

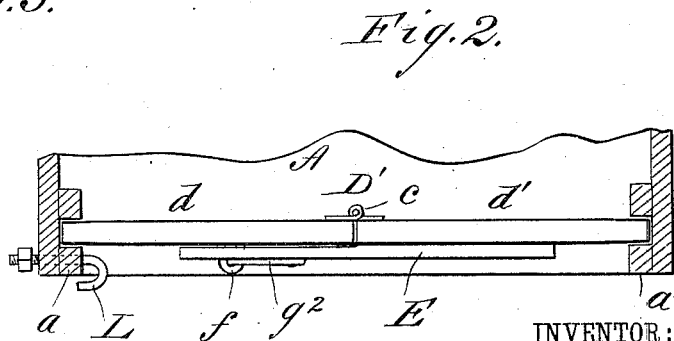
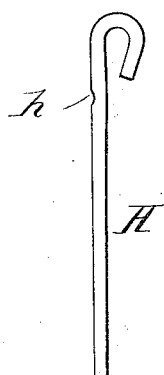
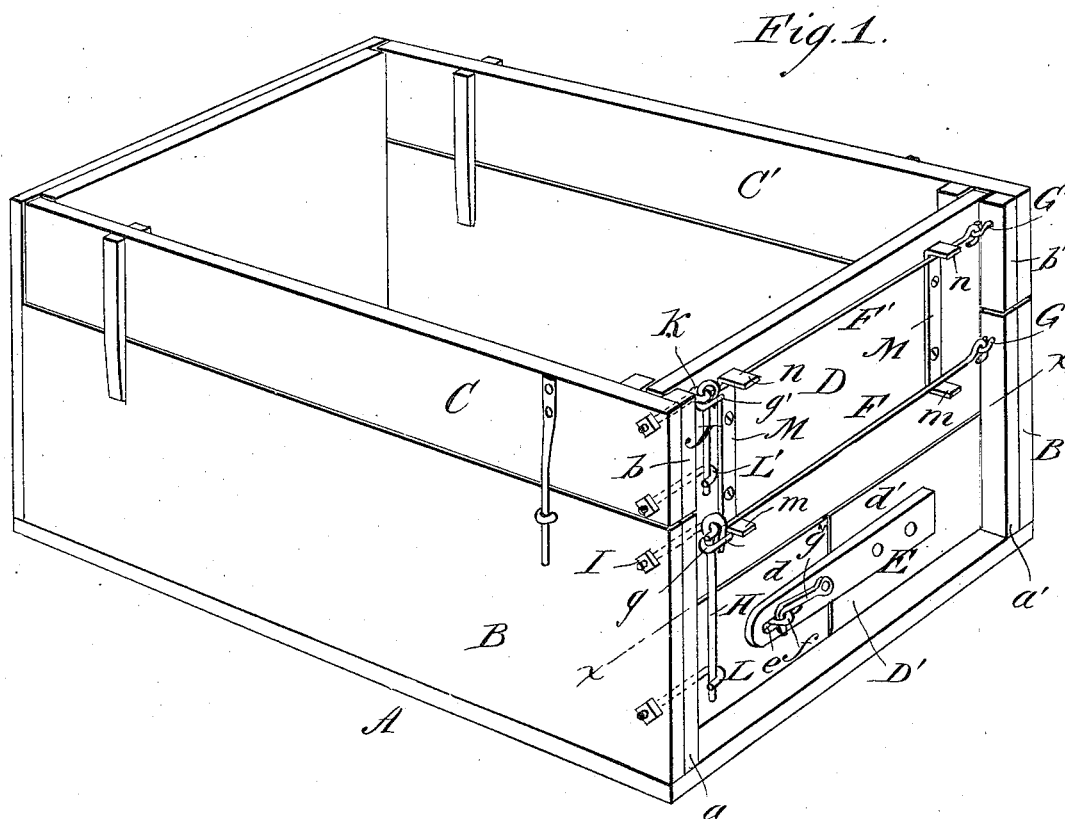
(No Model.)

C. P. KRENSON.

WAGON END GATE.

No. 306,261.

Patented Oct. 7, 1884.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CHARLES P. KRENSON, OF MUNSTER, ILLINOIS.

## WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 306,261, dated October 7, 1884.

Application filed April 2, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES P. KRENSON, of Munster, in the county of La Salle and State of Illinois, have invented a new and Improved Wagon End-Gate Fastener, of which the following is a full, clear, and exact description.

The object of my invention is to provide a fastening for the end-gates of wagons which will be better adapted for its purpose than the ordinary rod and nut.

To this end my invention consists in the method of securing the end-gate of a wagon in place in the wagon-box by hinged rods and levers, the rods being hinged to one side of the box and adapted to be engaged with levers pivoted to the other side of the box, which levers can be held locked by suitable devices; and my invention further consists in lock-bars engaging with the hinged rods for holding the end-gate from working up.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a wagon-box provided with my improved end-gate fastener. Fig. 2 is a cross-section on the line *x x* in Fig. 1, and Fig. 3 is a detail view of one of the levers.

A indicates a wagon-box; B B', the sides, and C C' the top boards, thereof. *a a'* and *b b'* are the rear end cleats of the sides and top boards respectively.

The end-gate shown consists of two parts, one of which, D, is of the same width as the sides of the wagon-box, and the other, D', is of the width of the top boards. The part D' is made in two parts hinged together upon the inside, and secured by a stay-piece, E, a staple, *f*, and the hook *g*<sup>2</sup>. Two rods, F F', are hinged by eyebolts G G' to one side, B', of the wagon-box, and one top board, C', respectively. The eyes on the hinged ends of the rods F F' are left sufficiently open to permit said rods to be disengaged from the eyebolts G G', if desired. Hooks *g g'* are formed on the free ends of the rods. A lever, H, is pivoted by a hook-bolt, I, to the side board, B, and a similar but shorter lever, J, is pivoted to the top board, C, by an eyebolt, K. Hook-bolts L and L' are loosely secured in the side board,

B, and top board, C, in position to engage the free ends of the levers H and J. Notches *h* are formed in the levers H and J a short distance below their pivots. Lock-bars M, having their ends *m n* bent outward at a right angle, are secured upon the part D of the end-gate in such position that their ends *m* are under the rods F and their ends *n* are above the rods F'.

In use, when the top boards, C C', are used, the part D' of the end-gate is locked by the hook *g*<sup>2</sup> and put in place, and the part D is put in place above it, the rod F is swung over the ends *m* of the bars M, the lever H is engaged with the hook *g*, and the free end of the lever passed into the hook L. The rod F' is then swung up under the end *n* and its hook *g'* engaged with the lever J, and the free end of the lever engaged with the hook L', whereby the end-gate is firmly secured in place and the rear end of the wagon-box clamped against the end-gate. If it is desired to remove the part D', the hook *g*<sup>2</sup> is unhooked, and it can be then easily removed. The part D of the gate will be held in place by the ends *n* of the bars M resting upon the rod F'. The end-gate is prevented from rising by the ends *m* of the bars M catching under the rod F. When the top boards, C C', are not to be used, the part D of the end-gate is placed between the sides B B' and resting upon the bottom of the wagon, and can be secured in place by the rod F. The rod F will be above the ends *n* of the bars M, and will hold the gate D from rising. When it is not desired to use the end-gate, the rods F F' can be removed from the eyebolts G' G', and the hook-bolts I L L' can be pushed back out of the way, as shown for the hook-bolt L in Fig. 2.

This end-gate fastener is very convenient for its purpose. The method of securing it to the wagon is simple, and the parts are always in place and easily operated.

This fastening device is adapted for use with any end-gate as well as with the one shown.

The bolts I, K, G, and G' may have closed eyes or open eyes or hooks, as preferred, and the rods F F' may be made in two or more pieces.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The herein-described method of securing the end-gate of a wagon in place by means of

one or more rods hinged to one side of the wagon-box, and engaging by their hook ends with a lever or levers pivoted to the other side of the wagon-box, the said levers engaging by their free ends with devices for holding the said levers and rods in the locked position, substantially as specified.

2. The combination, with the sides B B' and the end-gate D, of the rod F, hinged to the side B', the lever H, pivoted to the side B, and the hook-bolt L on the side B, substantially as shown and described.

3. The combination, with the sides of a wagon-box, of a rod hinged to one side, a le-

ver pivoted to the other side, and a hook for engaging the free end of the lever, the hinged rod having a hook at its free end, and the lever having a notch for engagement with the hook, substantially as specified.

4. The combination, with the wagon-box A, the top boards, C C', and the end-gate D D', of the rods FF', the bolts G G', the levers H J, the bolt K, and the bolts L, L', substantially as shown and described.

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