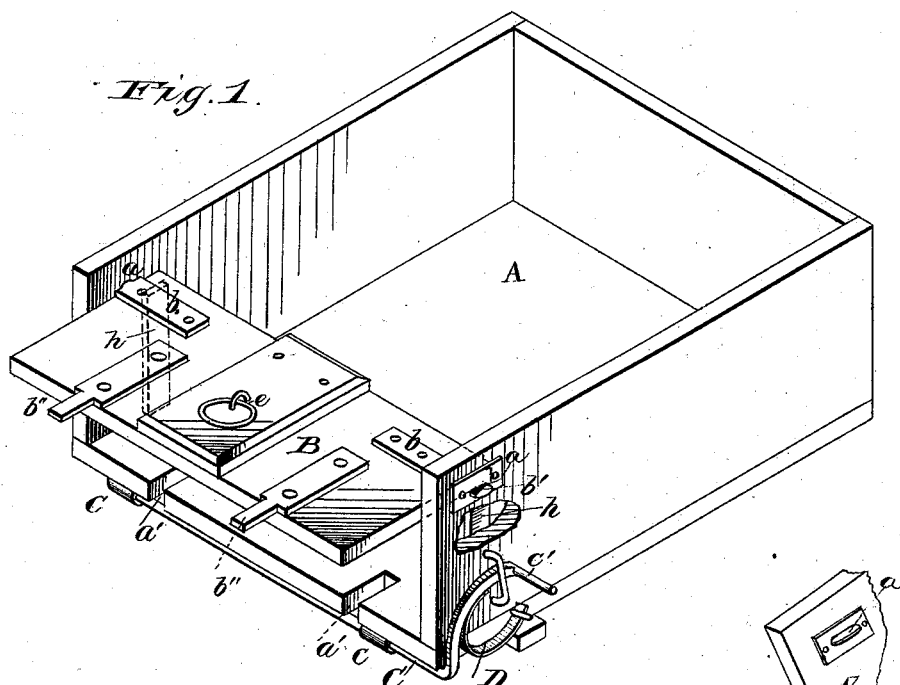


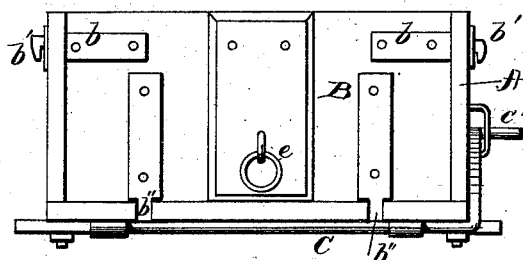
A. M. SMITH.  
End-Gate for Wagons.

No. 216,464.

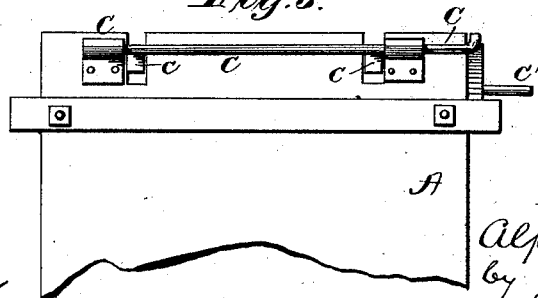
Patented June 10, 1879.



*Fig. 2.*



*Fig. 3.*



Witnesses  
P. L. Oumaud  
J. A. Stockman.

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# UNITED STATES PATENT OFFICE.

ALPHA M. SMITH, OF TAMPICO, ILLINOIS.

## IMPROVEMENT IN END-GATES FOR WAGONS.

Specification forming part of Letters Patent No. **216,464**, dated June 10, 1879; application filed April 28, 1879.

*To all whom it may concern:*

Be it known that I, ALPHA M. SMITH, of Tampico, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in End-Gates for Wagons, of which the following is a specification.

Figure 1 is a perspective, showing the present device as in use on a carriage or wagon body. Fig. 2 is an end elevation of device shown in Fig. 1. Fig. 3 is a detail in under plan, showing the rod with spring-fingers for engaging upon the points on the gate to lock it.

The object of the present invention is to provide a safe, cheap, and strong latch for the end-gates or tail-boards of carts, wagons, and like carriages; and the novelty consists more particularly in the peculiar construction and combination of the several parts, whereby these advantages are attained, all as will now be more in detail set out and explained.

In the accompanying drawings, A denotes any ordinary cart or wagon body, and B the end-gate or tail-board. This gate or tail-board has on each side, at the upper corners, trunnions *b*, which are adapted to fit into the oblong or elliptical shaped holes *a* in the sides of the wagon-body. Thus the gate or tail-board will have free motion from the vertical, when it is closed, to the horizontal, when it is opened. This trunnion has a head, *b'*, on its end, which will serve to retain it in place when in use.

When it is desirable to take the gate out, it will only be necessary to hold the gate in horizontal position till the flat ends of the trunnions match with the elliptical holes *a* in the wagon sides. Then the wagon sides may be sprung slightly apart and the gate can be readily removed. To put the gate in position it is only necessary to reverse this above-described operation; but, while I prefer to use this means or method of hinging, it is obvious that any usual or ordinary way or means of hinging will answer the necessary ends.

On the lower edge of the tail-board are points or fingers *b''*, suitably attached and projecting a little beyond the board, which points, in closing the gate, will pass into the slots *a'* in the bottom board of the wagon and

over the short arms *c* of the rod C, which lie against the bottoms of said slots, the said rod extending under the body of the wagon and having attached to its outer end the spring D. Thus the gate-points *b''*, in moving on the short arms C, will, with but small force on the gate, slide over them, and then find a seat in the inner end of the slot, when the arms will brace against them and hold the gate firmly closed.

In order to provide for the release of these points from these seats when it is desired to open the gate, there is a handle, *c'*, on the outer end of rod C, which is placed at any convenient point for use and for finish in making up the wagon. By pressing down this handle the arms *c* will be turned down, and free passage out for the points *b''* will thus be afforded. It may also be convenient to have a ring, *e*, on the outside of the tail-board with which to move it easily.

In shutting the tail-board or end-gate it may be well to have stops or cleats *h* or any like attachment on the inside of the side-boards, to cause the inward movement to be only such as will bring the points *b''* well into their seats.

The parts of my device are few, the device is cheaply made, easily used, is strong, cannot easily get out of order, and can be applied in such a neat and attractive way to the wagon as not to detract in the least from its symmetry.

Having thus described my invention, what I consider new, and desire to secure by Letters Patent, is—

1. In combination with the end-gate or tail-board B, having points *b''* on its lower edge, the wagon-floor, slotted at *a'*, and the rod C, held in place by a spring and provided with arms *c*, substantially as set forth.

2. In a wagon or cart, the rod C, having arms *c* and handle *c'*, combined with spring D and tail-board B, hinged as described, and having points *b''*, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ALPHA M. SMITH.

Witnesses:

T. R. MAXFIELD,  
J. P. BADGLEY.