

(No Model.)

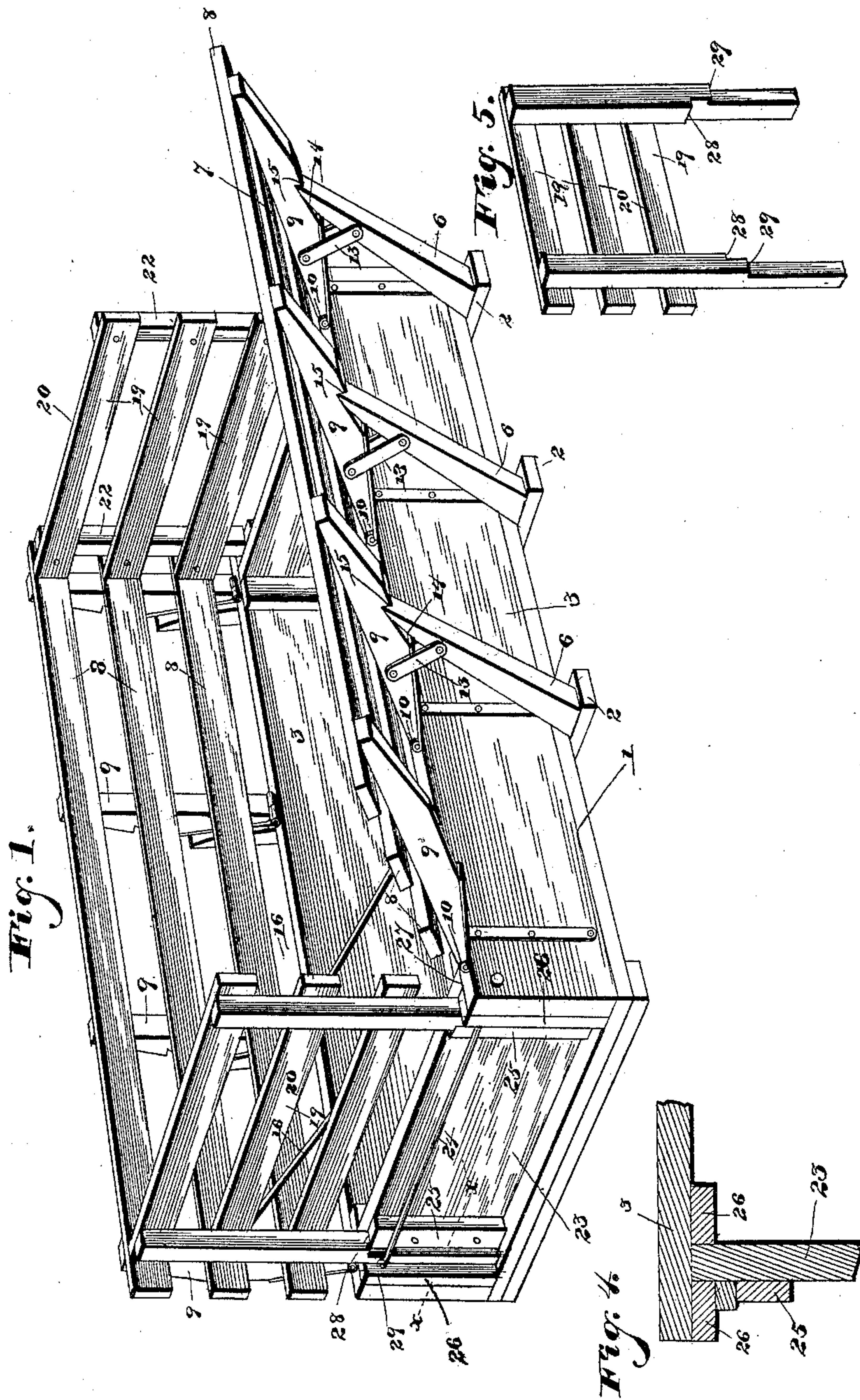
2 Sheets—Sheet 1.

J. E. GARLINGHOUSE.

COMBINED HAY AND STOCK RACK FOR WAGONS.

No. 440,426.

Patented Nov. 11, 1890.



Witnesses

Samuel Ker.

J. J. Marshall

John E. Garlinghouse.

By *his* Attorneys,

C. Snow & Co.

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Fig. 2.

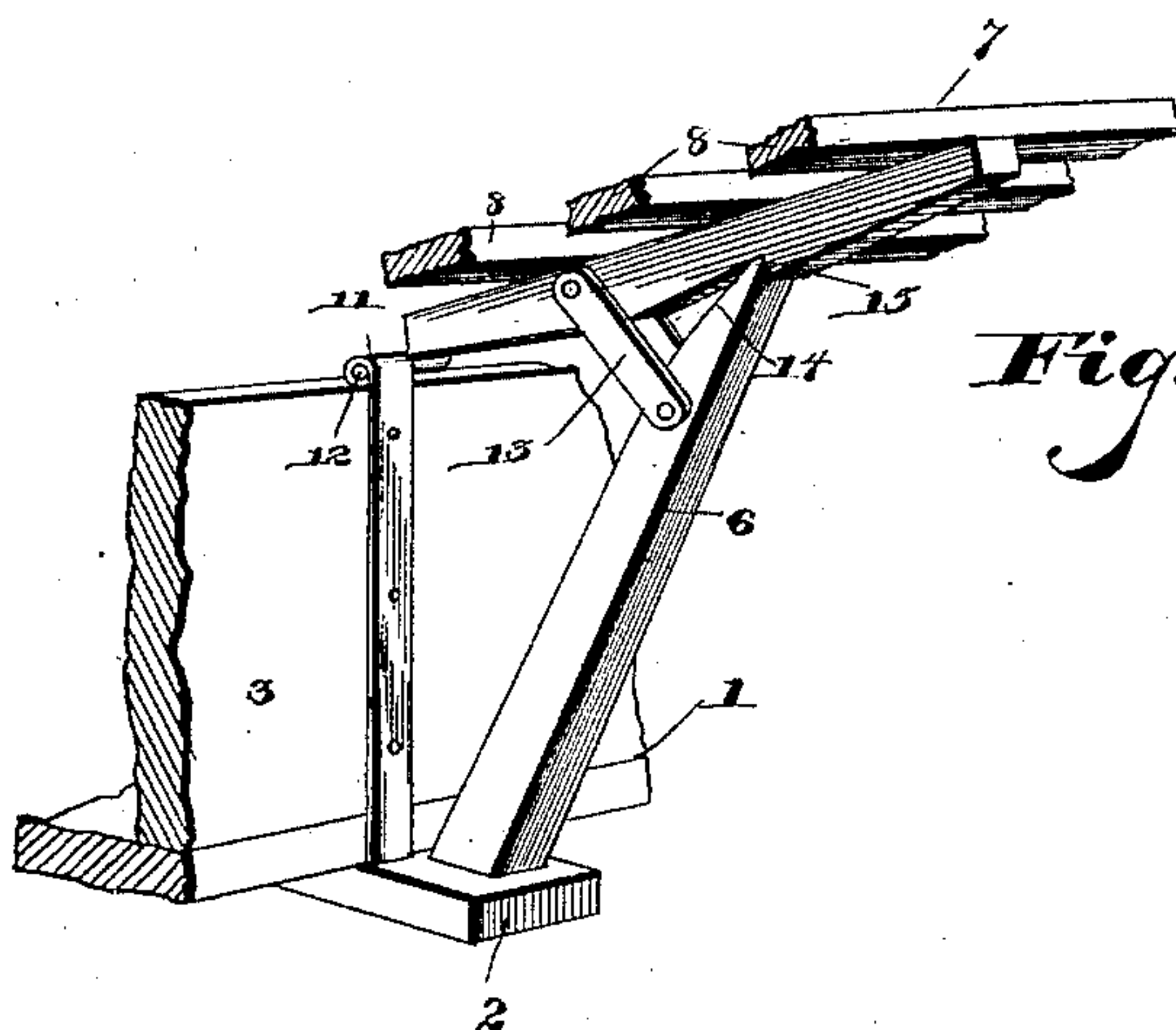
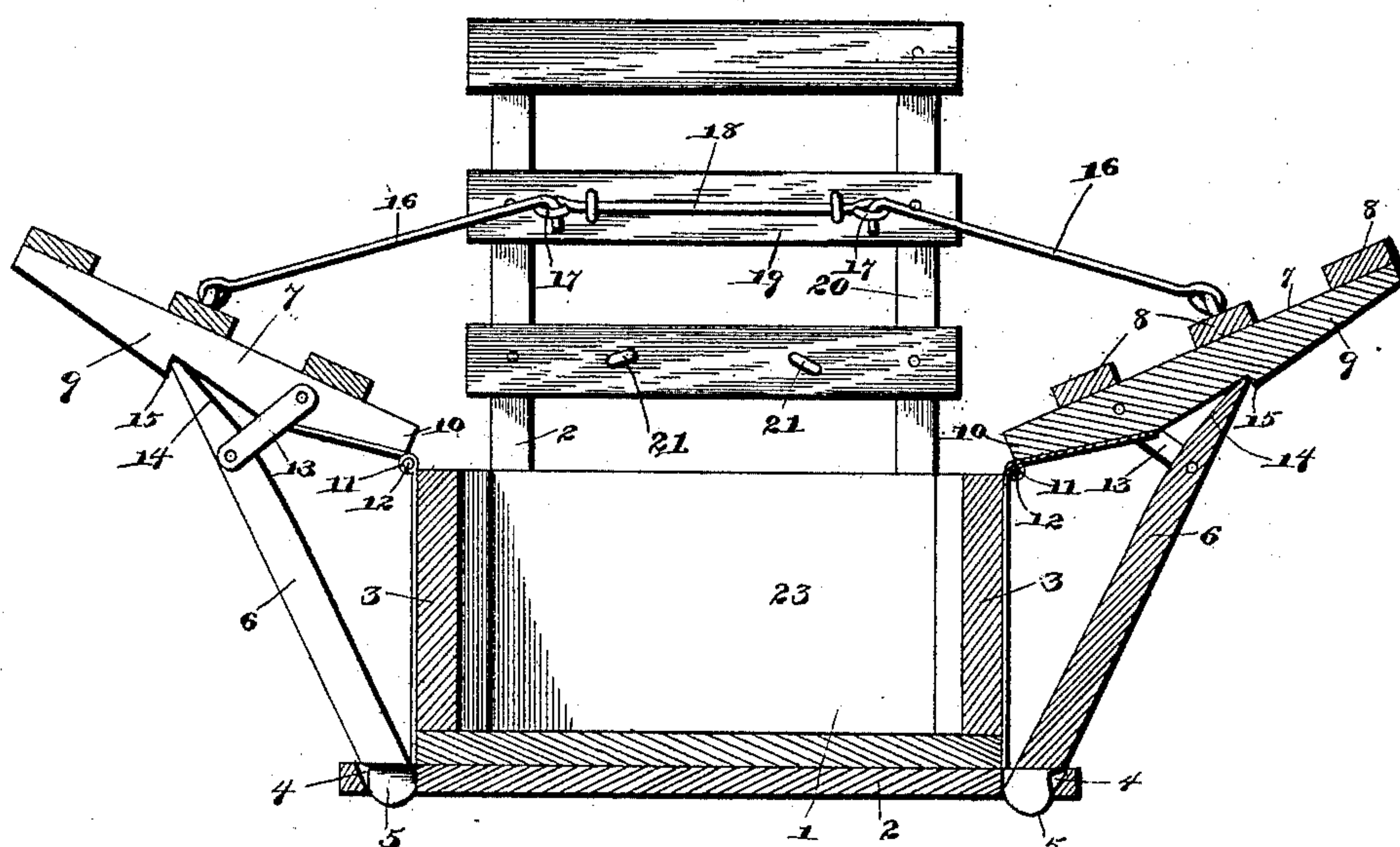


Fig. 3.

Witnesses

Samuel Ker.

R. J. Marshall

Inventor

John E. Garlinghouse,

By his Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN E. GARLINGHOUSE, OF DEVIL'S LAKE, MICHIGAN.

COMBINED HAY AND STOCK RACK FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 440,426, dated November 11, 1890.

Application filed May 31, 1890. Serial No. 353,787. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. GARLINGHOUSE, a citizen of the United States, residing at Devil's Lake, in the county of Lenawee and State of Michigan, have invented a new and useful Combined Hay and Stock Rack for Wagons, of which the following is a specification.

The invention relates to improvements in combined hay and stock racks for wagons.

The object of the present invention is to simplify, improve, and render the construction of combined hay and stock racks more durable and reliable, and enable the same to be quickly changed from one position to the other, or to be removed entirely from the wagon-body.

The invention consists in the construction and novel combination and arrangements of parts, hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wagon-body provided with combined hay and stock racks constructed in accordance with this invention, one of the side racks being shown in a vertical position to form a hog-rack and the other in an inclined position to form a hay-rack. Fig. 2 is a transverse sectional view showing both sides in an inclined position. Fig. 3 is a detail perspective view illustrating the manner of attaching the side racks to the body and showing the hinged braces. Fig. 4 is a horizontal section on the line $x x$, Fig. 1. Fig. 5 is a detail view of one of the end racks.

Referring to the accompanying drawings, 1 designates a wagon-body, having its bottom girths 2 extended beyond its sides 3 and provided with mortises 4, which receive the tenoned end 5 of hinged braces 6, that support side racks 7 in their inclined position when arranged to form a hay-rack. The side racks 7 are composed of longitudinal slats 8 and cross-bars 9, which connect the slats and are hinged at their inner or lower ends 10 to the upper edges of the sides 3 by eyes and pintles 11 and 12, the latter projecting laterally from the cross-bars and adapted to be engaged and disengaged from the eyes 11 by a sidewise movement of the side racks. The

braces 6, which support the racks in their inclined position, are hinged near their upper end to a point about midway the length of the cross-bar by plates 13, arranged upon each side of the braces and cross-bars and having their ends pivotally connected to the same, and the upper ends 14 of the hinged braces 6 are beveled and adapted to engage shouldered notches 15 of the cross-bars 9, and the lower ends 5 of the hinged braces engage the mortises of the projecting ends of the bottom girths 2 of the wagon-body, and it will be seen that the side rack can be readily swung on the hinges of the cross-bars from a vertical position to an inclined one, and vice versa. The side racks are further supported in their inclined position by hook-rods 16, which are secured to the front ends of the side racks and engage eyes 17 of a rod 18, secured to one of the slats 19 of the front end rack 20, and the hook-rods 16 also support the side racks when in a vertical position to form a stock-rack, and they engage eyes 21 of a slat 19 beneath the slat having the rod 18. The wagon-body is provided at its ends with similar end racks 20, which are composed of the slats 19 and vertical posts 22, which have their lower ends stepped between the outer faces of end-gates 23, and horizontal brace-rods 24, and are supported and braced by cleats 25, which form between them and cleats 26, secured to the sides 3 of the wagon-body, grooves or ways to receive the lower portion of the vertical posts of the end racks, and the said vertical posts are provided with shoulders 28 and 29, which bear upon the cleats 25 and the horizontal brace-rods 24. The cleats 26, which are secured to the inner faces of the sides 3 of the wagon-body, are those usually employed to form grooves or ways for the end-gates.

It will be readily seen that combined hay and stock racks constructed in accordance with this invention are simple and inexpensive in construction and can be readily changed from one position to the other or be entirely removed from the wagon-body when desired.

Having described my invention, what I claim is—

1. In a hay and stock rack, the combina-

tion of the side racks having cross-bars removably hinged to the wagon-body and the braces pivotally connected at a point intermediate of their ends to the cross-bars and
5 having their upper ends extending beyond the pivotal point and arranged to engage the same and their lower ends arranged to engage the wagon-body, substantially as described.

2. In the combined hay and stock rack, the
10 combination, with the wagon-body, of the side racks having their cross-bars removably hinged to the body, the braces 6, having their upper ends arranged to engage the cross-bars and their lower ends arranged to engage
15 the wagon-body, and the plates 13, arranged upon the sides of the braces and cross-bars and pivoted to them, substantially as described.

3. In a hay and stock rack, the combination, with the wagon-body, of the side racks
20 having their cross-bars hinged to the body and provided with shouldered notches 15, the braces having their upper ends beveled and adapted to engage the said notches and having
25 their lower ends arranged to engage the wagon-body, and the plates 13, arranged at

the sides of the cross-bars and the braces and having their ends pivoted to them, substantially as described.

4. In a hay and stock rack, the wagon-body 30 having bottom girts 2, provided with mortises 4, combined with the side racks 7, hinged to the sides of the wagon-body, and the braces 6, pivotally connected by links 13 to the side racks and having their lower ends adapted
35 to engage the mortises 4 and their upper ends constructed to engage shoulders 15 on the side racks, as set forth.

5. The wagon-body having cleats 26, the end-gate having cleats 25 and brace-rods 24, 40 and the removable end racks 20, which have posts 22, shouldered at 28 to bear upon the cleats 25 and adapted to fit between the cleats 25 and 26, as set forth.

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

JOHN E. GARLINGHOUSE.

Witnesses:

G. D. TIBBLES,
I. THOMPSON.