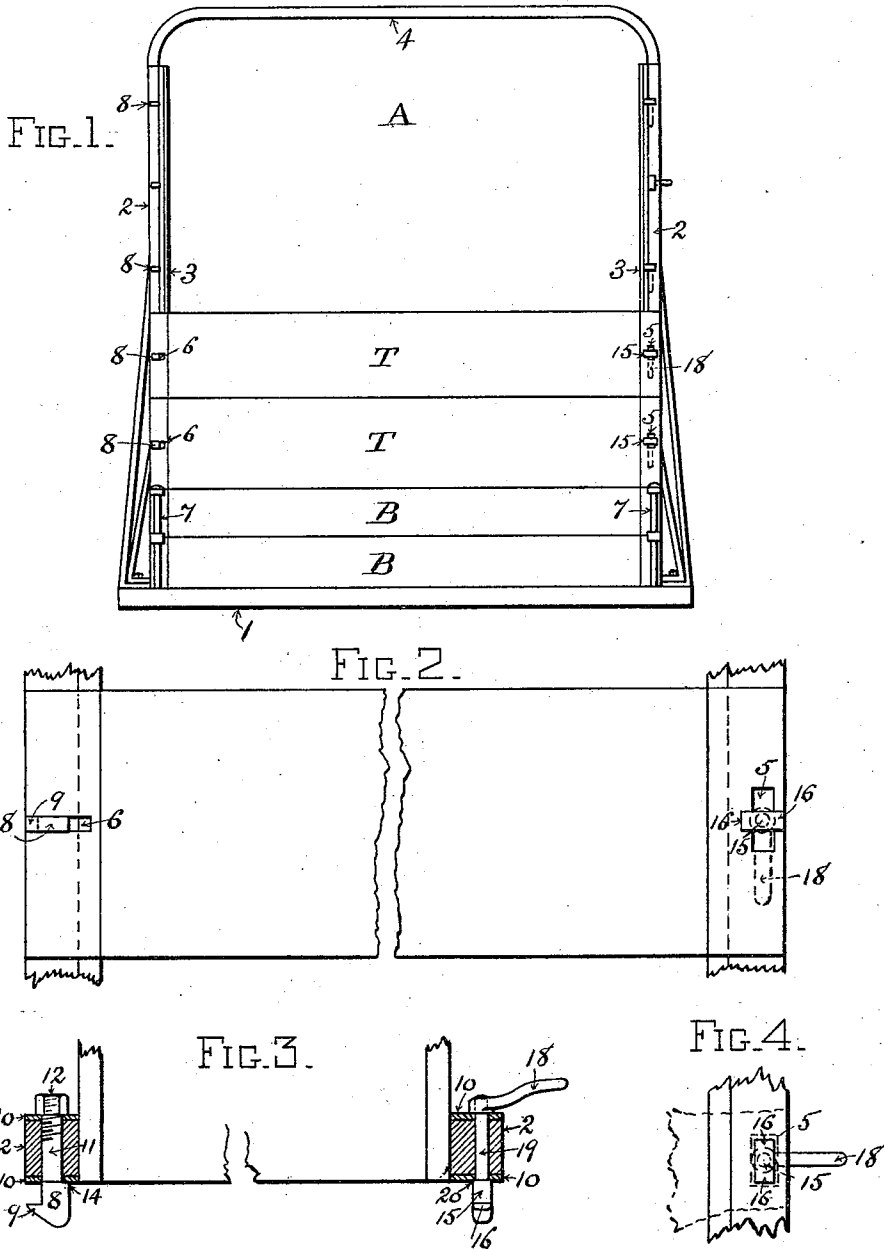


(No Model.)

A. R. MAGUIRE.
WAGON END GATE.

No. 550,987.

Patented Dec. 10, 1895.



WITNESSES.
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ALEXANDER R. MAGUIRE, OF LYNN, MASSACHUSETTS.

WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 550,987, dated December 10, 1895.

Application filed April 24, 1895. Serial No. 547,006. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER R. MAGUIRE, a citizen of the United States, residing at Lynn, in the county of Essex and Commonwealth of Massachusetts, have invented a new and useful Improvement in End-Boards and Devices for Fastening the Same, as fully described and shown in the following specification, taken in connection with the accompanying drawings, forming a part hereof.

This invention relates generally to devices of the above class, but more particularly to such devices as provide for wagons having high supporting-sides, against which the load is piled, such as the common form of ice-delivery wagon.

This invention consists of a novel form and arrangement of the end-board and its fastening, whereby the end-board may be readily adjusted and secured in position and is held longitudinally, as well as laterally, to act as a brace to resist the spreading of the sides of the wagon.

As heretofore formed and arranged, the end-boards of ice-delivery wagons are held laterally by their fastenings, but not longitudinally, the result being that the sides of a heavily-loaded wagon are apt to spread at the back under pressure of the ice and one or more of the end-boards fall out, followed, if the wagon is inclined toward the back, as in going uphill, by a portion of the load.

The object of this invention is to remedy the defect above set forth, which not only occasions great loss of time to persons employed upon said wagons, but is often dangerous, not only for such persons, but also for others who happen to be in the immediate vicinity.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a rear elevation of an ice-wagon body, showing my invention applied thereto. Fig. 2 is an enlarged back view of single board and fastening. Fig. 3 is a top plan view of my improved fastening, showing part of wagon in section. Fig. 4 is a detached view of portion of board and fastening, showing same in position for removal or adjustment of the board.

Similar letters and figures of reference refer to similar parts throughout the several views.

In the drawings, A represents the wagon-body, which is of the usual form and provided with a suitable floor or platform 1, the uprights or posts 2, the side-boarding 3, and the top 4, all formed and arranged in the usual manner.

T T T, &c., represent a series of my improved end-boards, secured one above the other and each held longitudinally as well as laterally, and forming a brace to prevent the spreading of the sides of the body A.

Under my improved end-boards are shown the end-boards B B, of the usual type, which are arranged to slide behind the rods 7 7, which are suitably secured to the sides of the wagon-body A and which hold the boards B B in position laterally, but not longitudinally. I find it convenient in practice to use the end-boards B B in connection with my improved end-boards T T, &c., on account of their adaptability to withstand the great lateral strain which naturally falls upon the lower boards. When lightly loaded, the sides of the body A are not apt to be sufficiently spread to displace the lower boards, arranged as described, and when heavily loaded the sides of the body A are held together by one or more of the boards T.

Each of the boards T T, &c., is provided with a transverse slot 5 and a longitudinal slot 6, located, respectively, adjacent to the opposite ends of the board.

To one side of the wagon-body A is secured a series of shoulder-latches 8 8 8, &c., which are respectively adapted to be projected through the longitudinal slot 6 and engage with the outer end of the same, each being provided with a laterally-projecting shoulder 9, which when the latch is projected through the slot 6 and brought into contact with the outer end of the same extends along the back of the board, the arrangement being such that the body of the latch 8 holds the board T longitudinally in position and the shoulder 9 laterally.

In practice I prefer to secure the latches 8, &c., to the sides of the wagon, as follows: At the front and back of the rear upright 2 (see Fig. 3) I secure a metal plate 10, in which are drilled a series of holes arranged in pairs upon opposite sides of the post 2 and each pair coinciding with a hole bored through

the post 2. From each of the latches 8 projects a stem 11, which extends through the post 2 and both plates 10 10, and the rear portion of which is threaded to receive a nut 12.

5 The latch 8 is provided with a shoulder 14, which extends along the rear plate 10, the arrangement being such that when the nut 12 is set up the latch 8 is held firmly in a fixed position against metal bearings. The plates 10 10 conveniently extend along the post 2 a sufficient distance to cover all the bearings of the latches 8 8, &c. To the other side of the body A is secured a series of double shoulders or T-shaped latches 15 15 15, &c., each of which is capable of rotation and adapted to be projected through the transverse slot 5 and then rotated until brought transversely thereto. When in the position last described, the shoulders 16 16 of the latch 15 project along the back of the board T and hold the same laterally in position, while the body of the latch 15, bearing against the sides of the slot 5, prevents any longitudinal movement of the board T.

25 It will be noted that since each of the latches 8 and 15 holds its board T both laterally and longitudinally each of the boards T acts as a lateral brace to prevent the sides of the body A from spreading.

30 Each of the latches 15 15, &c., is provided with an operating-handle 18, which is conveniently located at the front of the post 2 and rigidly connected with the stem 19, which secures the latch 15 to the post 2.

35 A single-shouldered latch may be used instead of the doubled-shouldered latch 15 and the position of the slot 5 varied; but I prefer the arrangement shown on account of the greater bearing of latch 15 on board T.

40 In practice I also provide plates 10 10, the form and arrangement of which I have already described, to form bearings for the latches 15

15, &c., and each of said latches is provided with a shoulder 20, which bears against the rear plate 10, the hub of the handle 18 or a suitable washer bearing against the front plate.

It will be noted that in my improved end-board the slots 5 and 6 are both inclosed slots, being, as shown, surrounded on all sides by the material of the board, and that by reason of such construction, in connection with the shoulder-latches herein described, I am enabled to hold the boards T T, &c., longitudinally as well as laterally, so that each board T acts as a brace to prevent the sides of the wagon from spreading, and it is obvious that any end-board so held not only cannot fall out itself, but will prevent other lower boards secured by other means from falling out when such result arises from the spreading of the sides of the wagon.

I therefore claim as novel and desire to secure by Letters Patent—

The combination with a wagon box, of an end board therefor having elongated slots formed in its opposite ends, a fixed latch 8 on one side of the body having a head with an overhanging shoulder 9, adapted to pass through one of the said slots and project over the end wall thereof, and a pivoted latch on the opposite side of the body having a head with an overhanging shoulder, arranged to engage over the side walls of the opposite slot, and a lever on the inner end of the pivoted latch for turning the same after the head has been passed into the slot, substantially as described.

Witness my hand, in the presence of two attesting witnesses, this 22d day of April, 1895.

ALEXANDER R. MAGUIRE.

Witnesses:

BENJAMIN PHILLIPS,
A. E. WHYTE.