No. 701,884. Patented June 10, 1902.

N. HON.

END GATE FOR WAGONS.

(Application filed Apr. 18, 1902.)

(No Model.)

FIG. 1.

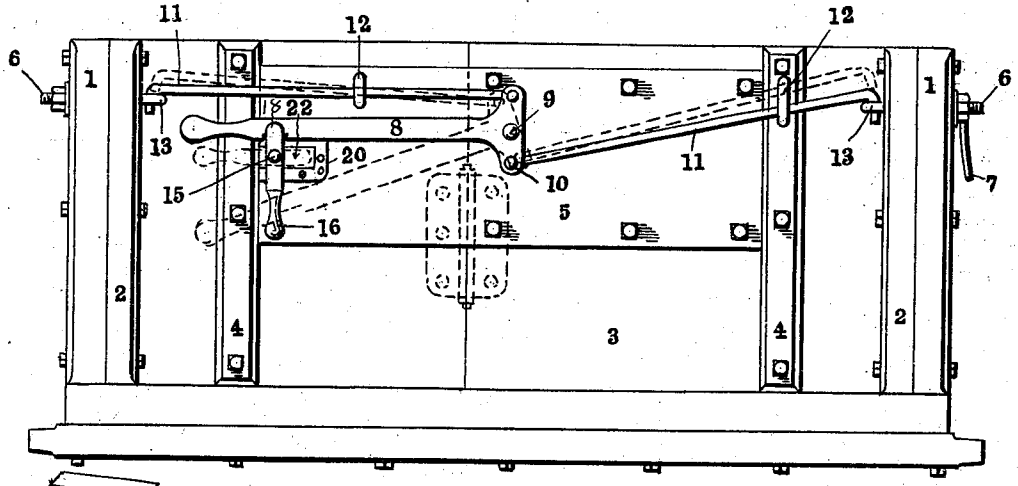


FIG. 3.

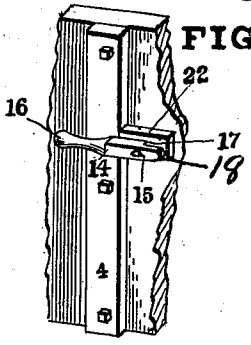


FIG. 4.

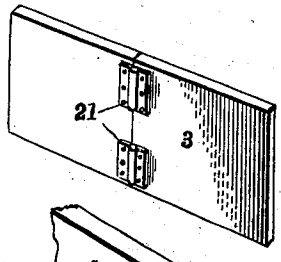
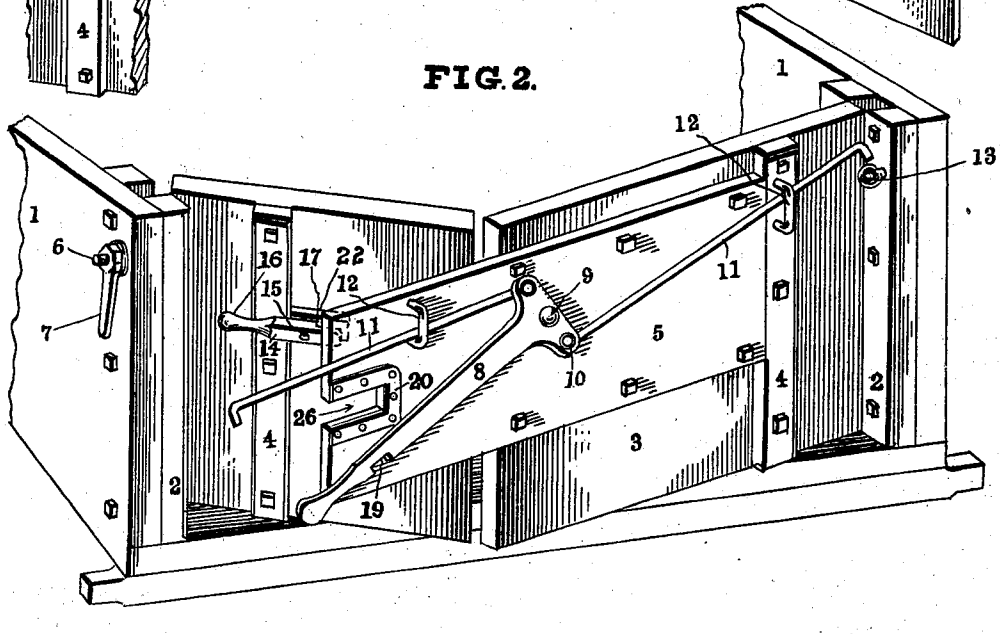


FIG. 2.



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UNITED STATES PATENT OFFICE.

NELSON HON, OF REDLINE, IOWA.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 701,884, dated June 10, 1902.

Application filed April 18, 1902. Serial No. 103,632. (No model.)

To all whom it may concern:

Be it known that I, NELSON HON, of Redline, county of Shelby, and State of Iowa, have invented certain new and useful Improvements in End-Gates for Wagons; and I do hereby declare the following is a full and clear description thereof.

My invention relates to vehicles.

More particularly stated, the object of my invention is to provide the end-gate of a wagon with a simple locking device for preventing the spread of the sides of the wagon-body and at the same time provide a locking device for holding the end-gate in place.

With these objects in view my invention consists in the following construction and operation of the parts, the details of which will first be fully set forth and the features of novelty then pointed out and claimed.

Figure 1 represents a perspective view of the rear portion of a wagon-body and end-gate having my invention applied thereto. Fig. 2 is a rear elevation of the same. Fig. 3 is a detail view of the operating-lever and its locking-latch. Fig. 4 represents a detail view of the eyebolts.

In the drawings the wagon-body 1 is shown provided with the usual cleats 2, secured to the sides of the body, forming slotted guides within which the end-gate 3 is held for the purpose of removing and replacing the same.

4 represents vertical risers secured to the gate, and 5 is a longitudinal strip secured between the risers, to which the main parts of the end-gate-locking device is secured.

Through the wagon-body in the rear of the gate horizontal apertures are formed, through which are inserted eyebolts 6, threaded at their outer ends and provided with nuts 7 for the purpose of adjustably setting the same. These nuts 7 may have projecting handles for rotating the same, as shown in Fig. 1, or the handle may be omitted, as may be seen in the same figure.

To the piece 5 is secured the main operating-lever 8, pivoted at 9 and having oppositely-projecting arms 10, to which are respectively secured rods 11, passing through guiding-staples 12. The ends of rod 11 are provided with hooks 13, which take into the eyebolts 6.

14 is a locking-latch pivoted at 15, 16 being the handle portion thereof.

17 is the locking-detent face of the latch, and 18 is a guiding and holding lip projecting beyond the detent 17.

19 is a recess formed in the lever-arm 8, into which the locking-detent 17 enters.

When the end-rod device is brought under tension, the detent and recess, together with the holding-lip 18, effectually lock the rod under strain and prevent it from becoming unlocked, due to the jolting of the wagon.

20 is a metal wear and pivot plate for the latch and operating-lever.

In operation the bolts 6 are adjustably set in proper position by means of the nuts 7 and the end-gate inserted between the cleats 2. The operating-arm 8 is dropped down over the latch 14, and the hooked rods 11 are projected sufficiently to permit the hooks to enter the eyes of the bolts 6. The arm 8 is then raised over the latch 14 in its horizontal position. To effect a further and effectual locking, the arm 16 of the latch 14 is pulled downwardly, when the locking-lever detent 17 forces the operating-arm farther upwardly until the detent drops into the recess 19, the lip 18 preventing the lever 8 from moving outwardly out of engagement. When the detent enters the recess, the strain of the rods 11 snaps the detent 17 into the recess 19 and locks the sides of the wagon securely through the end-gate device. In other end-gate-locking devices the severe jar and jolt of a wagon is apt to loosen and disengage the locking device, and thus defeat the object sought to be accomplished.

The end-gate 3 is made in two sections hinged at 21, and the longitudinal strip 5 is bolted to one of the sections, so as to swing therewith. The free end of the strip 5 is slotted at 26, and the block 22 on the adjacent section of the tail-board is securely fastened thereto and registers with the slot 26. The lever 14 is pivoted to this block 22.

When the locking-latch 14 is thrown out of engagement with the lever-arm 8 and the

hook-rods 11 disengaged from the eyes 13, the end-gate may be pulled horizontally and rearwardly, flexing on the hinges 21. It is thereby easily removed and replaced. The ends and edges of the tail-board may be rounded to facilitate the entrance into the slots between the cleats, if desired.

What I claim as new, and desire to secure by Letters Patent, is—

1. In an end-gate, the combination of a wagon-body, an end-gate, eyebolts secured to the sides of the wagon-body, an operating-arm pivoted to the end-gate having projections opposite its pivot, hooked rods engaging the eyebolts and the opposite projections of the operating-arm, a recess in the operating-arm, and a lever-latch pivoted to the end-gate having a detent and a holding-lip upon one end, adapted to embrace and enter the recess in the operating-arm.

2. In an end-gate, the combination of a wagon-body, a sectional end-gate, locking devices carried upon one of the sections for locking together the sides of the body, and a latch device carried by the other section for holding the end-gate in alinement and also locking the sides, whereby the tail-board may be flexed and withdrawn horizontally.

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

NELSON HON.

Witnesses:
M. H. WOODS,
F. P. MARSHALL.