

(No Model.)

W. EMERY.  
End Gate for Wagons.

**No. 241,199.**

**Patented May 10, 1881.**

Fig. 1.

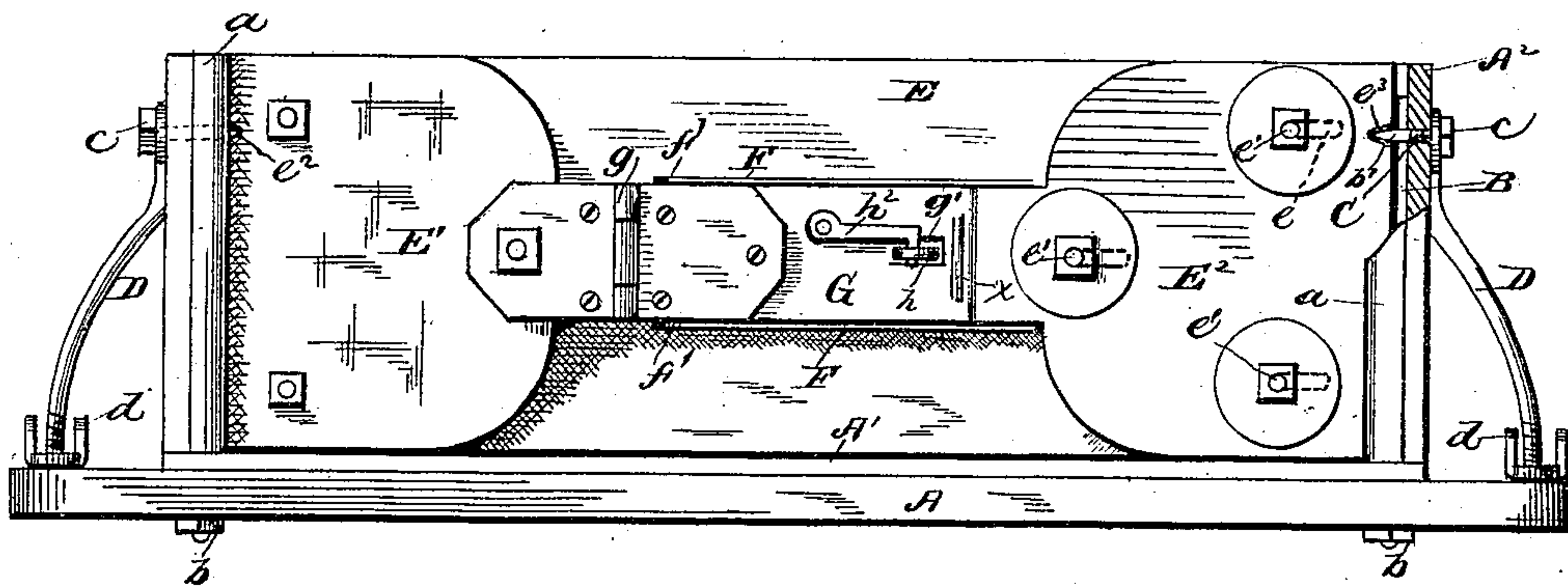


Fig. 2.

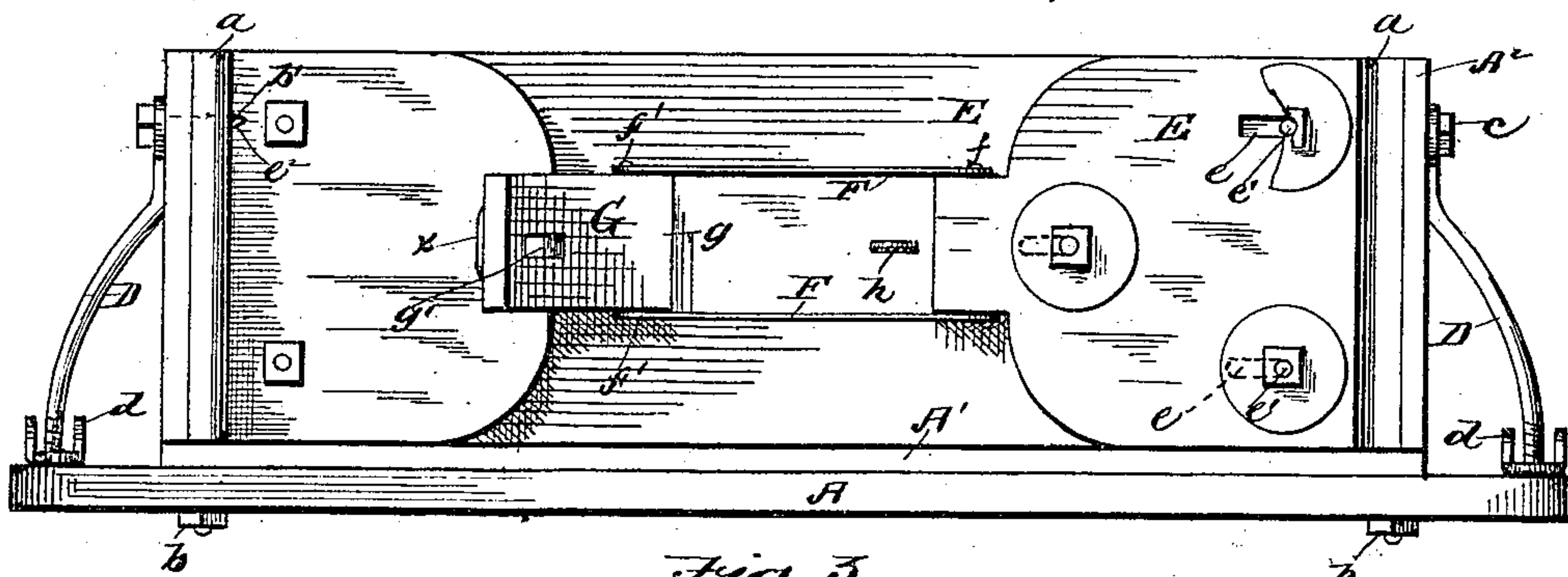


Fig. 3.

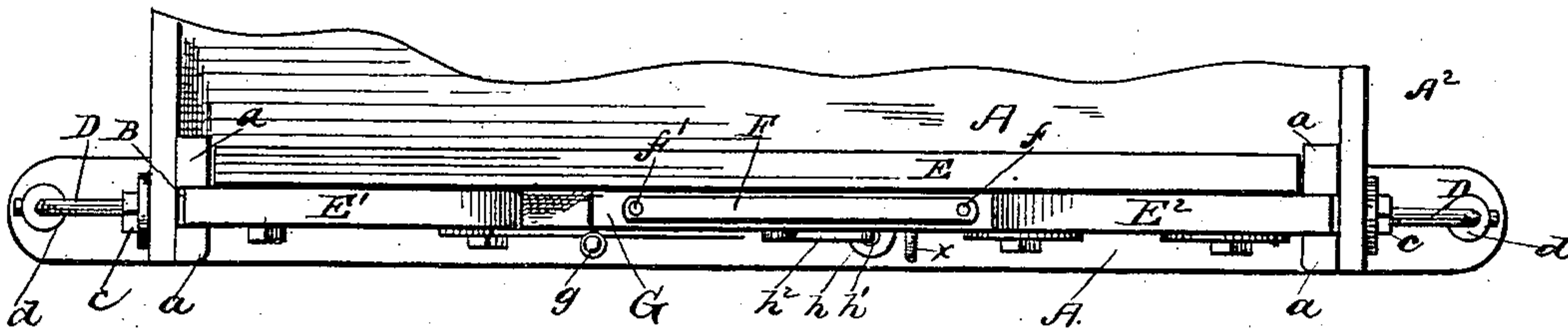
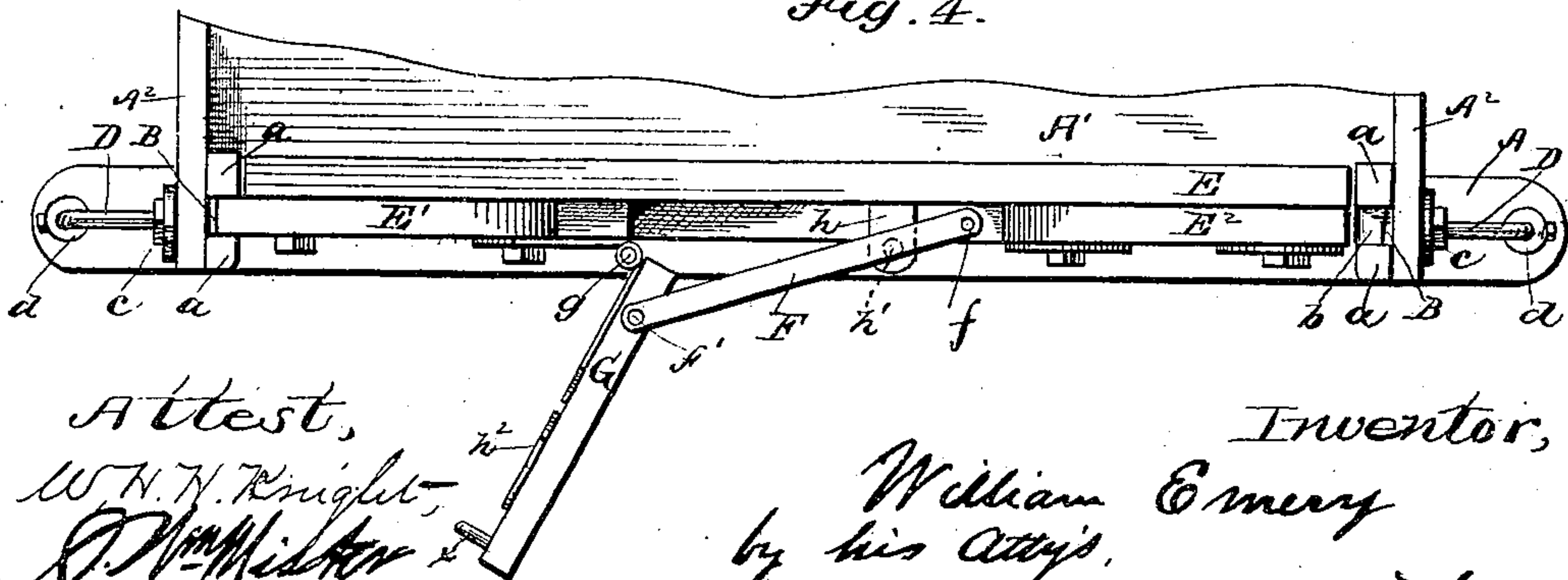


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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## END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 241,199, dated May 10, 1881.

Application filed February 12, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM EMERY, a citizen of the United States, residing at Concordia, in the county of Cloud and State of Kansas, have invented certain new and useful Improvements in End-Gates for Wagons; 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to the tail-board or end-gate of a wagon; and the novelty consists in the construction and arrangement of parts, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

Ordinarily devices of this kind operate in vertical grooves in the side-boards, and have to be lifted entirely out of the grooves in order to be liberated. In my device I obviate this inconvenient and laborious method, and my construction serves to firmly lock the end-gate in place.

In carrying out my invention I secure and brace the side-boards of the body by vertical bars situated within the vertical grooves in said side-boards, and passing through the rear cross-beam are held firmly by nut and thread. A curved brace-bar extends from near the ends of the cross-bar or beam upward, and is bolted to the side-boards by bolts and nuts, which pass through the vertical bars and afford a projection which operates in a groove or recess in each end of the gate to lock the same in place. A perforated ear upon the gate is adapted to pass through a slot in a hinged lever, and a pivoted hook serves to lock the lever when it is closed. This lever is provided with a convenient operating-handle, and has pivoted to it, above and below, two arms, which are secured to a sliding plate having two or more slots, in which operate bolts, which bolts secure the plate to the body of the gate. When the lock-lever is open the plate is withdrawn from the vertical guide in one of the side-boards, and the gate may be readily removed.

It will be observed that the pivotal bearings of the duplex arms are on a plane within the pivotal point of the lever-hinge, and that lateral pressure of the side-boards serves to hold the lever in its closed position.

In the accompanying drawings, which form a part of this specification, Figure 1 is a rear elevation, partially in section; Fig. 2, a similar view with the lock-lever open; Fig. 3, a top-plan view, and Fig. 4 a similar view with the lock-lever open.

Referring to the drawings, A represents the rear cross-beam, A' the bottom, and A<sup>2</sup> the side-boards, having vertical guides *a*.

B represents the vertical bar, fixed within the guides *a* by nuts *b* below and projections *b'* upon bolts C, which secure the bars, sides, and curved braces D together by a nut, *c*. These braces are secured to points near the ends of the cross-beam A by thumb-nuts *d*.

E represents the body of the end-gate, at one end of which is rigidly secured a plate, E', having a recess, *e*<sup>2</sup>, which receives one of the projections *b'*, and at the other is secured a sliding plate, E<sup>2</sup>, of similar construction to the plate E', except that it is provided with slots *e*, which receive the bolts *e'*.

*e*<sup>3</sup> represents the recess which receives *b'*.

F F represent arms secured at one end, *f*, to the sliding plate E<sup>2</sup>, and at the other, at *f'*, to a lock-lever, G, hinged at *g*, and having a slot, *g'*, which receives an ear, *h*, having a perforation, *h'*, and a hook, *h*<sup>2</sup>, which operates in the perforation *h'* to lock the lever G in place.

*x* represents a handle upon the lever G.

The operation and advantages of the invention are obvious.

What I claim as new is—

1. An end-gate for wagons, having a slotted sliding and locking plate bolted thereto, and adapted to be withdrawn by horizontal movement, as and for the purposes specified.

2. The brace-bolts C, having projections *b'*, bar B, and brace D, combined with an end-gate having a horizontally-sliding plate, and recesses *e*<sup>2</sup> *e*<sup>3</sup>, as and for the purposes set forth.

3. The combination of the hinged lever G, having slot *g'*, and hook *h*<sup>2</sup>, with the arms F, sliding plate E<sup>2</sup> *e*, recesses *e*<sup>2</sup> *e*<sup>3</sup>, perforated ear

$h$ , and projections  $b'$ , as and for the purposes specified.

4. The duplex bars  $F$ , pivoted to the sliding plate  $E^2$  at  $f$  and to the lever  $G$  at  $f'$ , combined with said lever and plate, and adapted  
5 to rest upon a plane within the plane of the hinge when the lever is closed, as and for the purposes specified.

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

WILLIAM EMERY.

Witnesses:

J. D. WILSON,

E. E. SWEARINGEN.