(No Model.) 2 Sheets—Sheet 1.

S. T. ELGIN.

END GATE FOR WAGONS.

No. 397,789. Patented Feb. 12, 1889.

Fig. 1.

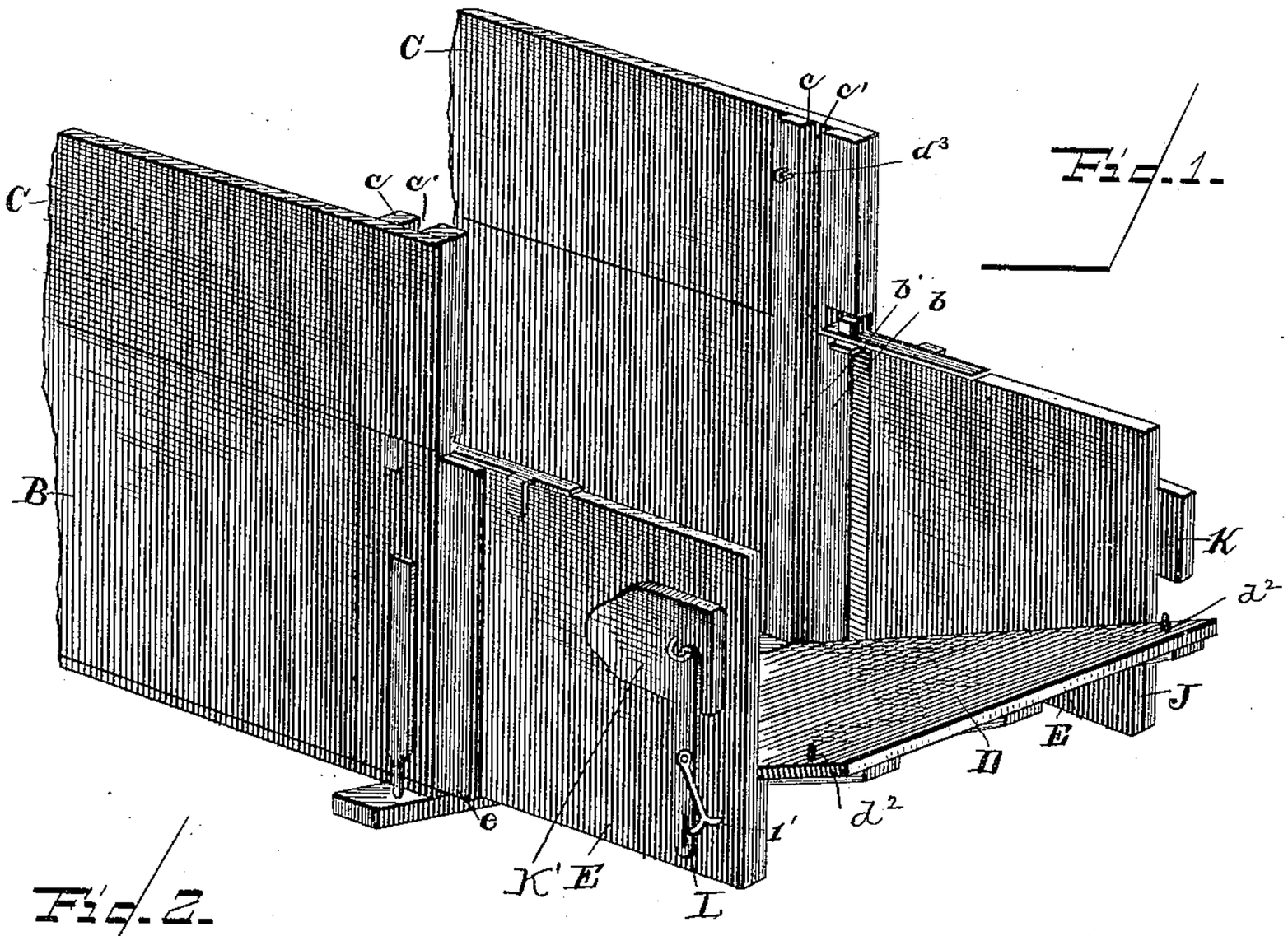


Fig. 2.

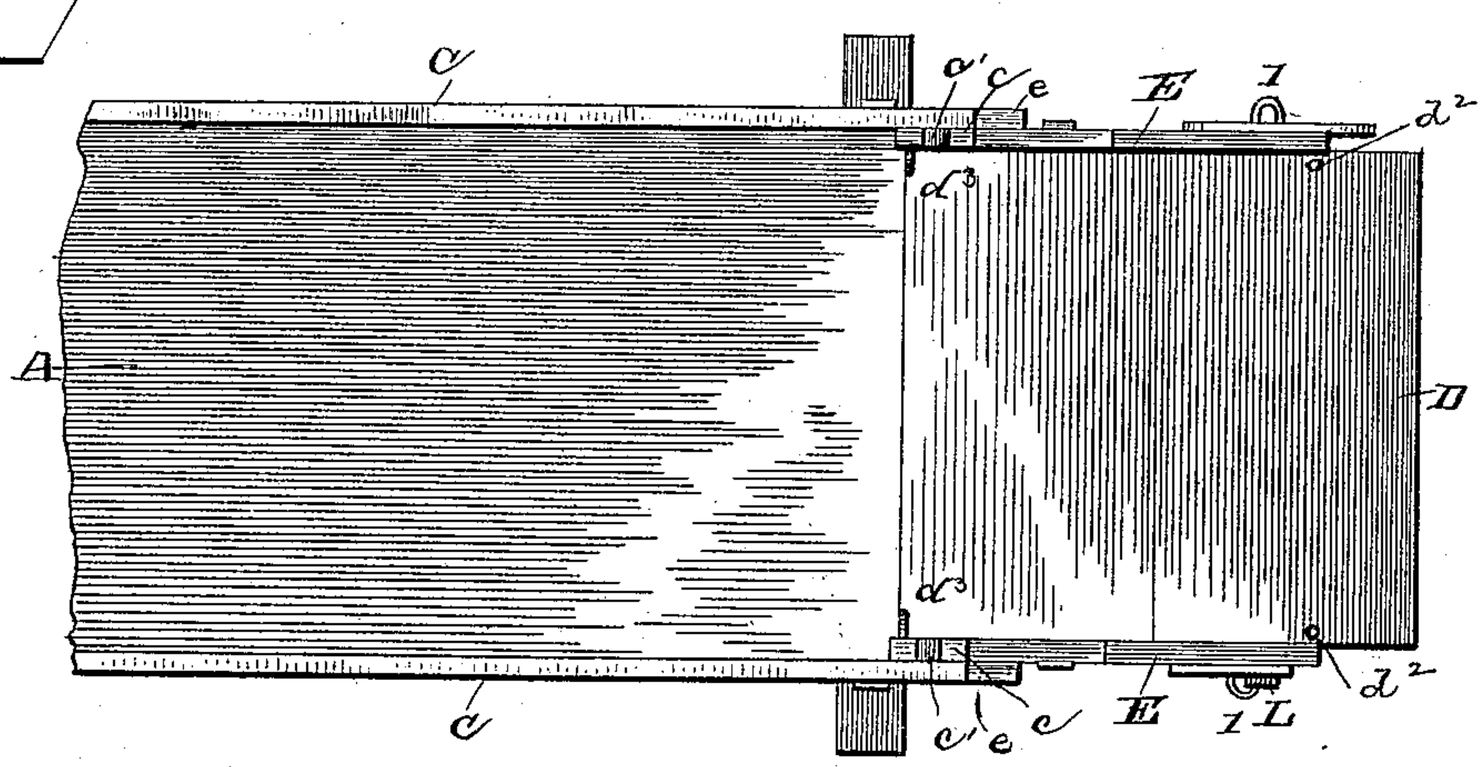
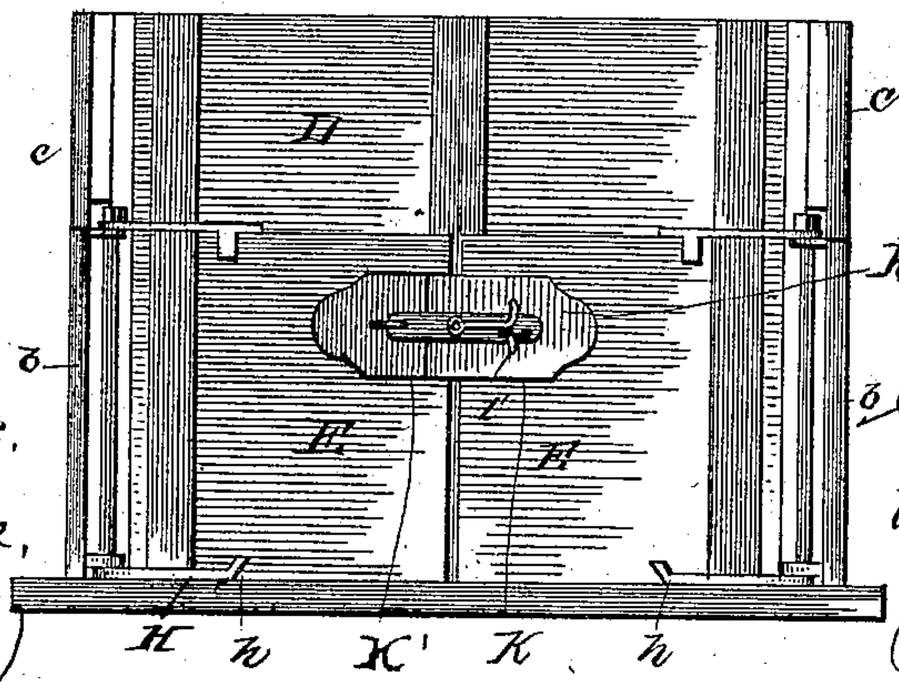


Fig. 4.



WITNESSES.

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Samuel T. Elgin,
INVENTOR.

by J. R. Littell,
Attorney.

(No Model.) 2 Sheets—Sheet 2.

S. T. ELGIN.

END GATE FOR WAGONS.

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Fig. 3.

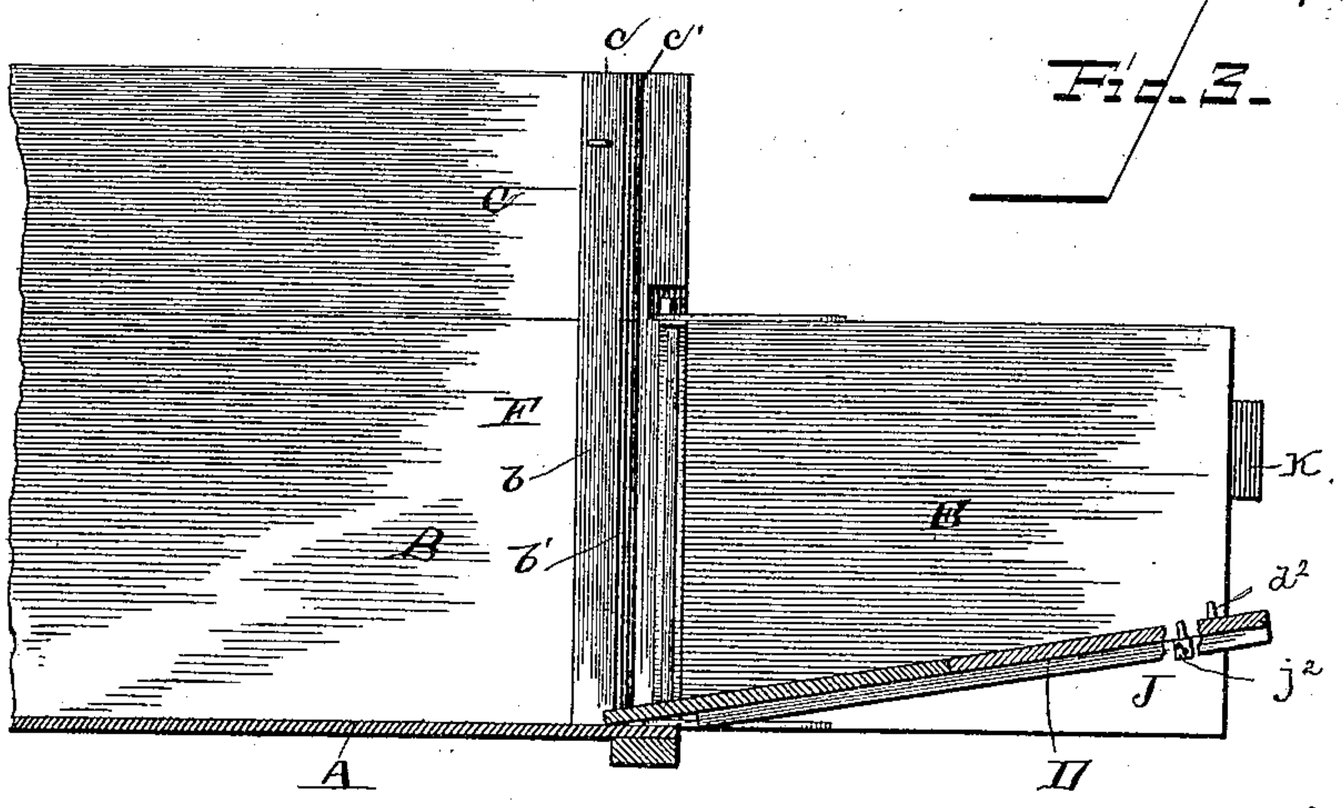


Fig. 5.

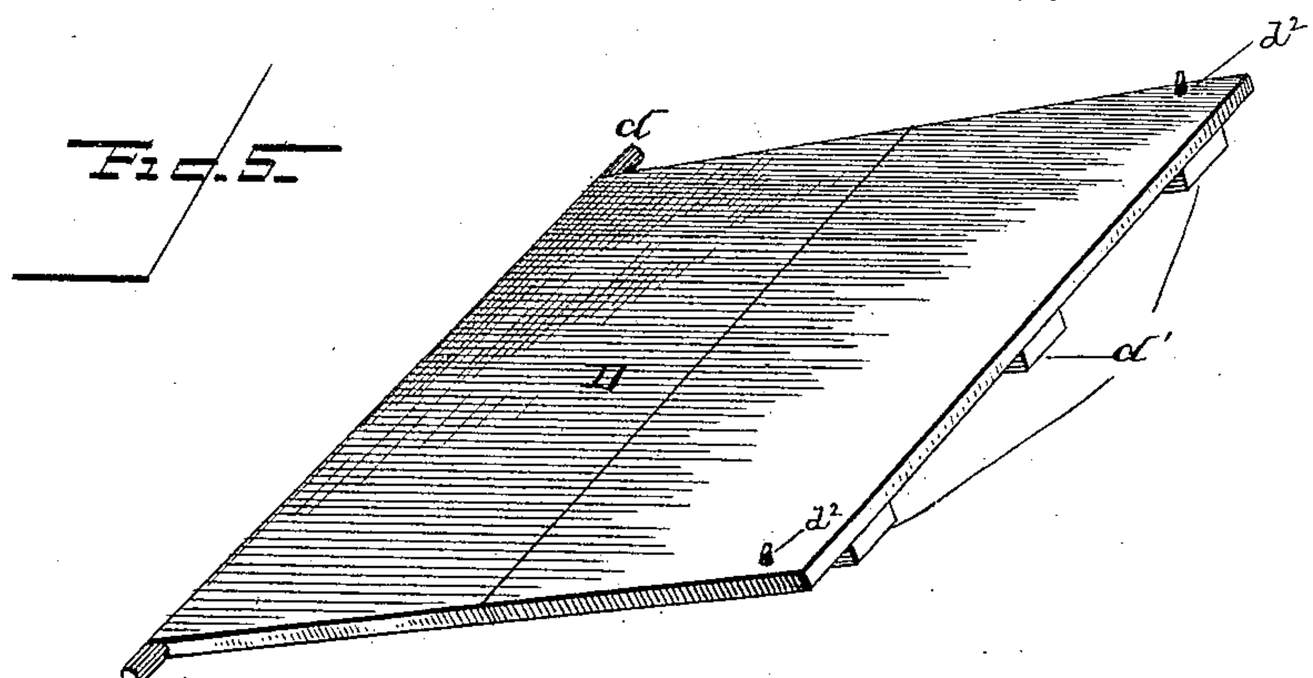


Fig. 6.

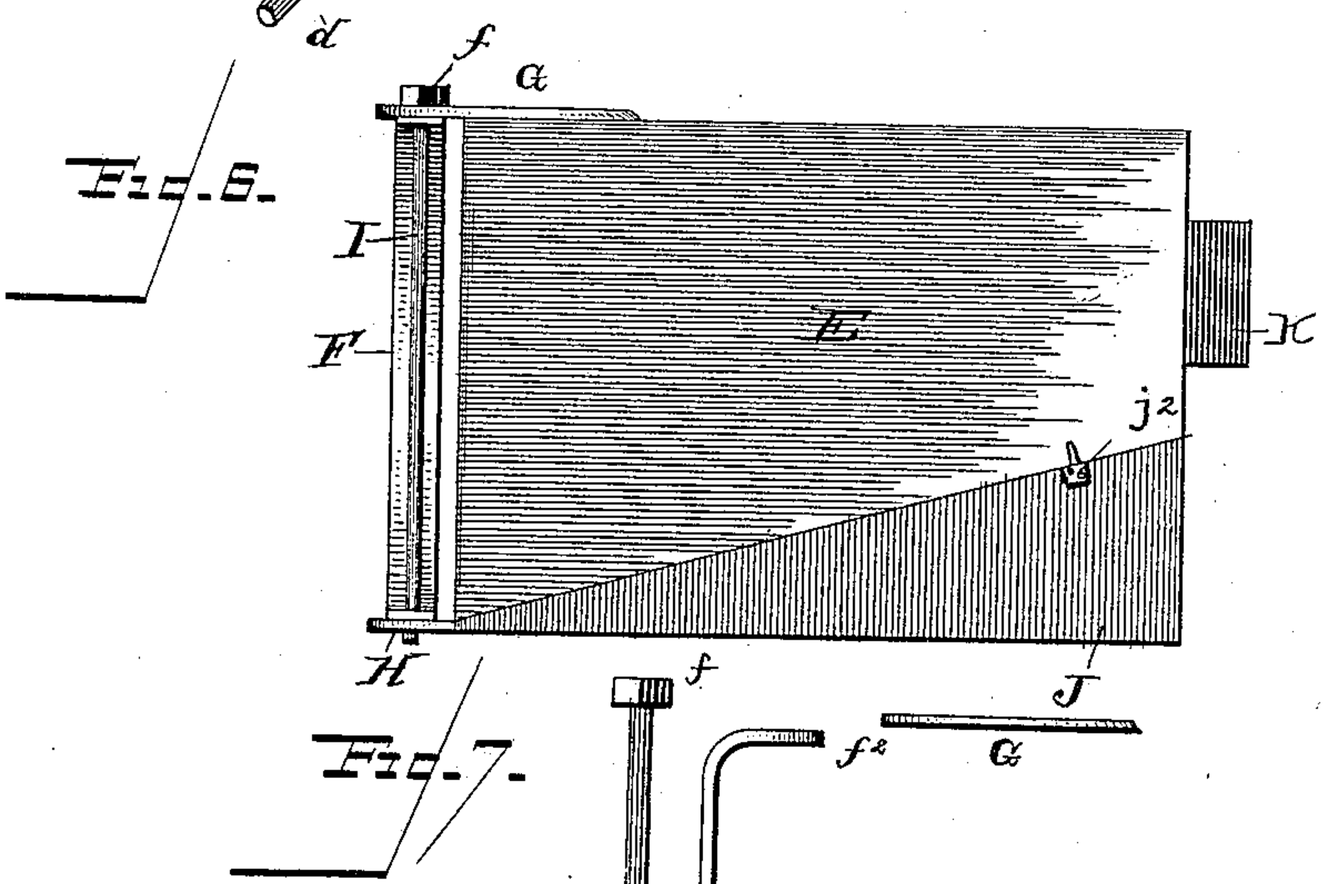
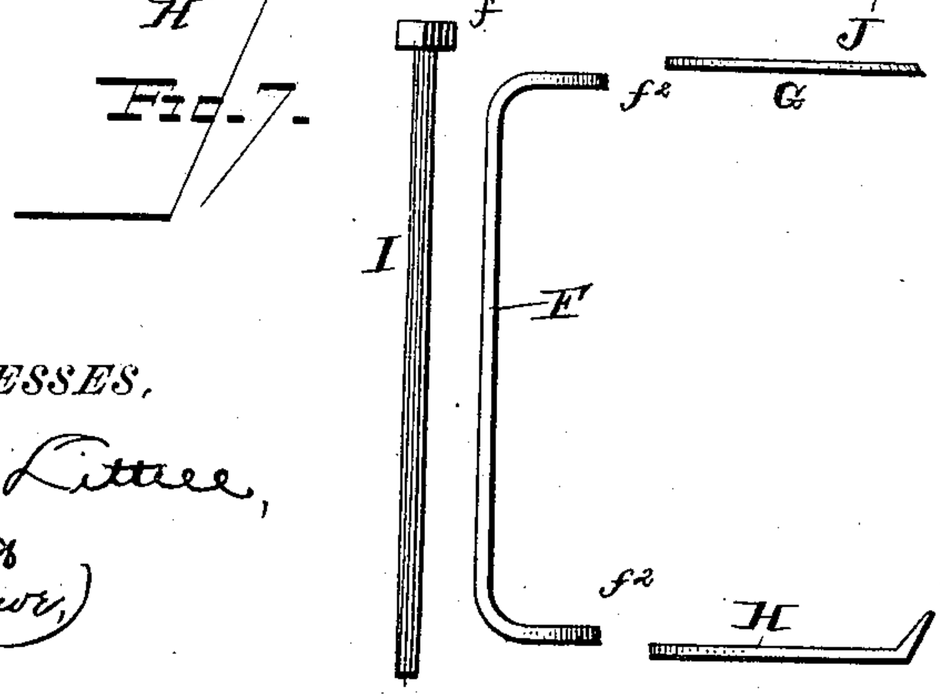


Fig. 7.



WITNESSES.

Wm. J. Littell,

A. Lee Lowe,

Samuel T. Elgin,
INVENTOR
by J. R. Littell,
Attorney

UNITED STATES PATENT OFFICE.

SAMUEL T. ELGIN, OF ASTORIA, ILLINOIS.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 397,789, dated February 12, 1889.

Application filed November 8, 1888. Serial No. 290,297. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL T. ELGIN, a citizen of the United States, residing at Astoria, in the county of Fulton and State of Illinois, have invented certain new and useful Improvements in End-Gates for Wagons, of which the following is a specification.

This invention relates to end-gates for wagons; and it has for its object to provide a simple and improved device of this character which can readily be operated by the driver from the wagon without dismounting, which may be adapted to form an extension at the end of the wagon proper, and which will furthermore possess advantages in point of inexpensiveness, durability, and general efficiency.

To this end the invention consists, substantially, in the details of construction, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view illustrating the application of my invention. Fig. 2 is a top or plan view. Fig. 3 is a vertical longitudinal sectional view. Fig. 4 is an end elevation with the gates closed. Fig. 5 is a detail perspective view of the extension-board. Fig. 6 is a side elevation of one of the gates. Fig. 7 is a similar view of the hinge for the latter.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring to the drawings, A designates the bed of the wagon, B the permanent sides, and C the removable top sides, all of these parts being of any well-known or preferred construction. The sides B are each provided near their ends with two vertical parallel cleats, *b b*, forming a groove, *b'*, between the same, and the sides C are provided with correspondingly-disposed cleats *c c*, forming grooves *c' c'*, the latter being a continuation of the grooves *b'*.

D designates an extension-board provided at its lower ends with outwardly-projecting cylindrical bearing-lugs *d d*, which are passed down through the grooves *c'* and have bearing at the lower ends of the grooves *b'*. The board is also provided with cleats *d'* upon its back for securing the parts together when the board is constructed in sections and for strengthening the board. The upper edge of this board when closed is preferably on the same horizontal plane as the top of the sides C, and has secured upon its face inwardly-projecting lugs d^2 d^2, which are adapted to engage staples d^3 d^3 upon the inner cleats, *c*, which prevent the sides of the wagon from spreading, and thus the transverse rod usually employed is dispensed with. The outer cleats, *b*, are recessed, as shown, and in said recesses are hinged gates E. The hinges for these gates comprise each a vertical plate, F, secured to the sides B by screws or bolts *f*, passed through the perforations *f'* therein, and having its ends outturned to form horizontal lugs f^2. To the top ends of the gates adjacent the plates F are secured plates G, the outer ends of which project over the top lugs f^2, and are provided near their inner ends with downturned flanges *g g*, which fit over the outer faces of the gates and are secured thereto. Plates H are provided at the bottom ends, corresponding to those upon which the plates G are secured, their inner ends, *h*, being turned up and beveled to form sharp edges. These plates are sunk into the gates flush with the bottom edges thereof, the outer ends of said plates projecting out and under the lower lugs f^2. The hinge-joint is formed by rods or bolts I I, passed through perforations therefor in the lugs f^2 and projecting ends of plates G and H.

Cleats *e e* are secured to the gates near their hinged ends, which rest against the vertical edges of the sides B and prevent the gates from spreading, when open, beyond a parallel plane.

To the inner sides of the gates, at the bottoms thereof, are secured triangular strips J, the lower edges of which are flush with the corresponding edges of the gates, and the top edges incline toward the hinges. A portion of the broad end of one of the strips projects beyond the free end of its gate, as shown at *j*, which laps over the adjacent end of the other gate and is received by a corresponding recess, *j'*, in the other strip. These strips project from the faces of the gates and form supports when the latter are open for the extension-board. Lugs j^2 j^2 are secured to the sides of the strips and project upwardly beyond the top plane thereof, said lugs being received by perforations therefor in the extension-board, and act as a further protection against spreading of the gates.

Upon the outer faces of one of the gates is secured a board or plate, K, the outer end of which projects over the adjacent end of the gates. A corresponding but shorter board, K′, is secured to the other gate, the outer end of which meets the adjacent end of the board K, said boards being designed to hold the gates rigid when closed. The gates are preferably locked by a hasp, L, and staples *l l*, a hook, *l′*, being pivoted to the hasp and projecting over the staple-slot for engaging the staple when passed through the latter.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. It will be obvious that when desired the extension-board may be readily removed without in any way interfering with the gates.

I do not wish to be understood as limiting myself to the exact construction as herein shown and described, but reserve to myself the right to all such modifications as properly fall within the spirit and scope of my invention. For instance, the gates may be nearly the full width of the wagon, so as to provide longer side extensions, one of said gates lapping over the other when closed; and, further, the triangular supports J may be dispensed with and supports provided upon the lower edge of the gates, thus permitting the extension-board to assume a horizontal position when lowered, forming an extension of the bed proper.

I claim as my invention—

1. The combination, with the sides of a wagon and end-gates therefor, of hinges for mounting the gates, comprising plates for the sides, provided with projecting perforated lugs, top plates for the gates having perforated ends and provided near their other ends with downturned flanges adapted to rest and be secured against the face of the gates, bottom plates for the gates, provided with perforations in one end and having their other ends upturned and beveled, and a rod or bolt passing through the lugs and perforations in the top and bottom plates, substantially as set forth.

2. The combination, with a wagon provided upon opposite sides with vertically-disposed parallel cleats forming grooves and with oppositely-disposed vertical plates F F, having top and bottom lugs, of an extension-board provided with lugs bearing in said grooves and removable therefrom, and with lugs adapted to engage staples upon the rear cleats, and end-gates provided with top and bottom plates, G H, the outer ends of which project between the lugs of the plate F, said plates F G H, in connection with the bolts I, forming hinges, corresponding inclined plates secured to the inner faces of the gates at their lower edges and provided with lugs adapted to engage perforations in the extension-board, and plates K K′, respectively secured to the gates, the former overlapping the adjoining gate, said gates being adapted to be locked against the extension-board, all arranged and adapted to operate substantially as and for the purpose set forth.

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

SAMUEL T. ELGIN.

Witnesses:

SAMUEL A. HUNTER,

A. B. ROOSA.