edge nearest the bottom boards of the wagon-box is supported by the cleat C, and the outer edge of the end-gate is supported by the sectoral plates F, said plates being sustained by the bolts *h*.

The recesses *a* may be formed in the outer side of the side-boards, or they may, in some cases, be omitted altogether.

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

1. The combination, with the end-gate D, 5 pivoted in slots *c* in the side-board, of the sector-shaped end plates, F, provided with curved slots *f* and notches *g*, and the bolts *h*, passing through the side-boards of the box and through the slots of the end plates, substantially as 10 herein specified.

2. The combination, with a wagon-box having recessed side-boards and having formed at the ends of the bottom boards the rabbet *b*, of the end-gate D, sectoral plates F, provided 15 with curved slots *f* and notches *g*, the strap-

bolts E, and the clamping-bolts *h*, substantially as herein specified.

3. The combination, with a wagon-box having side-boards A, provided with sector-shaped recesses *a*, and having slots *c* formed therein, 20 of the cleat C, forming with the ends of the bottom of the box the rabbet *b*, the end-gate D, provided with pivots *d*, the sectoral plates F, having curved slots *f* and notches *g*, and the bolts *h*, substantially as specified.

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Witnesses:

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