

No. 630,663.

Patented Aug. 8, 1899.

W. G. COOK & W. H. SHANNON.
COMBINED HAY AND STOCK RACK.

(Application filed May 1, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

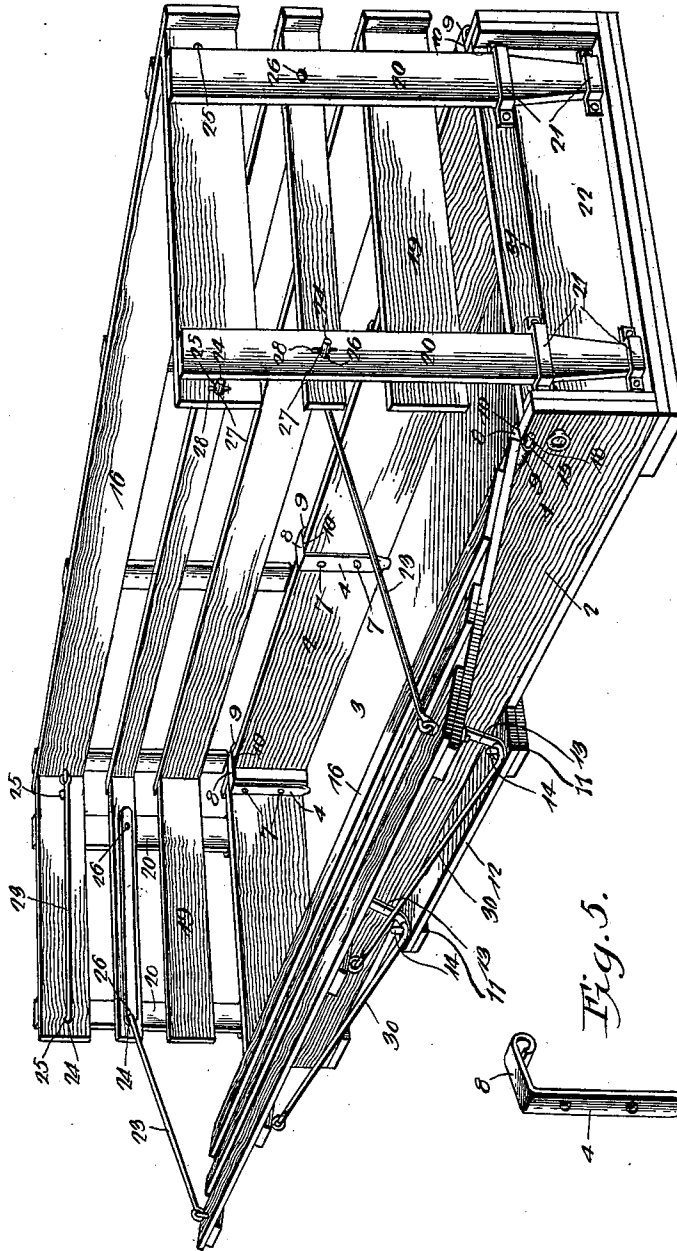
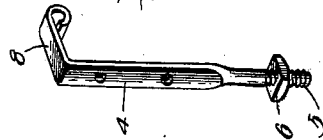


Fig. 5.



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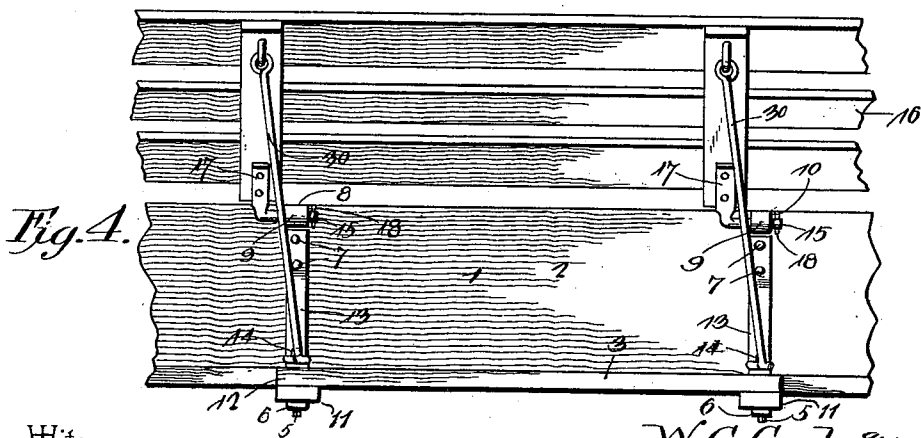
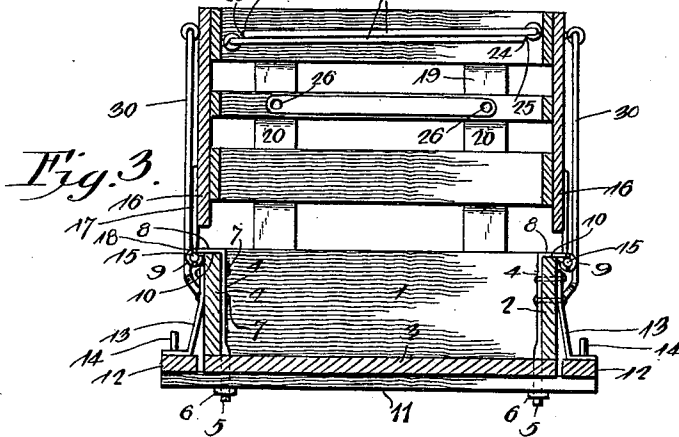
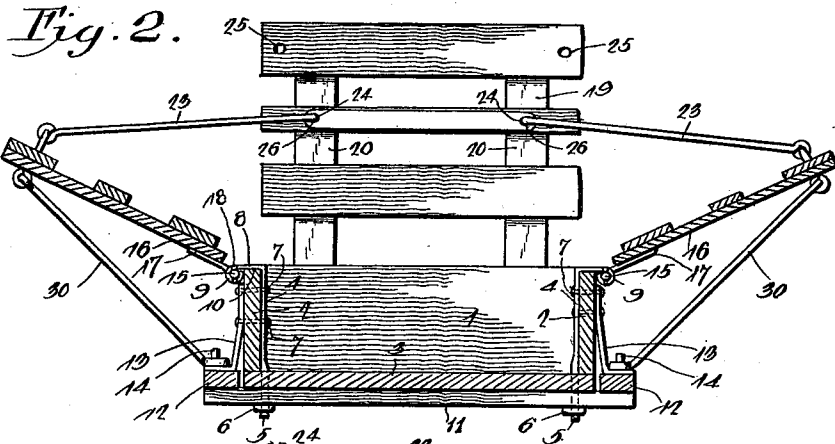
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2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

WALLACE GEORGE COOK AND WILLIAM HENRY SHANNON, OF BRIGHTON,
MICHIGAN.

COMBINED HAY AND STOCK RACK.

SPECIFICATION forming part of Letters Patent No. 630,663, dated August 8, 1899.

Application filed May 1, 1899, Serial No. 715,145. (No model.)

To all whom it may concern:

Be it known that we, WALLACE GEORGE COOK and WILLIAM HENRY SHANNON, citizens of the United States, residing at Brighton, in the county of Livingston and State of Michigan, have invented a new and useful Combined Hay and Stock Rack, of which the following is a specification.

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

The object of the present invention is to improve the construction of combined hay and stock racks, more especially the means for connecting the sides of the rack with the sides of the wagon-body, and to provide a simple, inexpensive, and efficient construction by which the sides of the rack and the sides of the wagon-body are firmly mounted in position and which will enable the sides of the rack to be readily adjusted to and supported in either a vertical or inclined position.

The invention consists in the construction and novel combination and arrangement 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 combined hay and stock rack constructed in accordance with this invention, one of the sides being shown in a vertical position and the other in an inclined position. Fig. 2 is a transverse sectional view, the parts being arranged to form a hay-rack. Fig. 3 is a similar view, the parts being arranged to form a stock-rack. Fig. 4 is a detail side elevation showing the central portion of the device, the parts being arranged to form a hay-rack. Fig. 5 is a detail perspective view of one of the hook-bars.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a wagon-body having its sides 2 secured to its bottom 3 by means of vertical bars or straps 4 arranged at the inner faces of the sides and extending from the upper edges of the same through the bottom and through transverse cleats fastened to the lower face of the bottom by the vertical bars or straps. The lower ends 5 of the vertical bars or straps are threaded and receive nuts 6, which are arranged on the lower faces of

the transverse cleats, as clearly illustrated in Figs. 2 and 3 of the accompanying drawings. The straps or bars, which are secured between their ends to the sides of the wagon-body by fastening devices 7, are provided at their upper ends with hooks 8, consisting of outwardly-extending arms having their outer portions coiled or rolled to form eyes 9, which extend below the upper edges of the sides 2. The upper edges of the sides 2 are provided with recesses 10 to receive the hooks of the straps or bars, which are located at the ends of the wagon-body and at points at opposite sides of the center thereof.

The central cleats 11 project beyond the sides of the wagon-body and support the side ledges 12, at the ends of which are arranged inclined braces 13. The inclined braces 13, which are disposed in pairs at opposite sides of the wagon-body, are secured at their upper ends to the outer faces of the sides 2 by the fastening devices, which pass through the upper portions of the central slats or bars, and the lower ends of the inclined braces 13 are bent outward and are secured to the upper faces of the side ledges 12 by fastening devices 14, which project upward and form studs.

The eyes at the sides of the wagon-body receive pintles 15 of the sides 16 of the rack, and the rack sides 16 are adapted by this hinged connection to swing upward and downward and to be arranged in an inclined position, as illustrated in Fig. 2 of the accompanying drawings, to form a hay-rack, and in a vertical position, as illustrated in Fig. 3, to form a stock-rack. The pintles 15 are formed integral with plates or shanks 17, which are secured to the outer faces of the rack sides, and one or more of each set of pintles may be extended and perforated for the reception of a key 18, whereby they are locked in the eyes of the wagon-body.

The ends 19 of the rack have their vertical bars or standards 20 extended and detachably stepped in sockets formed by loops 21, secured to the outer faces of the end-gates 22 of the wagon-body and arranged in pairs, as clearly shown in Fig. 1. The sides 16 of the rack are provided at their ends with rods 23, having arms 24 at their engaging ends to fit in sockets or perforations 25 and 26 of the

ends of the rack. The rods 23 are provided at their outer ends with eyes, which are linked into eyes at the upper edges of the sides of the rack, and when the latter are arranged in a vertical position the rods are crossed or overlapped and engage the perforations or sockets 25, which are located at the tops of the ends 19. The perforations or sockets 26, which are located below the perforations or sockets 25, receive the ends of the rods when the sides of the rack are disposed at an inclination, as clearly illustrated in Fig. 2 of the accompanying drawings, and the engaging portions or arms at the inner ends of the rods are provided with perforations 27, for the reception of keys 28 or other suitable fastening devices for retaining the arms in the perforations or sockets. The ends of the rack are preferably reinforced by suitable plates at the points where they are provided with the sockets or perforations.

When the sides of the rack are arranged in an inclined position to form a hay-rack, they are centrally supported by inclined bracing-rods 30, provided at their ends with eyes, the upper eyes being linked into eyes of the upper edges of the sides of a rack and the lower eyes being engaged with the projections or lugs at the ends of the side ledges 12 of the wagon-body. The rods at the ends of the sides of the rack by engaging the lower perforations or sockets of the ends of the rack retain the central bracing-rods in engagement with the said projections or lugs.

The end-gates of the wagon-body are arranged in suitable ways and are secured therein by transverse rods 31, passing through perforations of the sides of the wagon-body and arranged in grooves of the end-gates to clear the vertical bars or standards of the ends of the rack.

The invention has the following advantages: The combined hay and stock rack is simple and comparatively inexpensive in construction and adapted to be readily arranged to form either a hay or stock rack, and the sides are firmly supported when in an inclined position. The eyes at the lower ends of the central bracing-rods are detachably retained in engagement with the upwardly-projecting studs at the ends of the side ledges, and the vertical bars or straps not only form one

member or leaf of the hinges, but they also operate as bolts for securing the sides of the wagon-body to the bottom thereof.

Changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is—

1. In a device of the class described, the combination of a wagon-body provided with side ledges, outer inclined braces fastened to the sides and having their lower ends fastened to the side ledges, said fastening devices forming studs or projections, the rack sides hinged to the wagon-body, the central bracing-rods connected with the rack sides and provided at their lower ends with eyes fitting over the studs, rack ends, and the rods arranged at the terminals of the sides of the rack and engaging the rack ends, whereby the central bracing-rods are retained on the studs, substantially as described.

2. In a device of the class described, the combination with a wagon-body, of the vertical bars secured to the inner faces of the sides of the body and having their lower ends extended through and secured to the bottom of the body, said bars being provided at their upper ends with hooks engaging the upper edges of the sides and provided with eyes, the rack sides having pintles fitting in said eyes, the side ledges, the outer inclined braces secured to the sides of the body by the fastening devices of the adjacent vertical bars and having their lower ends secured to the side ledges, studs arranged at the lower ends of the inclined braces, the rack ends, the central bracing-rods secured to the sides of the rack and having eyes at their lower ends fitting over the said studs, and the rods located at the ends of the sides of the rack and engaging the rack ends, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in the presence of two witnesses.

WALLACE GEORGE COOK.
WILLIAM HENRY SHANNON.

Witnesses:

CHARLES F. JUDSON,
A. PROSSER.