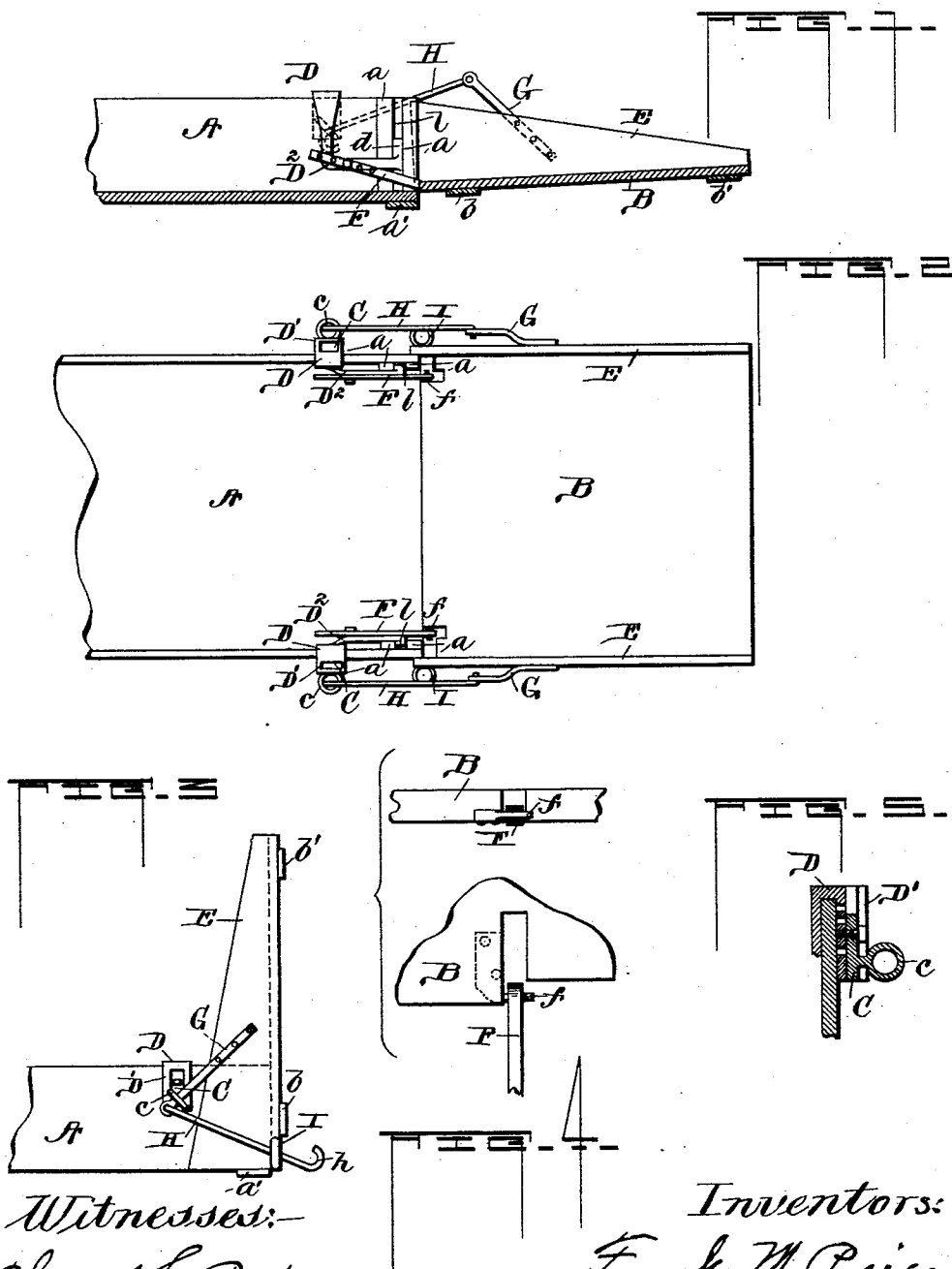


(No Model.)

F. M. PIERCE & A. C. WARNER.
END GATE.

No. 573,794.

Patented Dec. 22, 1896.



Witnesses:-
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UNITED STATES PATENT OFFICE.

FRANK M. PIERCE AND ALBERT C. WARNER, OF ALLENTOWN, ILLINOIS.

END-GATE.

SPECIFICATION forming part of Letters Patent No. 573,794, dated December 22, 1896.

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To all whom it may concern:

Be it known that we, FRANK M. PIERCE and ALBERT C. WARNER, citizens of the United States, residing at Allentown, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in End-Gates; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to certain new and useful improvements in end-gates for wagon-beds, by means of which a particularly useful end-gate is provided, adapted in construction to fulfil all the requirements necessary to render the same applicable to any and all wagon-beds.

More particularly our invention relates to an end-gate adapted to be attached to the wagon-bed without auxiliary attachments thereto being necessary to facilitate the said attachment without in any manner defacing the wagon-bed.

Our invention consists in the provision of angle-bars, one carried on either side of the wagon-bed and provided with lugs on one extremity of each, carried at right angles with and projecting from the particular arm of the bar with which each is connected and adapted to fit within the grooves formed by the usual cleats that hold the ordinary end-gates in place, the other end of each of the angle-bars being provided with hooks designed to bear over the sides of the wagon-body, and an adjustable eye connected with each of the angle-bars; a pair of rods pivoted upon straps or other projections secured to the sides of the end-gates and provided with hooks at their free ends, the said rods adapted to bear within the eyes or loops of the angle-bars, and the hook thereon designed to engage the same; bars on either side of the wagon-body, connected with the angle-bars and in an adjustable relation therewith, the other extremity of each connected with the hooks upon the end-gate, and hooks upon the lower edge of the end-gate for engaging the free ends of the pivoting-rods.

That our invention may be more fully understood, reference is had to the accompanying drawings.

Figure 1 is a vertical longitudinal section of our improved end-gate attached to the usual wagon-body, showing the same open. Fig. 2 is a plan view of the same. Fig. 3 is a side view showing our end-gate raised or closed. Fig. 4 shows an enlarged detail view of the means of pivoting my end-gate. Fig. 5 is an enlarged view in section, showing the means of adjusting the eye on the angle-bar.

In the drawings, A represents the wagon-body, which is of the ordinary construction, having the sides A' A', provided with the cleats a a.

a' refers to a cleat on the bottom of the wagon-body.

B is the back of the end-gate.

b b' are cleats across the same.

E E are side pieces which narrow gradually from the base to the upper extremity of the end-gate. Fastened to the back of the end-gate B are the pins f f, to which are loosely engaged the pivoting-rods F F, having a number of perforations in the rear ends, which are adjustable on the bar D'', to be used in adjusting the end-gate to any desired height.

D D are angle-bars which are adjustable to the sides A' A' of the wagon-body, having the lugs d d carried at right angles with and projecting from the arms D'' D'' of the angle-bars, each of which is adapted to fit within the grooves ll, formed by the cleats a a. The angle-bars D D are provided with the adjustable bars C C, sliding in slots D' D' within the angle-bars D D, and provided with set-screws for holding them at any point desired and having the eyes c c formed therein.

G G are straps fixed to the side pieces E E, in the manner shown in the drawings, in a diagonal manner and extend a little above the upper edge of the side pieces and are provided with perforations or eyes.

H H are bars pivoted to the straps G G and are provided with the hooks h h, which are designed to engage the eyes c c of the adjustable bar C.

I I are hooks secured to the lower rear edges of the side pieces E E and within which the side bars H H are designed to bear when the end-gate is in its maximum raised position.

The end-gate being provided with the back B, having the pins f f secured thereto and provided with the straps G G and the bars

H H, pivoted thereto, is designed to be pivoted upon the bars F F and the bars H H, inserted through the eyes *c c*.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination with a wagon-body, of the angle-bars D, D, each provided with hooked upper ends for bearing over the edge of the wagon-bed, and provided with the slot D', and the portion D² of the angle-bar, being each provided with the lugs *d, d*, fitting between the cleats *a, a*, of the wagon-bed, the adjustable bars C, C, adjustable within the slots D', of the angle-bars and having the eyes *c, c*, projecting therefrom, the eyes I, I, secured to the lower rear edge of the wagon-bed, the bars F, F, pivoted to the angle-bars and to the end-gate B, upon pins *f, f*, and the end-gate B, provided with straps G, G, the bars H, H, pivoted thereto and having hooks at their outer extremities and designed to pass through the eyes *c, c*, and I, I, all substantially as described and shown.

2. The combination with a wagon-body and the cleats thereon, of the angle-bars D, D, the portions D², D², thereof provided at their extremities with the lugs *d, d*, which fit between the pair of cleats on said wagon-bed and the upper ends of the arms of the angle-bars provided with hooks bearing over the top edges of the wagon-bed and at points some distance forward from the rear end of the wagon-bed, the perforated bars F, F, pivoted to the angle-bars at the forward portions of said bars and an end-gate having slots in the lower edge and provided with the pins *f, f*, pivoted to said bars F, F, all substantially as described and shown.

3. The angle-bars D, D, the rearwardly-extending arms D², D², thereof provided with the lugs *d, d*, and the upwardly-bearing arms thereof provided with hooks, the perforated bars F, F, pivoted at their forward ends to the angle-bars at the point of the angle of each and perforated at their rear ends to receive pins, in combination with a wagon-bed provided with the cleats at the rear end between which the lugs *d, d*, are fitted and over the top edges of the wagon-bed and at points some little distance forward from the rear end thereof the hooks of the angle-bars are fitted, an end-gate slotted at its lower edge and provided with pins projecting at right

angles into the said slots, which pins fit into the perforations in the rear ends of bars F, F, all substantially as described and shown.

4. The combination with a wagon-body and an end-gate, of the straps G, G, attached to said end-gate, the slots in the lower edge thereof and the pins *f, f*, projecting into the same, the angle-bars D, D, the rearwardly-extending portions D², D², thereof being provided with lugs *d, d*, that fit between the cleats of the wagon-bed, the upwardly-extending portions of the angle-bars provided with hooks bearing over the upper edge of the wagon-bed and the portions of the hooks bearing on the outside of the wagon-bed provided with slots D', D', therein, the bars C, C, provided with eyes *c, c*, adjustable in the slots D', D', in the hooked portions of the angle-bars, the eyes I, I, fixed to the lower edge and at the rear end of the wagon-bed, the rods H, H, pivoted to the straps G, G, at one end and provided each with a hook at its other end adapted when the end-gate is lowered to engage the eyes *c, c*, to support the end-gate when in a lowered position and further adapted when the end-gate is raised to engage the eyes I, I, to hold the end-gate in such position, and the perforated bars F, F, pivoted at their forward portions to the angle-bars at the points of the angles thereof and the rear ends thereof pivoted upon the pins *f, f*, upon the end-gate, all substantially as described and shown.

5. The combination with the wagon-bed, of the pivoted adjustable hangers F, F, the angle-bars D, D, to which the forward portions of the hangers are pivoted, carrying the adjustable bars C, C, provided with eyes *c, c*, the fixed eyes I, I, an end-gate pivoted to the rear end of the hangers F, F, and provided with straps G, G, having rods H, H, pivoted thereto at one extremity and adapted to engage the eyes *c, c*, to support the board in a lowered position and to engage the eyes I, I, to support the board in a raised position, all substantially as described and shown.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK M. PIERCE.
ALBERT C. WARNER.

Witnesses:
CHAS. W. LA PORTE,
W. V. TEFFT.