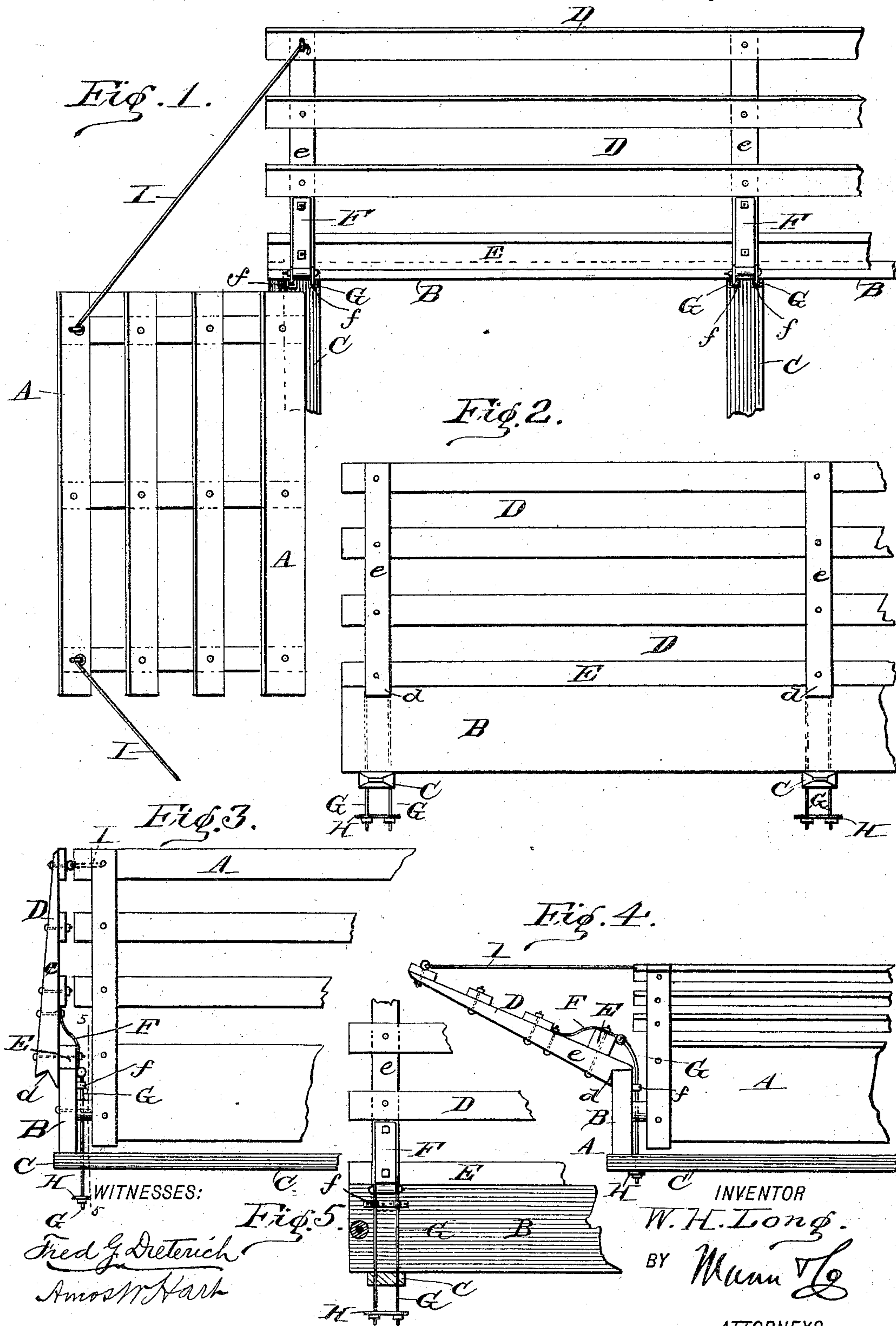


(No Model.)

W. H. LONG.
HAY OR HOG RACK.

No. 500,920.

Patented July 4, 1893.



WITNESSES:
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UNITED STATES PATENT OFFICE.

WILLIAM H. LONG, OF WASHINGTON, ILLINOIS, ASSIGNOR TO THE LONG MANUFACTURING COMPANY, OF SAME PLACE.

HAY OR HOG RACK.

SPECIFICATION forming part of Letters Patent No. 500,920, dated July 4, 1893.

Application filed October 15, 1892. Serial No. 449,037. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. LONG, a citizen of the United States of America, residing at Washington, in the county of Tazewell and State of Illinois, have invented a new and Improved Combined Hay and Live-Stock Rack, of which the following is a specification.

My invention is an improvement in the class of hay wagons whose skeleton sides are hinged and thus adapted to be adjusted from an inclined to the vertical position, in order to adapt the wagon for transporting stock, more especially small stock, such as swine, sheep, and calves.

My improvements relate to the construction and arrangement of the sides of such wagons and the means for supporting them in either of the two positions they are required and adapted to assume, according as the wagon is to be used for transporting hay or stock.

In accompanying drawings, Figure 1 is a plan view of a portion of a complete rack, extended, or in inclined position, as required to serve as a hay-rack. Fig. 2 is a side view of one of the adjustable sides of the rack, which embody my invention. Fig. 3 is an end view of a portion of a rack, in vertical position, as required to serve as stock-rack. Fig. 4 is a view of the same parts, as shown in Fig. 3, when inclined or extended to serve as a hay-rack. Fig. 5 is a vertical section on line 5—5 of Fig. 3.

The views show but a small portion of the skeleton frame of the wagon-bed, since that forms no part of my invention.

The end gate, A, is constructed and pivoted, in the usual way, between the longitudinal, or side beams, B. (But one such beam is shown.) These beams, B, rest on and are bolted, or otherwise secured, to cross pieces, or sills, C, which, in practice, support the floor of the wagon-bed.

The skeleton side, D, of the rack and its attachments embody my invention. (But one rack D, is shown in the drawings, but, in practice, another, or duplicate, is arranged opposite it.) The rack, D, is supported upon a side beam, B. When arranged vertical, as in Figs. 2, 3, 5, it is supported by a bar, E, which is bolted to its inner side, and rests directly upon the upper edge of said beam. When in

the inclined position, as shown in Figs. 1 and 4, the notched lower ends *d*, of the standards, *e*, of the side rack, D, rest upon the upper, outer corner of the beam, B. When the side, D, is vertical, the lower ends, *d*, of its standards, *e*, project down on the outer side of the beam, B.

I will now describe the means for holding the side, D, in the two positions indicated. A flat and narrow metal strap, or plate, F, is attached to the inner side of each standard of the side, D, and also to the bar, E, below which it extends for a half inch, or thereabout. These straps, F, are preferably attached to the bar, E, by the same bolts that secure it to the standards, *e*. Two rods, G, are jointed to the lower ends of each strap, F, and extend down through a guide, or keeper, *f*, and holes in the cross-pieces, or sills, C, their lower ends being joined by a plate, H. The joint connection between the rods, G, and strap, F, is a screw-bolt, which, being detachable, permits the rods, G, to be readily disconnected in case it is desired to remove the side, D, from the wagon-bed. The rods, G, are of such length that when the side, D, is in the inclined position shown in Figs. 1 and 4, the cross plates, H, are held in contact with the cross-pieces, C, and thus serve as stop plates, whereby the notched ends, *d*, of the side standards, *e*, are held securely in place on the beam, B. But when the side, D, is vertical—as in Figs. 3 and 5—the rods, G, project some distance below the sills, C, and have no function, the base portion of the side, D, being in such case held in place by reason of the straps, F, and lower ends, *d*, of the standards, *e*, projecting below the upper edges of the beam, B, as shown. The guides, *e*, and rods, G, aid in preventing endwise movement of the side, D, on the beam B. The upper end of the end A is supported by rods, I, which are attached thereto at one end and provided with hooks at their opposite ends, to adapt them to be engaged with staples fixed in the side, D. When the side, D, and end gate, A, are vertical, these rods, I, are crossed, but not in the alternative, or inclined, position shown in Figs. 1 and 4.

What I claim is—

1. The combination, with the side beams of a wagon bed, and a side-rack supported on

said beams, of a device adapted to slide through the bed, and having a flexible or hinge connection with the side-rack, and a stop plate which is attached to the lower end of said device, and comes in contact with the bed when the rack is inclined outward, as and for the purpose specified.

2. The combination, with a beam, forming part of a wagon-bed, of a side-rack having standards with notched lower ends, rods, G, hinged to the inner side of the rack, and slidable through a base piece, and a stop-plate applied to the lower ends of the rods, substantially as shown and described to operate as specified.

3. The combination, with a beam, forming

part of a wagon-bed, and a side-rack, D, having standards whose lower ends are notched, of rods which connect with such side-rack and are adapted to slide through a base piece, and provided with a stop-plate, whereby the said rods are subjected to tension when the side-rack is in an inclined position, and thus aid in supporting it, substantially as shown and described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of witnesses.

WILLIAM H. LONG.

Witnesses:

HOWARD M. LONG,

FRED AUBERTIN.