A. W. BOWEN.

END GATE FOR WAGONS.

APPLICATION FILED MAY 24, 1909.

954,075. Patented Apr. 5, 1910.

Fig. 1.

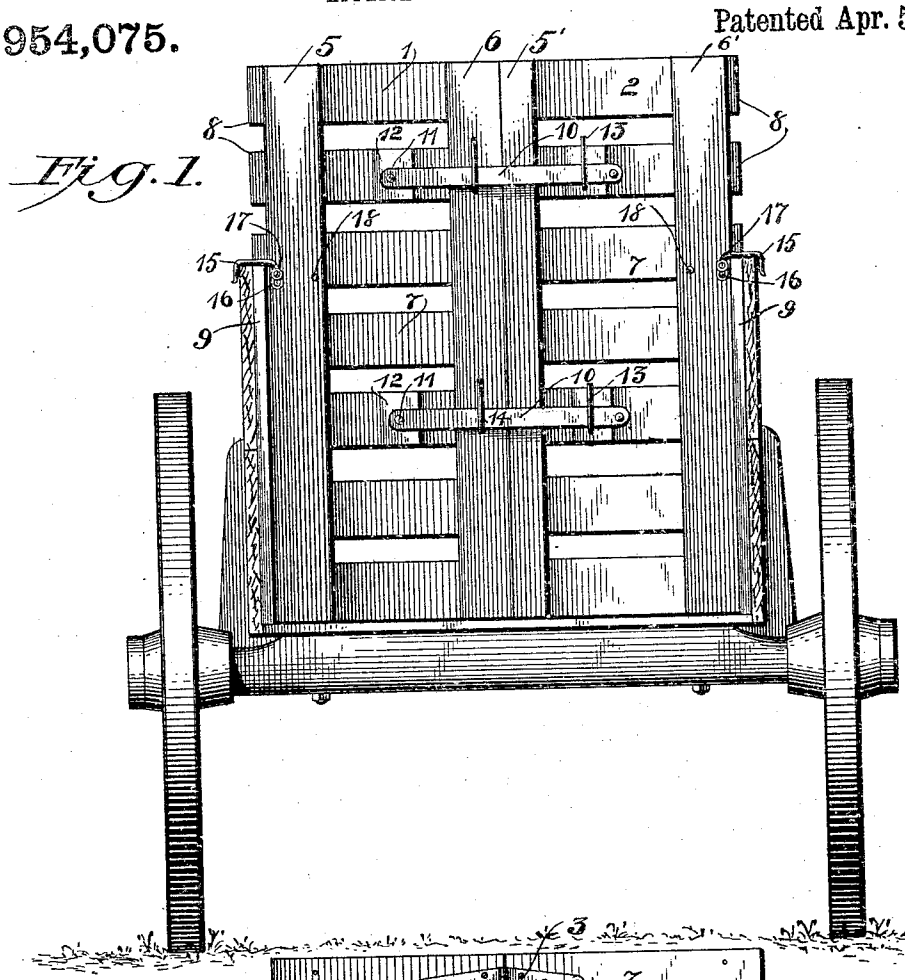
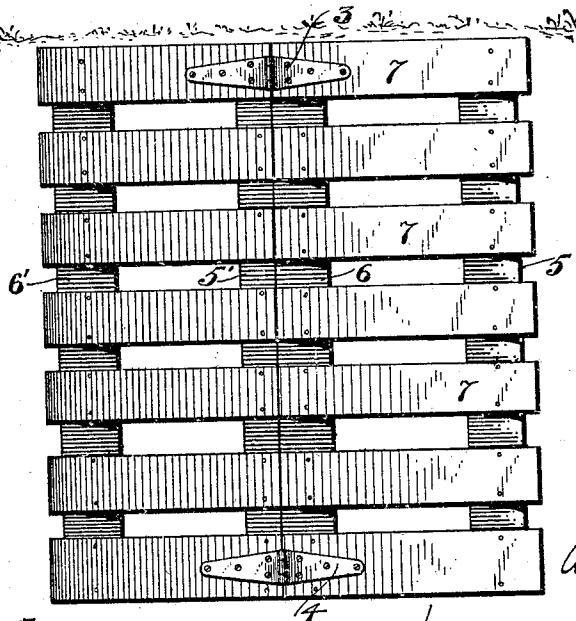


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ALONZO W. BOWEN, OF NEOLA, IOWA.

END-GATE FOR WAGONS.

954,075. Specification of Letters Patent. Patented Apr. 5, 1910.

Application filed May 24, 1909. Serial No. 498,050.

To all whom it may concern:

Be it known that I, ALONZO W. BOWEN, a citizen of the United States, residing at Neola, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in End-Gates for Wagons, of which the following is a specification.

This invention relates to end-gates for wagons, and pertains more particularly to a gate which is adapted for use in hauling hogs, and other small stock.

It is the object of the present invention to construct a gate which is adapted to be locked securely in position, and will resist pressure from either side, but which is also readily removable or capable of being placed in position.

It is also an object to provide a gate of this character, which is simple and without a complication of parts, and which can be used on any wagon box at present in use on farms and dairies.

With these and other objects which will hereinafter appear, in view, the device will now be fully set forth and described, reference being had to the accompanying drawings, which form a part of this specification, and in which,

Figure 1 is a front elevation of the gate, showing it in position on a wagon-box of ordinary construction. Fig. 2 is a rear view of the gate.

Referring more particularly to said drawing, 1 and 2 indicate the two sections which together form the end-gate. Said sections 1 and 2 are pivotally joined along adjacent vertical edges, as by hinges 3 and 4, which are located on said sections to permit inward, but not outward folding of the gate. That is, when in place on the wagon, the gate may be doubled up by pressure from the inside, but not from the outside. In the present embodiment, this is accomplished by using ordinary strap hinges and securing them on the inside of the gate to join the sections, but it is evident that any suitable hinge or fastening which will accomplish the same purpose may be employed. Each of said sections 1 and 2, comprises two or more uprights 5 and 6, and 5′ and 6′, which are joined by a plurality of horizontal parallel slats or bars 7. Said slats 7 abut one another, end for end at the meeting edges of the sections 1 and 2, and on the outer edges of said sections, project beyond their respective uprights to form projections 8, of sufficient length to fit in the gate-grooves formed at the end of the wagon box. Thus, when the gate is in position, the projections 8 lie in said gate-grooves and the outer uprights lie against the cleats 9 forming said groove thereby making a snug, secure joint. As will be observed, the inside upright 5′ on section 2 is narrower in this construction than the adjacent upright 6. By this arrangement, ample leverage-space is given to the locking-bars 10, which are employed to secure the two sections in extended position. Said locking-bars 10 comprise comparatively long narrow metallic strips which are pivotally mounted at one end on one section of the gate, as at 11, upon blocks 12, secured to the slats of said section and extend across uprights 6 and 5′ and engage behind latches 13 secured to the section 2. Said latches 13 are constructed to receive the bars 10 with a spring grip to lock said bars against ordinary jarring and usage. Located on the upright 6 are hooks 14 which engage and uphold the bars 10 when they are not locked in latches 13, and also serve as additional bracing means therefor when the gate is locked in position.

In order to lock the gate to the sides of the wagon box, and to maintain the projections 8 in engagement with the gate-grooves, locks 15 are provided. Said locks 15 comprise hooks of suitable conformation to fit on the sides of a wagon box with a swing grip, and are provided with slotted downturned shanks 16, by means of which they are pivotally and slidably secured to the gate, as by bolts 17. Said locks are located as desired, to meet the requirements of standard or other wagon-box constructions, and are shown herein mounted for a double-box wagon. By means of the slotted connection, sufficient vertical play is given the lock to permit it to be readily raised from engagement with the box sides. Behind each lock is provided a pin 18, upon which the lock falls and is held when the latter is thrown over from the wagon-box. Thus, the lock is held out of the way in the further operation of removing the gate from the wagon.

The operation of the gate is obvious, from the above, and its advantages evident. When in position, there is no chance for lateral, or backward movement, owing to the engagement of the locks 15 and the bars 10.

It is readily and easily removable, owing to the simplicity of the elements employed and their small number. And a gate is provided which is easily adaptable to any wagon-box, and is economical, both in use and manufacture.

What I claim and desire to secure by Letters Patent of the United States, is:—

1. An end-gate for wagons, comprising, in combination, pivotally joined sections, lock-hooks for engagement with the side-boards and locking bars for securing said sections in a common plane, said lock-hooks comprising hook-portions for engagement with the side-boards and slotted shanks for slidable connection to said sections.

2. An end-gate for wagons, comprising in combination, vertically hinged sections, locking bars pivoted to one section and extending over the other section, latches on said other section for engagement by said bars, and lock hooks having slots formed thereon slidably pivoted to said sections and adapted to engage the side boards of the wagon, said sections comprising uprights, horizontal slats joining said uprights and having projections beyond the respective outer uprights for engagement with the gate-grooves of the side-boards.

In testimony whereof I affix my signature in presence of two witnesses.

ALONZO W. BOWEN.

Witnesses:
W. H. Bowen,
Fred A. Williams.