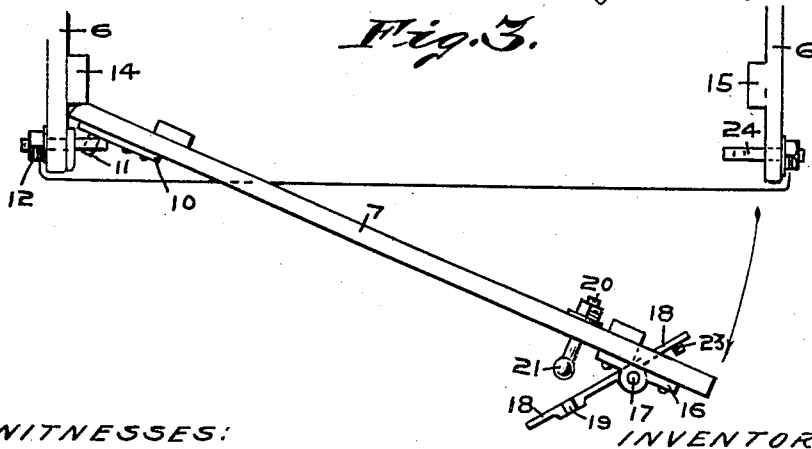
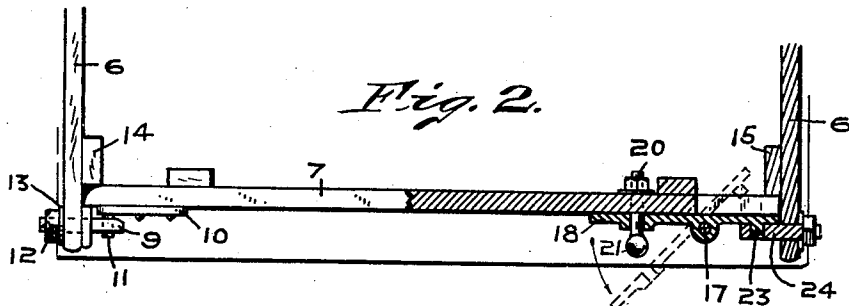
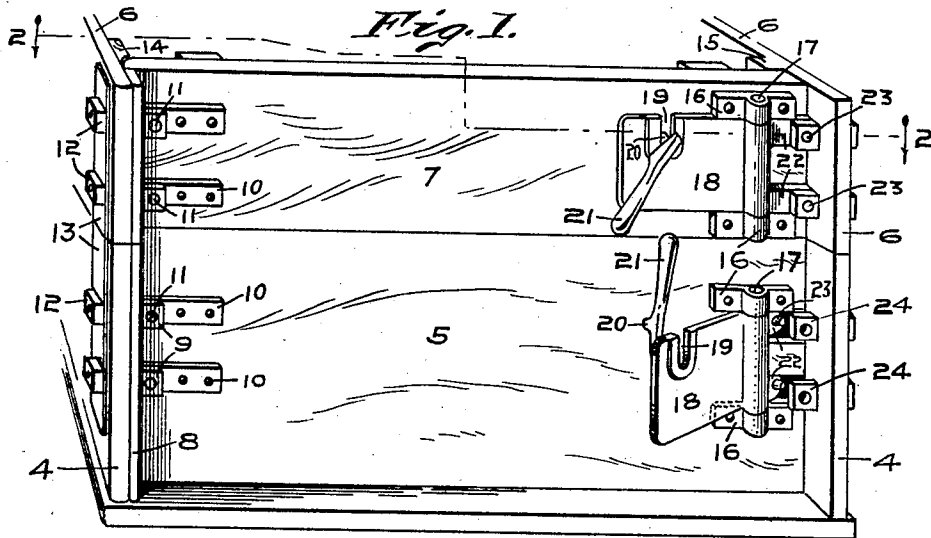


No. 814,099.

PATENTED MAR. 6, 1906.

W. F. WAGNER.
END GATE FOR WAGONS.
APPLICATION FILED DEC. 30, 1904.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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MARTIN R. DALY AND WILLIAM HART, OF PERU, INDIANA, AND JAMES
H. CASEY AND HARRY F. GUTZ, OF NOBLESVILLE, INDIANA.

END-GATE FOR WAGONS.

No. 814,099.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed December 30, 1904. Serial No. 239,019.

To all whom it may concern:

Be it known that I, WILLIAM F. WAGNER, a citizen of the United States, residing at Peru, in the county of Miami and State of Indiana, have invented certain new and useful Improvements in Rodless End-Gates for Wagons, of which the following is a specification.

This invention relates to improvements in end-gates for the beds of farm-wagons; and one of the objects of the invention is to dispense with the rod heretofore used for clamping the end-gate in the bed.

Another object of the invention is to provide means whereby a number of side-boards are used on the bed for removing the end-gate of the bed or lower ones of the side-boards without the necessity of first removing all of the end-gates above the particular one sought to be removed, as has been necessary in the construction heretofore in use.

The object of the invention also is to provide a simple and durable end-gate fastening and to provide a construction as a whole that will be strong and easy to apply and remove from the wagon and which will be cheap to construct and inexpensive to keep in repair.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a detail in perspective of the end of a wagon-bed with a first pair of side-boards in place thereon, the view showing both end-gates in operative position and a locking-plate for the end-gate for the bed in open position. Fig. 2 is a detail in plan view of a wagon-bed with my improved end-gate in locked position therein; and Fig. 3 is a detail in plan view of a wagon-bed, showing the end-gate disengaged from the side of the wagon-bed with the locking-plate in open position out of parallel with the end-gate.

Like characters of reference indicate like parts throughout the several views of the drawings.

4 is a wagon body or bed of usual construction, and 5 the end-gate therefor. 6 represents the side-boards, also of usual construction, and 7 is the end-gate for said side-boards. As the construction of the end-gate for the side-boards is the same as for the wagon-bed, a description of one will suffice

for all, and I will therefore confine my description to the end-gate for the wagon-bed. Secured to the left side of the wagon-bed next to the end of the side is the vertical strip 8, preferably of iron, having a pair of integral lugs 9 with transverse horizontal perforations, and secured to the outer side of the end-gate 5 are the plates 10, of iron, having pins 11, which take into the respective perforations of the lugs 9 in the manner as shown to form a positive fastening between the end-gate and left side of the wagon-bed to keep the bed from spreading under a load and drawing away from the end-gate. The lugs 9 may be formed as integral portions of the plate 8, or they may be the ends of bolts, as shown in the drawings, which pass through the bar 8 and through the side of the bed and are secured by nuts 12, which are screwed on the outer threaded end of the bolt, and in practice a bearing-plate 13 will be interposed between the wooden sides of the bed and said nuts. Secured to the side of the body inside of the end-gate is the vertical cleat 14 to form a bearing and support for the end-gate. The adjacent end of the end-gate will preferably be made tapering toward its outer side, and the adjacent edge of cleat 14 will be correspondingly shaped in order thereby when the end-gate is inserted to cause it to be forced outwardly to insure the entrance of the pins 11 into the perforations of the lugs 9.

In placing the end-gate its left end will be first inserted, as shown in Fig. 3, and then its right end will be pressed back with a swinging movement into position at right angles with the sides of the bed. This position will be ascertained by means of the vertical cleat 15, fastened to the right side of the bed.

Secured to the outer face of the end-gate adjacent to its right end are the boxes 16, two in number, which form the journals for the ends of a pin 17.

18 is a metal plate which is hinged to the pin 17, and which occupies the space between the two boxes 16 in the manner shown. The body of the plate 18 lies inwardly of the pin 17 toward the middle of the bed. It has the vertical slot 19 entering from its upper edge to receive a bolt 20, which passes through the end-gate and extends out from the bed. The outer end of this bolt has a transverse lever or handle 21, by means of which the bolt is

rotated or rocked. When the handle 21 is in a vertical position, it and its bolt will pass through the slot 19 of plate 18, thereby allowing the plate 18 to reach a position between said handle and the end-gate, and then by lowering the handle the plate 18 will be locked in close contact with the end-gate and will be held there by said handle, and as the handle will swing down by gravity it is obvious that the accidental unlocking of this plate becomes practically impossible, for the reason that a jarring and jolting movement on the bed will cause the handle to settle down by gravity into a more positive locking position. The plate 18 has two extensions 22 on the opposite side of the hinge 17 from the body portion 18 of said plate. These extensions 22, each have outwardly-projected pins 23, similar in purpose and construction to the previously-described pins 11 of plates 10. 24 represents lugs projecting inwardly from the adjacent side of the wagon-bed and are provided with horizontal perforations to receive the pins 23 from the respective plate extensions 22. It will thus be seen that a positive fastening is provided for the right end of the end-gate with its adjacent side of the wagon-bed. The end-gate is cut away to a sufficient extent opposite the plate extensions 22 to allow the latter to swing in without obstruction when the plate 18 is moved on the pins 17 in outward direction out of parallelism with end-gate 5, as must obtain in the operations of placing the end-gate in position in the wagon-bed and of removing it.

It is believed that the construction is so simple and is so clearly illustrated in the

drawings that further description is unnecessary and that the manner of the application and use of my invention will be readily understood without further explanation. It will be observed that as each end-gate is independent of the others any one of them may be removed or placed without interfering with the others.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent of the United States, is—

The combination with a wagon-bed, lugs mounted in the side of said bed that stand at right angle of said bed and parallel with the end-gate and provided with right-angle apertures, an end-gate provided with slots at one end and lugs on the other end that stand at right angle to said gate and adapted to engage the apertures in the lugs mounted on the adjacent side of the wagon-bed, a locking-plate pivotally mounted near the center of the end-gate, so that when the key is operated a portion thereof will swing into the wagon-bed, and lugs carried by the locking-plate that stand at right angle thereto and are adapted to be brought into alinement with and engage the apertures in the adjacently-mounted lugs in the side of the wagon-bed when the locking-plate is seated, and adapted to form a lock for retaining the end-gate.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 1st day of December, A. D. 1904.

WILLIAM F. WAGNER. [L. s.]

Witnesses:

L. SHUTE,
F. W. WOERNER.