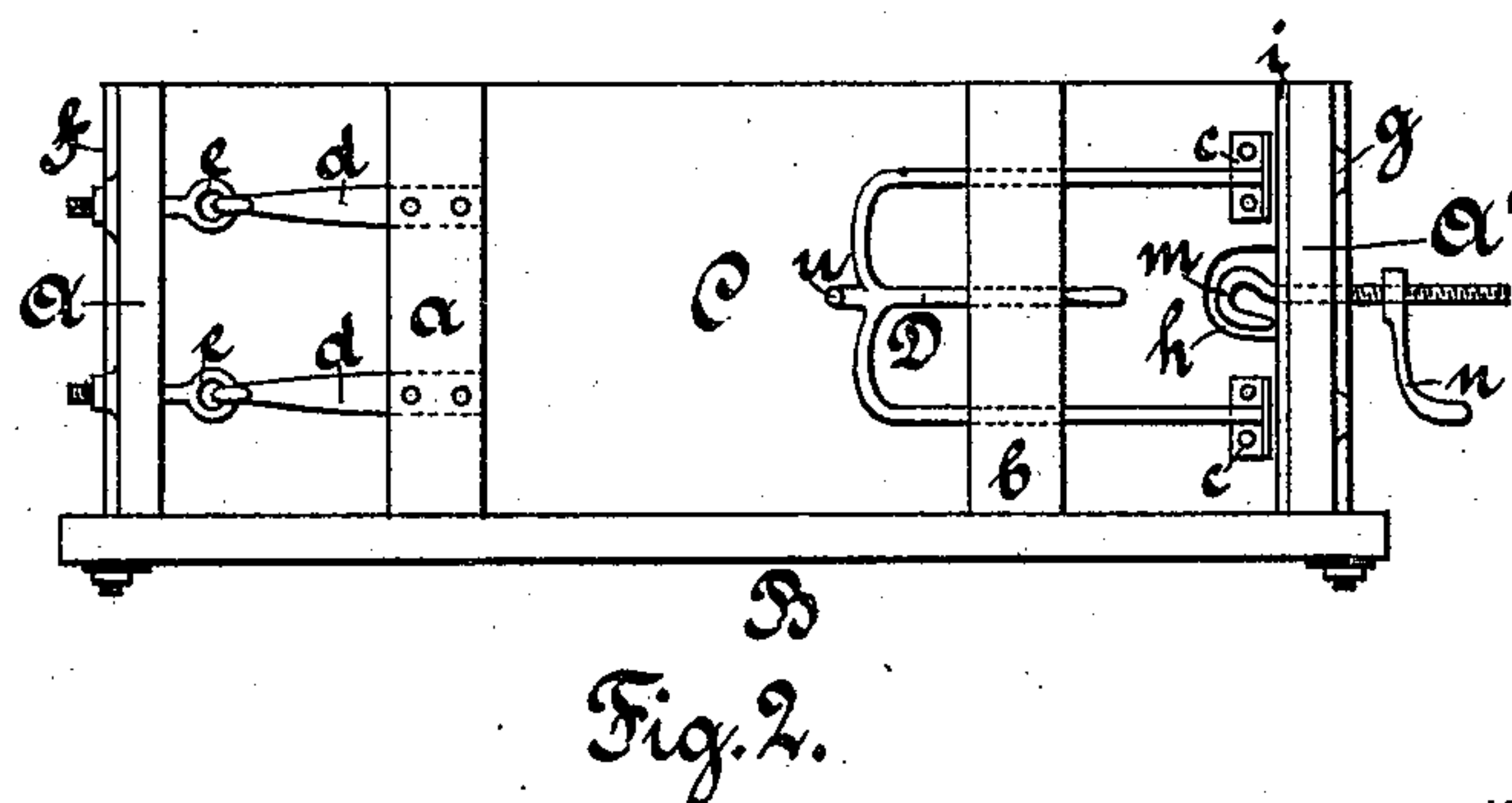
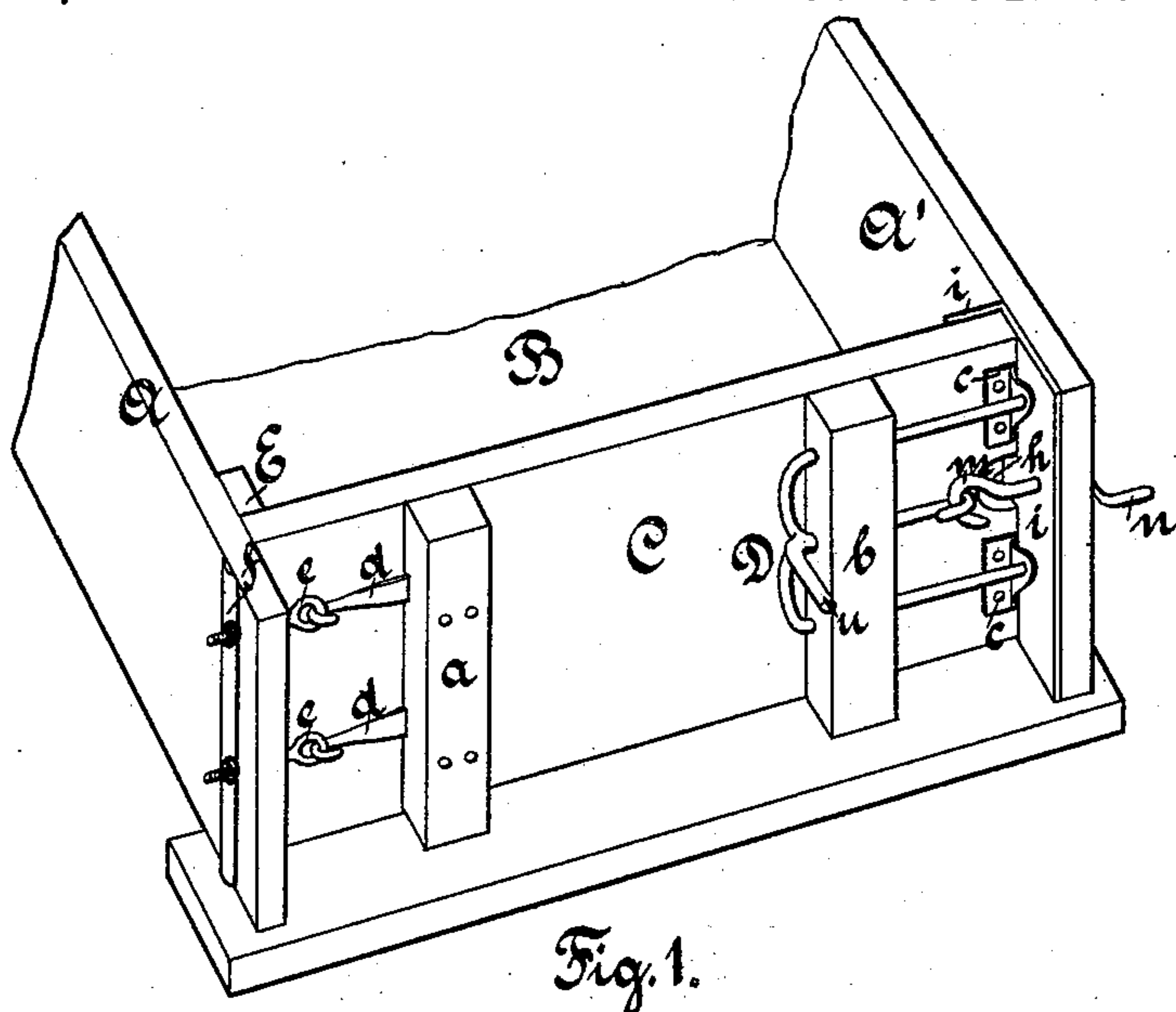


(No Model.)

J. R. DAVIS.
WAGON END GATE.

No. 352,860.

Patented Nov. 16, 1886.



WITNESSES:

Storm Bull
R. B. Doane.

INVENTOR

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UNITED STATES PATENT OFFICE.

JOHN R. DAVIS, OF BRISTOL, WISCONSIN.

WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 352,860, dated November 16, 1886.

Application filed May 10, 1886. Serial No. 201,763. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. DAVIS, a citizen of the United States, residing at Bristol, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Wagon End-Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to improvements in unjointed wagon end-gates, whereby the devices for locking the same in position also serve to hold it, as well as the wagon sides, against outward pressure, thereby dispensing with both a tie-rod and outer cleats on the wagon sides at each end of the wagon end-gate.

Figure 1 is a perspective view showing my end-gate locked in adjustment. Fig. 2 is an end elevation of the same with the end-gate unlocked.

In the drawings, similar letters, where they occur, refer to like parts in both views.

A A' represent the sides, B the bottom, and C the end-gate, of the wagon-box.

The end-gate bears against the inner cleat, E, at one end and at the other end against the inner projecting face of the angle-iron *i*, and is provided with two cleats, *a* and *b*, and ears *c c*. If desired, the cleat *a* may be dispensed with, as it is not an indispensable part of the operating device, and serves chiefly to strengthen the end-gate. The strap-hooks *d d* are rigidly fastened to the end-gate C, and are adapted to engage, respectively, with the eyebolts *e e*, extending through the side A and upright *f*. The triple slide-bolt D consists of three prongs, all in the same plane, and extending through the cleat *b*, and preferably adjacent to the face of the end-gate C, the upper and the lower prong being adapted to pass through the angle-iron *i*, side A', and upright *g* when the end-gate is locked in position. (See Fig. 2.) When the prongs extend through the side-board, as described, the cleat *b* acts as a stop against the arms joining said prongs, preventing them from sliding farther outward, and in this position they are locked by means of the hook *m* engaging with a corresponding hook extending from the shorter middle prong of

the sliding bolt D. The shank of the hook *m* extends through the angle-iron *i*, side A', and upright *g*, being threaded at the outer end to receive the wing-nut *n*, which is adapted to clamp against the upright *g*. When the end-gate is locked in this position, it is obvious that the side-boards will be securely held against outward pressure the same as if united directly by a tie-rod, while the end-gate is also held against outward pressure by the prongs of the triple slide D and by the strap-hooks *d d*, in engagement with the eyebolts *e e*.

To remove the end-gate, the wing-nut *n* is unclamped, and the hook *m* is disengaged from the corresponding hook of the middle prong of the slide D, when the operator pulls back on the handle *u* until the hook in the middle prong strikes the cleat *b*, when the upper and the lower prongs will be drawn clear of the side A'. (See Fig. 2.) The hook *m* is then pushed out so that the slot *h* in the end-gate will clear it, and the end-gate is swung out, turning on the strap-hooks *d d*, which hinge in the eyebolts *e e* until the latter are disengaged, when the end-gate can be removed. The slot *h* may be made as large as desired, so long as it does not extend inward beyond the inner edge of the projecting face of the angle-iron *i*.

It is obvious that the locking device and triple bolt D may be placed at either end of the end-gate, or, if desired, at both ends, thus dispensing with the strap-hooks and eyebolts. By the use of the strap-hooks and eyebolts at one end and triple slide-bolt and locking device at the other end of the end-gate, as described, I am able to dispense with the use of outside cleats on the side-boards A A', thus simplifying the device and cheapening the cost of construction.

I am aware that unjointed end-gates are used wherein the free end is fastened by means of a hook engaging with an eyebolt or its equivalent rigidly fastened to the end-gate, said hook extending through the side-board, to which it is adapted to be clamped by means of a wing-nut on its threaded outer end, such mechanism, in connection with hinge or strap hooks at the other end of the gate, engaging with eyebolts or their equivalents and holding the wagon sides against outward pressure,

thus dispensing with a tie-rod. I am, however, the first to provide a construction in unjointed end-gates by which all the above-mentioned results are obtained, using but one cleat
5 to each side-board, the outer side-board cleat at each end of the gate being dispensed with, while my locking device not only holds the yagon sides, but also the end-gate against outward pressure.

10 What I claim, and desire to secure by Letters Patent from the United States, is—
The end-gate C, provided with the strap-

hooks *d d*, cleat *b*, and triple slide-bolt D, in combination with the eyebolts *e e*, angle-iron *i*, hook *m*, and wing-nut *n*, substantially as
15 described, and for the uses and purposes mentioned.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN R. DAVIS.

Witnesses:

CHAS. G. MAYERS,
WM. H. MIHILLS.