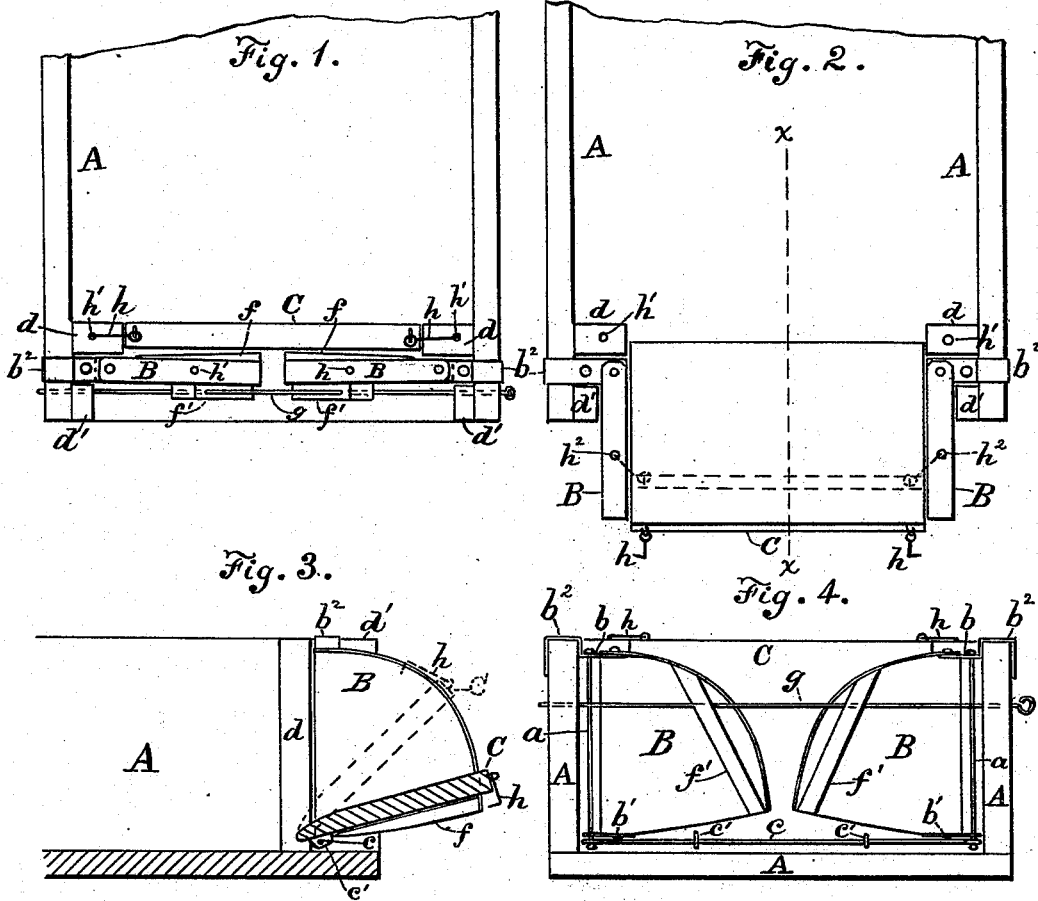


D. AUSTIN.
End-Gate for Wagons.

No. 207,095.

Patented Aug. 20, 1878.



Witnesses:
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DINSMORE AUSTIN, OF MURRAY, IOWA, ASSIGNOR TO JEDEDIAH KNOTTS
AND DAVID O. DUFUR, ONE-THIRD TO EACH.

IMPROVEMENT IN END-GATES FOR WAGONS.

Specification forming part of Letters Patent No. 207,095, dated August 20, 1878; application filed
June 17, 1878.

To all whom it may concern:

Be it known that I, DINSMORE AUSTIN, of Murray, in the county of Clarke and State of Iowa, have invented certain new and useful Improvements in End-Gates for Wagons; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view with all the gates closed. Fig. 2 is a plan view with all the gates open, showing, by dotted lines, the inner gate partly down. Fig. 3 is a longitudinal vertical section on line *xx* of Fig. 2. Fig. 4 is a back-end view with the gates all closed and the cleats of the wagon removed to show the rods and hinges of the gates.

My invention relates to end-gates for wagons constructed as hereinafter described; and the invention consists of the construction and combination of the devices specifically set forth and embraced in the claims.

A is the wagon-box. BB are gates, hinged at the sides of the box to swing outward, and C is an inner gate, hinged at the bottom to fold downward and outward. The gates B are adjusted to swing on the upright rods *aa*, which extend through plates *b*, attached to the top of the gates, and through plates *b'*, attached to the bottom of the gates. The top plates, *b*, extend over the edges of the sides of the wagon-box, and are bent, forming the clasps *b²* to hold in place the upper ends of these gates.

The lower ends of the rods *aa* are provided with heads or screw-nuts, and extend through eyes on the horizontal rod *e*, which is fastened to the lower part of the gate C by staples *e'*. Slotted plates may be used instead of these staples for attaching the rod *e* to the gate C, and this rod is adjusted loosely in the staples or slotted plates to allow the necessary play to the lower edge of the gate in letting it down, and when it is up to allow the lower edge to rest on the bottom of the wagon-box.

The wagon-box is provided with standards *dd* and cleats *d'd'*, attached to the sides of the box a sufficient distance apart to allow space between the standards and cleats for the plates *b b'* on the gates B.

The cleats are made the required size to allow the gates B to swing outward to a line parallel with the sides of the wagon-box, and the standards are the required width for the inner edges to be flush with the inner sides of the gates B when they are open.

The gate C is made the required length to fit neatly between the standards, and when let down the ends of this gate impinge loosely against the inner sides of the gates B and rest on cleats *f* attached to the lower part of the inner sides of these gates, which are provided also with cleats *f'* on the outside to support and strengthen the gates, and which cleats *f'* bear against the ends of the wagon-box when these gates are open.

The gate C is provided with clasp-hooks *h* to catch in holes *h¹* in the ends of the standards to hold the gate in position when raised up and to prevent the sides of the box from spreading apart, and also to hold the gate when partly down by inserting the clasp-hooks in the holes *h²* in the top edges of the gates B, as shown in the drawings. The gates B, when closed, are held in place by the rod *g*.

The gates all being connected by the rods and hinges, as described and shown, are all together adjusted in place and removed from the box by sliding the plates *b b'* in and out of the slots between the standards *d* and the cleats *d'*; and when the gates are thus adjusted in place the clasps *b²* over the edges of the box hold the upper ends of the gates B in position, and the clasp-hooks *h* inserted in the holes *h¹* in the top of the standards hold the gate C in position and prevent the sides of the box from spreading apart.

When the gate C is let entirely down it rests on the cleats *f* on the gates B, and the ends of the gate fit closely to the inner sides of the gates B. When it is desirable to let the gate C partly down, the hook *h* is inserted in the holes *h²* in the gates B, as shown in the draw-

ings; and several similar holes, the proper distances apart, may be made in these gates to adjust the gate C at any desirable inclination.

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

1. The end-gates B B C, connected together by the rods *a a* and *c* and the plates *b b'*, and adjusted in the wagon-box, to be operated substantially as and for the purposes described.

2. The end-gates B B C, as constructed and arranged, in combination with the wagon-box A, provided with the standards *d* and the cleats *d'*, substantially as and for the purposes described.

3. The gates B B, adjusted to swing outward and provided with the clasps *b²*, in combina-

tion with the gates C, attached to the rod *c* to fold outward and downward, substantially as and for the purposes described.

4. The gate C, having the hooks *h*, in combination with the standards *d*, having holes *h¹*, the gates B having the holes *h²* and the cleats *f*, substantially as and for the purposes described.

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

DINSMORE AUSTIN.

Witnesses:

H. M. MARTINDALE,
W. C. MARTINDALE.