

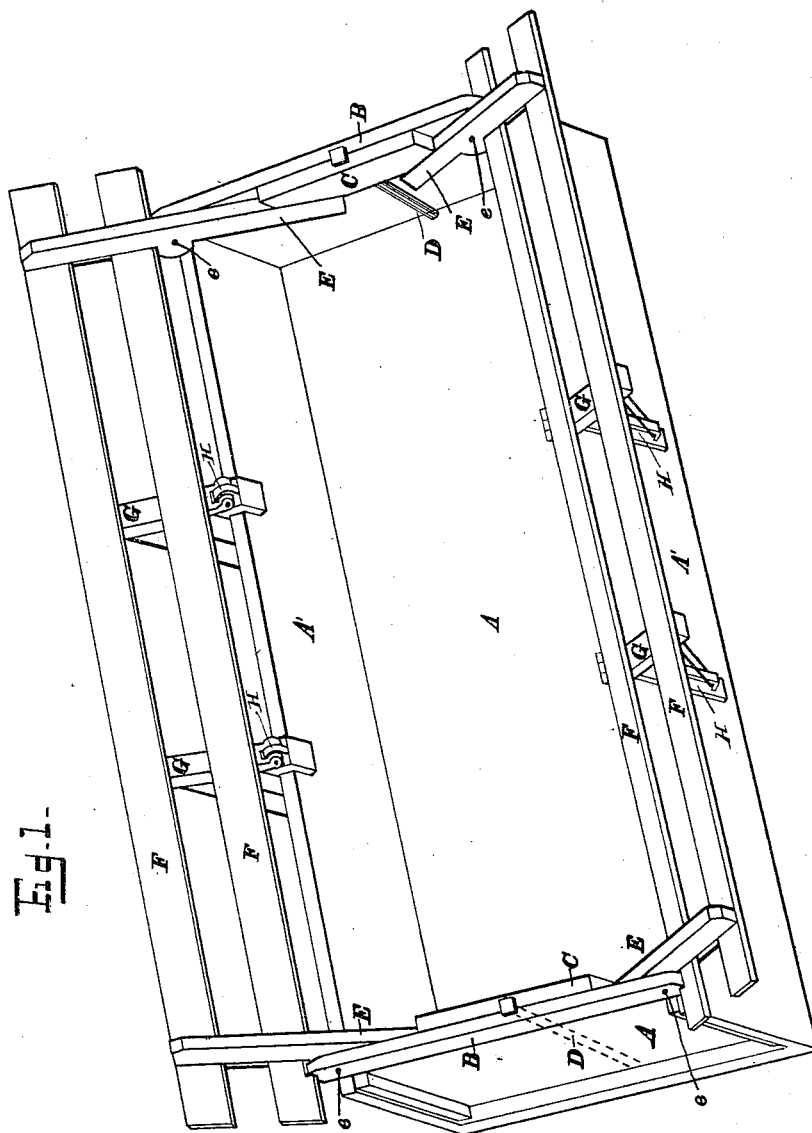
(No Model.)

2 Sheets—Sheet 1.

G. A. GIBBS.  
HAY RACK.

No. 457,876.

Patented Aug. 18, 1891.



WITNESSES—

*A. P. Selden.*

*Wm. E. Marshall.*

INVENTOR—

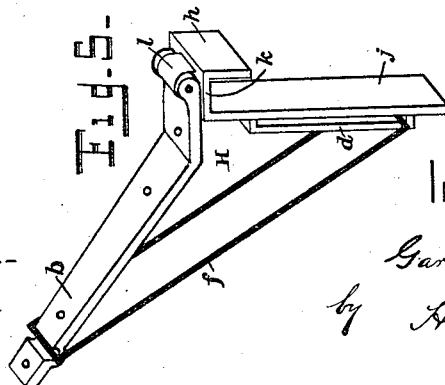
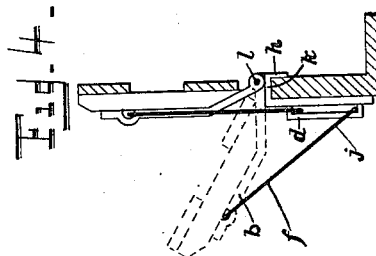
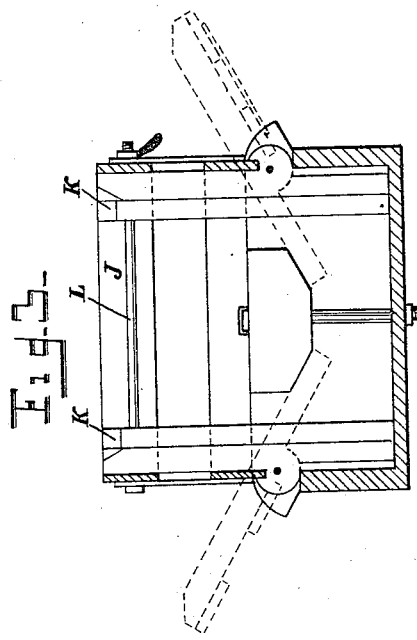
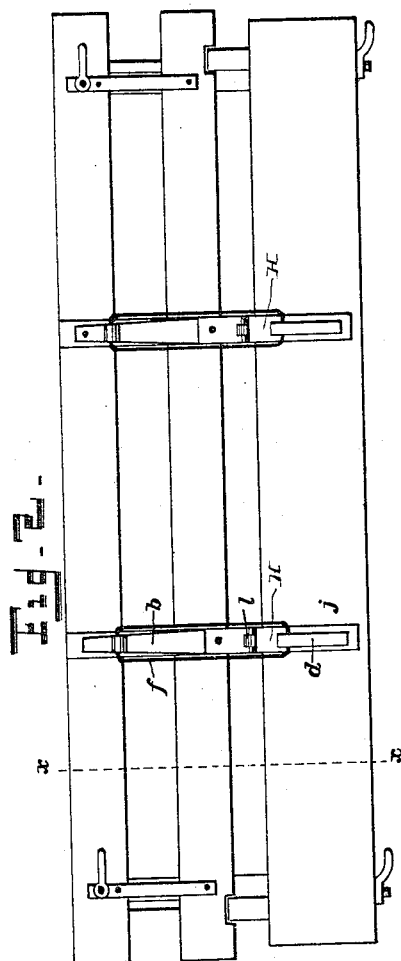
*Gardner A. Gibbs*

*by Howard L. Ogden &  
his attys*

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# UNITED STATES PATENT OFFICE.

GARDNER A. GIBBS, OF LIVONIA, NEW YORK, ASSIGNOR OF ONE-HALF TO  
CHARLES GAMBEE, OF SAME PLACE.

## HAY-RACK.

SPECIFICATION forming part of Letters Patent No. 457,876, dated August 18, 1891.

Application filed April 29, 1891. Serial No. 390,993. (No model.)

*To all whom it may concern:*

Be it known that I, GARDNER A. GIBBS, a citizen of the United States, and a resident of Livonia, in the county of Livingston, in the State of New York, have invented certain new and useful Improvements in Hay-Racks, of which the following is a specification, reference being had to the accompanying drawings, in which similar letters indicate similar parts in the several views.

My invention consists in the improvements hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of my hay-rack. Fig. 2 is a side view thereof when the sides are raised to the vertical position and the end-gates are inserted. Fig. 3 is a sectional view of my device on the line *x x* of Fig. 2, and shows in dotted lines the position of the side pieces when placed in the position shown in Fig. 1. Fig. 4 is a sectional view of one side of my device, showing the sides in two positions and showing the combined clamp and hinge. Fig. 5 is a detail perspective view of the irons of the combined clamp and hinge.

A represents the wagon-body of an ordinary farm-wagon, and A' A' represent the sides thereof.

B B represent cross-bars resting on the top of the ends or end-gates of the wagon-body. C C represent stops fastened to said cross-bars. D D represent bolts adapted to fasten said cross-bars and stops firmly upon the wagon-body. E E represent end bars hinged to said cross-bars, as by the pins *e e*.

F F represent the slats forming the sides of the hay-rack.

G G represent braces fastened to the slats.

H represents the irons of the combined clamp and hinge. This is composed of a main part having two rectangular bends forming two legs, one of which is longer than the other, and having a portion connecting the two legs *h j*, equal in length to the thickness of the side of the wagon-body. The longer leg *j* is adapted to fit on the outer side of the side of the wagon-body and the shorter leg *h* to extend over and clamp the inner side of the side of the wagon-body. Upon the portion *k*, connecting the two legs, is a suitable hinge *l*, one part or leaf

of which is a strap or iron *b*, of suitable length, adapted to be fastened to the cross-pieces G, or, if so desired, directly to the slats F F, the clamp forming the other part of the hinge. On the outer side of the long leg *j* of the clamp is fastened a slotted guide *d*. A suitable brace *f* is hinged to the long iron *b*, and passes through the guide *d*. This brace is of such length that when the iron *b* is moved into the position shown in dotted lines in Fig. 4, the brace will rest upon the bottom of the guide *d*, and will thus support the slats F F, and the hay or other material which may rest upon them. The end bars E E will then abut against the stops C C, and the sides will then also be supported in this way. The guide *d* is long enough to permit the brace *f* to move from the position just described to a position which will permit the slats F F to be raised into a vertical position, as shown in Fig. 4.

J J represent end-gates, which may be placed between the slats F F when the same are raised to a vertical position, and have vertical bars K K, which fit against the end bars E E, when the same are in a vertical position, and tend to retain the same in that position. Cross-bolts L L may be used, which shall pass through the end bars E E and the vertical bars K K, and may fasten them solidly in the vertical position and hold the end-gates J J firmly in place.

When this device is to be used as a hay-rack, the end-gates are removed and the slats and connected devices are placed in a position shown in Fig. 1, so that the ends of the end bars E E press against the stops C C, and the sides of the hay-rack are then supported by this means as well as by the braces *f f*. When the parts are placed in the position shown in Figs. 2 and 3, the hay-rack is thereby converted into a stock-wagon or a wagon with a deep body at will. Removable slats may be inserted between the slats F F in order to make the wagon-body more close than when the same are omitted.

By removing the bolts D D the whole hay-rack may be easily removed from the wagon-body, and a wagon is not mutilated in any way by the application of the hay-rack, except that holes are bored through the bottom

to permit the insertion of the bolts or fastenings D D.

I prefer not to fasten my device to a wagon-body, except by the bolts D D; but obviously, if it is so preferred, screws or bolts may be used to fasten the hinged clamps H H to the wagon-body.

The advantages of this device are that it can be adapted by an ordinary mechanic of small ability to any wagon-body which he may desire to use by making the cross-bars B B and slats F F of suitable length. The irons H H are easily adapted to the slats by such a person, and the whole device may be easily removed from a wagon-body, and is simple, strong, and easy to use. Further, the parts of this device interfere but slightly with the ability to use the full capacity of the wagon-body.

What I claim is—

1. In a hay-rack, the combination of cross-

pieces having stops attached thereto, end bars pivoted to said cross-pieces and adapted to abut against the stops, side slats fastened to said end bars, and a series of hinged irons, one part of each of which is adapted to fit on the side of a wagon-body and the other part of which is adapted to support said slats, together with braces to strengthen and support the two parts of the hinge.

2. In a hay-rack, cross-bars provided with stops, and means for removably fastening the same to a wagon-body, in combination with end bars pivoted to said cross-bars and adapted to abut against said stops, and a series of hinges, each composed of a clamp detachable from the wagon-body and a leaf attached to the side slats of the hay-rack.

GARDNER A. GIBBS.

Witnesses:

J. B. THURSTON,  
W. B. THURSTON.