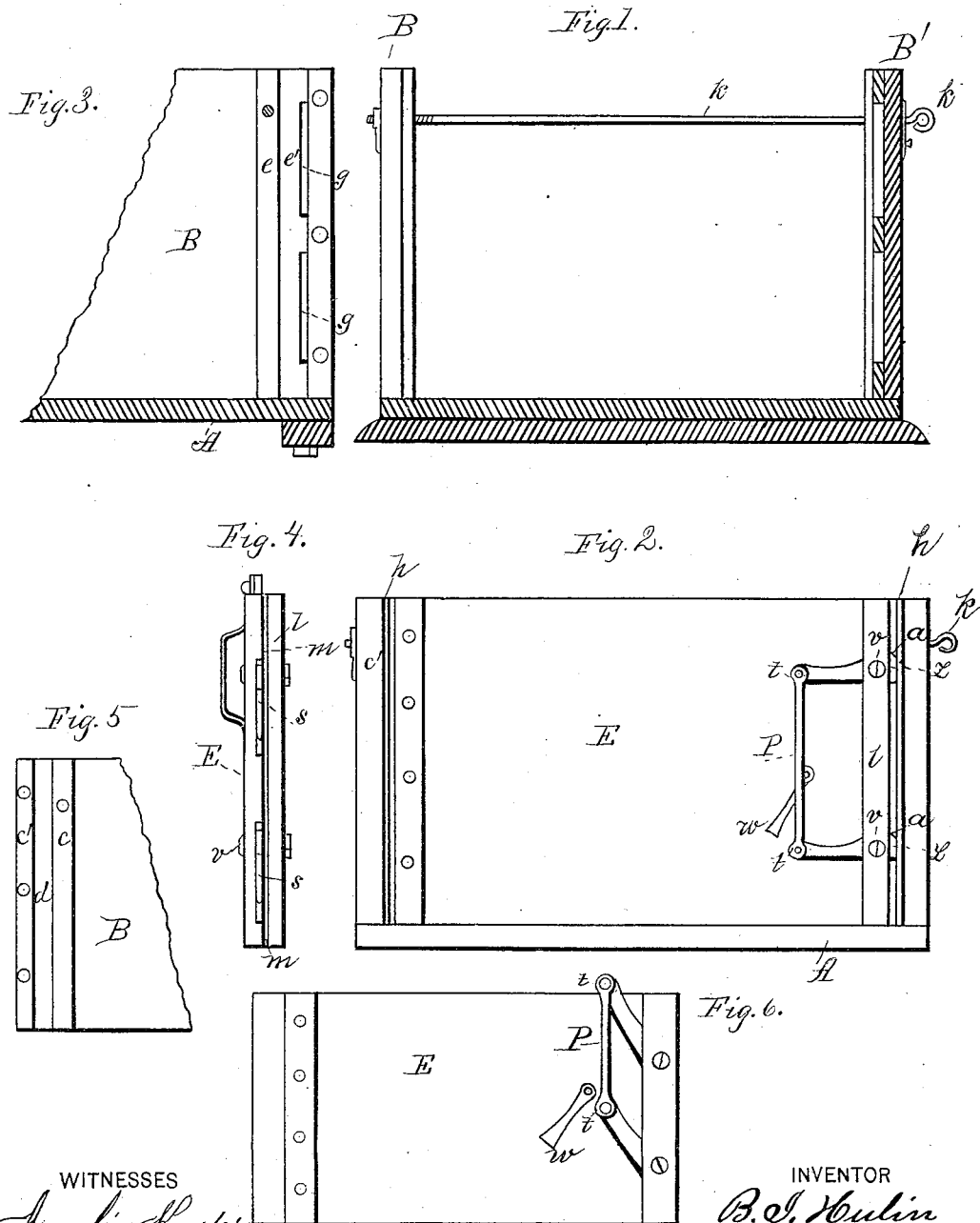


(No Model.)

B. I. HULIN.  
END GATE FOR WAGONS.

No. 263,522.

Patented Aug. 29, 1882.



WITNESSES

*Amelia Kuyper.*  
*Philip K. Masi.*

INVENTOR

*B. I. Hulin*  
*by Anderson & Smith*

ATTORNEYS

# UNITED STATES PATENT OFFICE.

BENJAMIN I. HULIN, OF CAMBRIDGE, ILLINOIS.

## END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 263,522, dated August 29, 1882.

Application filed July 8, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, BENJAMIN I. HULIN, a citizen of the United States, resident at Cambridge, in the county of Henry and State of Illinois, have invented a new and valuable Improvement in End-Gates for Wagons; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a vertical sectional view, partly in elevation. Fig. 2 is a front view. Fig. 3 is a longitudinal sectional view of the wagon-body partly broken away. Figs. 4, 5, and 6 are details.

This invention has relation to devices for fastening the end-gates of wagons, and especially of lumber-wagons; and the invention consists in the construction and novel arrangement of the latches pivoted in slots between the edge of the gate and an upright cleat thereon, the connecting handle and stop, and the catch-slots in the wagon side, all as hereinafter set forth.

In the accompanying drawings, the letter A designates the bottom of a wagon-box, and B B' the side walls of the same. At the rear end of the side wall, B, vertical cleats *c c'* are arranged, with an interval between, forming a vertical slot, *d*, in which is seated one edge of the end-gate E. At the rear end of the other side wall, B', is placed a vertical abutment-cleat, *e*, opposite the cleat *c*, and in rear of this cleat *e* is formed a plane bearing, *e'*, which is provided with vertical catch-slots *g*. Wear-plates *h* are placed on the cleat *c'* and in rear of the catch-slots *g*. An adjustable tie-rod, *k*, having a threaded end, serves to hold the upper parts of the side walls in true and proper position with relation to each other.

A marginal vertical cleat, *l*, is secured to one edge of the end-gate, preferably that at the right hand.

A wear-plate, *m*, is secured under the cleat, and slots *s* are made through the cleat next the wear-plate in the transverse direction to

receive latch-levers *z*, which are pivoted therein by the bolts *v*, which pass through the cleat, wear-plate, and gate. The ends of the latches *z*, which project outside of the cleat, are angular in form, being beveled on their upper edges at such an angle that when the inner ends or handle parts, *t*, are raised these beveled edges *a* will be flush with the edge of the end-gate, the ends *z* of the latches being wholly within the slots *s* of the end-gate; but when the ends *t* of the latches are depressed the ends *z* will be projected to engage the catch-slots *g* in the side wall of the wagon-box.

In order that the lever-latches may be operated together and by one movement of the hand, they are designed to be connected by a handle, P, the ends of which are respectively pivoted to the ends of the said lever-latches.

A stop, *w*, is pivoted to the end-gate between the latches, and is designed to be turned out of the way when the latches are to be disconnected from the catch-slots, in order to remove the end-gate; but when the end-gate is in position and fastened by means of the latches the stop *w* is turned so that it will bear on the end *t* of one of the latches and lock them in the engaged position. One of these bevel-end latch-levers will sometimes answer; but it is better to use two, connected in the manner described, as the upper and lower parts of the end-gate will thereby be better secured, and the pressure of a load within the wagon-box will be more firmly resisted.

This end-gate fastening is simple and strong, and can be easily operated with one hand, the handle P serving not only to turn the latches, but also to remove the gate from its bearings.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In an end-gate fastening, the combination, with the catch-slots in the side wall of the wagon, of the bevel-end lever-latches *z* and the connecting-handle P, substantially as specified.

2. In an end-gate fastening, the combination, with the bevel-end lever-latches *z*, pivoted in

slots *s*, between the end-gate and a vertical cleat thereon, of the stop pivoted to the end-gate, substantially as specified.

- 5 3. The combination, with the vertical slot-bearing *d* and the catch-slots *g* of the wagon-box, of the end-gate *E*, the bevel-end latches *z*, pivoted in slots *s*, the connecting-handle *P*, and a holding-stop, *w*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

BENJAMIN I. HULIN.

Witnesses:

WILLIAM P. DECKER,  
W. L. DALRYMPLE.