J. HALL.

Hay-Rack.

No. 164,731. Patented June 22, 1875.

Fig. 1.

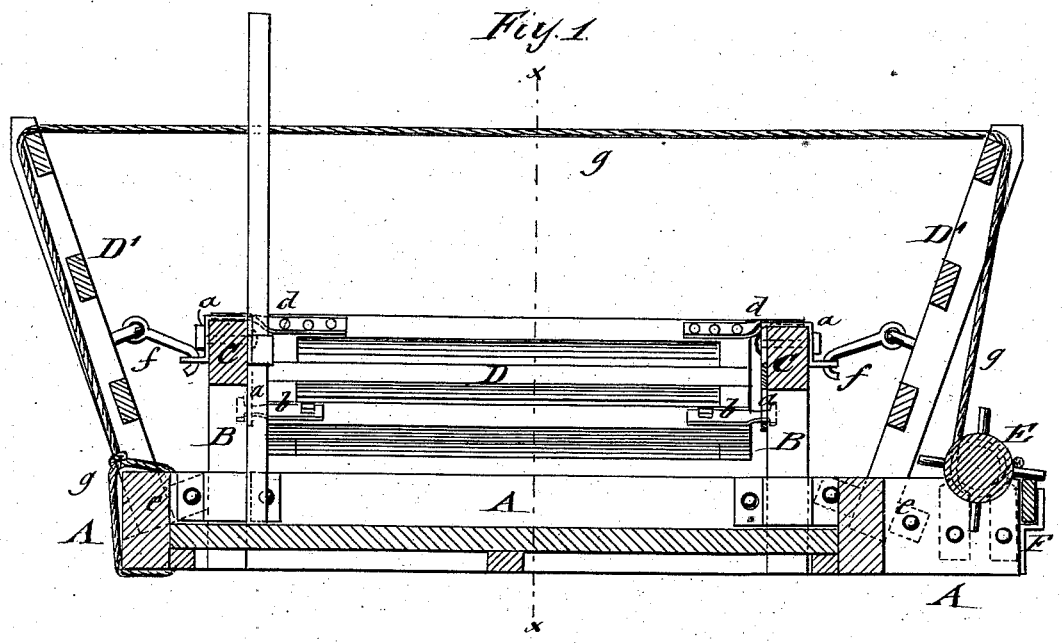
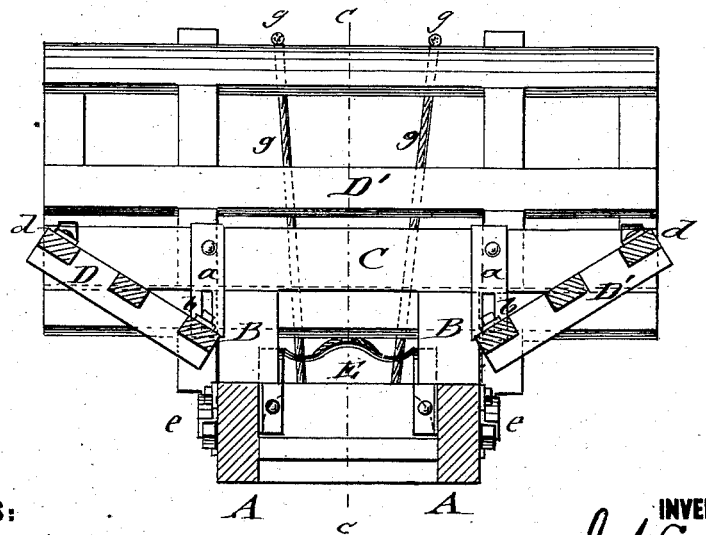


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOSEPH HALL, OF RIVERSIDE, NEBRASKA.

IMPROVEMENT IN HAY-RACKS.

Specification forming part of Letters Patent No. **164,731**, dated June 22, 1875; application filed May 1, 1875.

To all whom it may concern:

Be it known that I, JOSEPH HALL, of Riverside, in the county of Burt and State of Nebraska, have invented a new and Improved Hay-Rack, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a vertical longitudinal section on the line *c c*, Fig. 2, of my improved hay-rack; and Fig. 2, a vertical transverse section of the same on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The object of my invention is to furnish to farmers an improved hay-rack that is constructed in such a manner that it can be taken to pieces and stored away when not in use, while it may be readily set up and placed on the wagon by one person; being capable of carrying a large load, close to the team, without danger of slipping, moving, or upsetting.

The invention consists of a bed-frame, which is placed on the running-gear of a wagon, and provided with vertical standards having detachable cross-beams, and with inclined side and end ladders attached thereto, and load-binding cords stretched by a windlass attachment.

In the drawing, A represents an oblong bed-frame; B its vertical standards, and C the cross-beams, which are secured by slotted recesses to the top of the standards, so as to be readily applied and detached.

The cross-beams C are provided with slotted bands *a*, which are bolted thereto near the standards, to form at both sides supports, to which the inclined side and end ladders D and D′ may be connected. The side ladders D have at their lower ends projecting lock-bolts *b*, with L or T shaped ends, which are introduced to the interior slotted parts of bands *a* by holding the ladders in vertical position, to be then carried back into inclined position until the rest-plates *d* at the upper corners of the side ladders, are seated on the cross-beams. The side ladders are in this manner securely retained in position, while being quickly detached on being swung up in vertical position to release the lock-bolts from the slots. The front and rear ladders D′ are of greater height than the side ladders, and are seated into socket staples or bands *e* at the sides of the bed-frame. They are also placed at suitable inclination, and secured furthermore by hooks *f* to the outer slotted parts of bands *a*. The load is then placed on the rack, and the hay, straw, or other article firmly bound by means of the top cords *g* which are attached to the lateral front piece of the bed-frame, and carried over the front and rear ladders to a windlass, E, at the hind part of the bed-frame to be looped thereto. By turning the windlass the load-binding cords may be tightened to such a degree that the load is fully and securely, and without any danger of slipping, bound to the rack. A pivoted stay-board, F, or other device locks the windlass in position for keeping the cords tight. All the parts of the rack are thus firmly secured, yet readily detachable from the bed-frame, for being taken off for storage or set up for use by one person, forming a convenient and superior rack device for farmers.

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

The combination of bed-frame A, having standards B and side sockets *e*, the cross-beams C C, having slotted bands *a*, and the frames D D′, having fasteners, substantially as and for the purpose specified.

JOSEPH HALL.

Witnesses:
J. C. LAUGHLIN,
GEO. W. GREEN.