

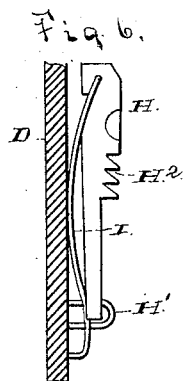
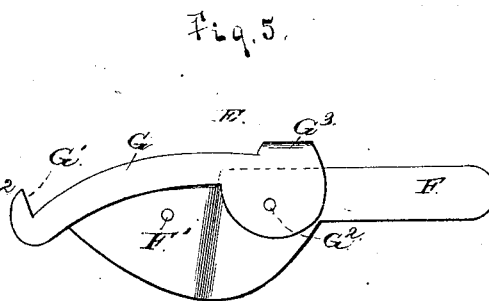
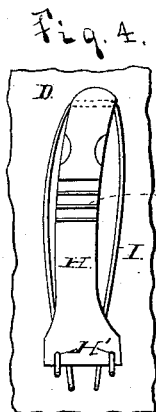
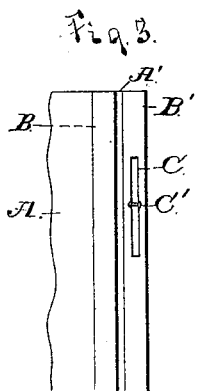
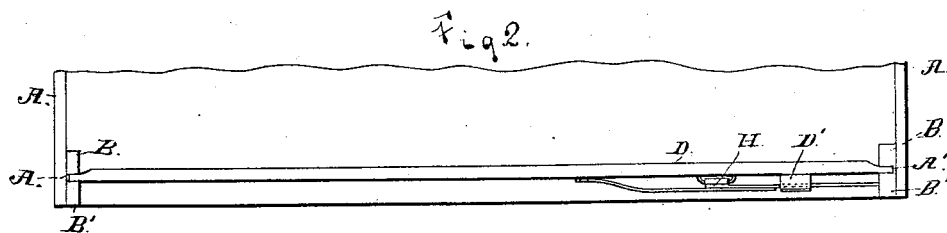
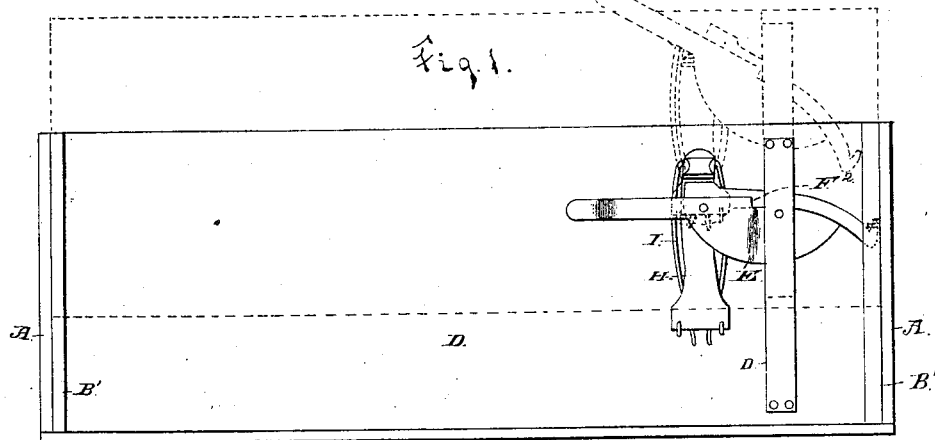
(No Model.)

N. POLK.

END GATE.

No. 304,450.

Patented Sept. 2, 1884.



WITNESSES:

H. A. Clark.  
P. B. Turpin.

INVENTOR

Nathaniel Polk

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att'y.

# UNITED STATES PATENT OFFICE.

NATHANIEL POLK, OF OREGON, ASSIGNOR OF ONE-HALF TO H. C. SCHMIDT,  
OF HOLT COUNTY, MISSOURI.

## END-GATE.

SPECIFICATION forming part of Letters Patent No. 304,450, dated September 2, 1884.

Application filed March 11, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, NATHANIEL POLK, a citizen of the United States, residing at Oregon, in the county of Holt and State of Missouri, have invented certain new and useful Improvements in End-Gates; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to vehicle end-gates; and it consists in the novel fastening devices hereinafter described and claimed.

In the drawings, Figure 1 is an elevation. Fig. 2 is a plan view of an end-gate provided with my improvements in place in a vehicle-body. Fig. 3 is a detached section of the rear end of one of the sides of the vehicle. Fig. 4 is a detail in elevation of the rack-bar. Fig. 5 is a detail view of the lever. Fig. 6 is a detail edge view of the rack, the gate being shown in section.

The sides A A of the body are provided with the gate-grooves A' A', formed preferably by means of cleats B B', as is usual. One of the rear cleats, B', is provided on its inner face with a vertically-elongated groove, C, in which, about midway its length, I secure a staple or bearing, C', as shown in Fig. 3, and indicated in dotted lines, Fig. 1.

In order to provide a bearing for the fastening-lever, I secure a cleat, D', on the rear side of the end-gate D.

The lever E is composed of handle-section F and the hook-section G. The handle-section F is pivoted at F' to the cleat D', and is formed with a shoulder, F<sup>2</sup>, in rear of said pivot. I bend the handle-section at this point to form an offset, as shown in Fig. 5. The hook-section G is provided at its outer end with an upturned hook, G', and its inner end is pivoted at G<sup>2</sup> to the section F. This pivot is arranged in rear of the offset before described, so that the forward portion of the section F bears under and braces the section G. The rear end of section G is bent, forming a lip, G<sup>3</sup>, which engages the rack-bar, presently described.

I construct my lever in sections in order to secure a longitudinal clamping or binding of the end-gate, and the side of the body provided with the staple or bearing C'.

The operation will be understood on reference to the drawings. It will be noticed that when the outer end of section F is raised the hook or point G' of lever G will be thrown slightly toward the bearing of the box, and the pivotal point G<sup>2</sup> will be correspondingly advanced. If the point of section G be now engaged with the side-board of the box and the outer end of the section F be depressed, box and gate will be drawn firmly together, rendering the fastening more secure, and bracing the boxing, as will be appreciated. It will be appreciated that the side of the end-gate opposite the securing devices may be held in a dovetail groove, or in other suitable manner to the side-board.

The operation of the lever before described will serve to connect the opposite side-boards firmly and prevent their lateral springing when the wagon is loaded.

In order to more securely hold the lever in place when pivoted to the cleat D', I secure a metallic strap to the said cleat and over the lever, as will be understood from Fig. 1.

The rack-bar H is pivoted at its lower end to the end-gate by means of staples H' H', and is provided near its upper end with a tooth or series of teeth, H<sup>2</sup>, arranged in position to engage the end of the lever, as clearly shown. This lever is supported by a spring bearing between its upper end and the end-gate. I prefer to make this spring I, as shown, of a spring-rod bent and passed through a transverse opening in the upper end of the bar H, and having its end secured to the end-gate slightly below the lower end of said bar, as shown.

It is manifest that instead of making the lever sectional it might be made in a single piece; also, that said lever might be pivoted directly to the end-gate, and the cleat D' be dispensed with. This would involve the outward bending of the handle end of lever, so it might engage the rack; or the rack might be countersunk in the face of the end-gate, as desired. These slight changes, it will be seen, would involve no departure from the

broad principles of my invention; but in practice I prefer the construction before described.

In dotted lines, Fig. 1, I have shown the gate, with its several attachments, elevated as when being applied to or removed from the vehicle-body. When the gate has been lowered to its proper position, the lever is operated, as described, until its end G' engages the staple secured on the inner side of the wagon-body, and the lever is secured at any desired point by means of the rack-bar before described.

While I prefer to use the staple, as shown and before described, it is obvious said staple might be dispensed with and a shoulder or other suitable stop substituted therefor.

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

1. In an end-gate fastening, the herein-described lever composed of sections F G, pivoted together, the forward end of lever F being extended and bearing under the section G in the operation of the device, substantially as set forth.

2. In an end-gate fastening, the combination, with the vehicle-body, the end-gate, and the lever pivoted to the end-gate and adapted to operate as set forth, of the rack-bar pivoted at its lower end to the end-gate, and a spring arranged to bear between the end-gate and the upper end of the rack-bar, substantially as set forth.

3. In an end-gate, the combination, with the

gate and the rack secured thereon, of the lever-section F, pivoted at F' to the gate, and the section G, pivoted at G<sup>2</sup> to the section F, and extended forward, bearing on the forward end of said section F, and having its outer end adapted to engage the side of the body, all arranged substantially as and for the purposes specified.

4. The herein-described end-gate fastening, consisting in the lever composed of section F, pivoted to the end-gate, and the section G, pivoted to section F, and provided with a hook, G', at one end, and a flange-lip, G<sup>3</sup>, at its other or rear end, the rack-bar pivoted at its lower end to the end-gate, and having its upper end supported by a spring, and the staple or catch secured in the side of the vehicle-body, substantially as set forth.

5. The combination, with the body having one of its side-boards provided with an eye or stop, of the end-gate and the lever pivoted thereon, and having its outer end or point adapted to and arranged to engage the under side of the eye or stop, whereby in operation the said lever holds the gate to the body and firmly clamps it against the body-bed, and devices for holding the inner end of the lever, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

NATHANIEL POLK.

Witnesses:

T. C. DUNGAN,  
CHARLES W. THOMAS.