

No. 689,594.

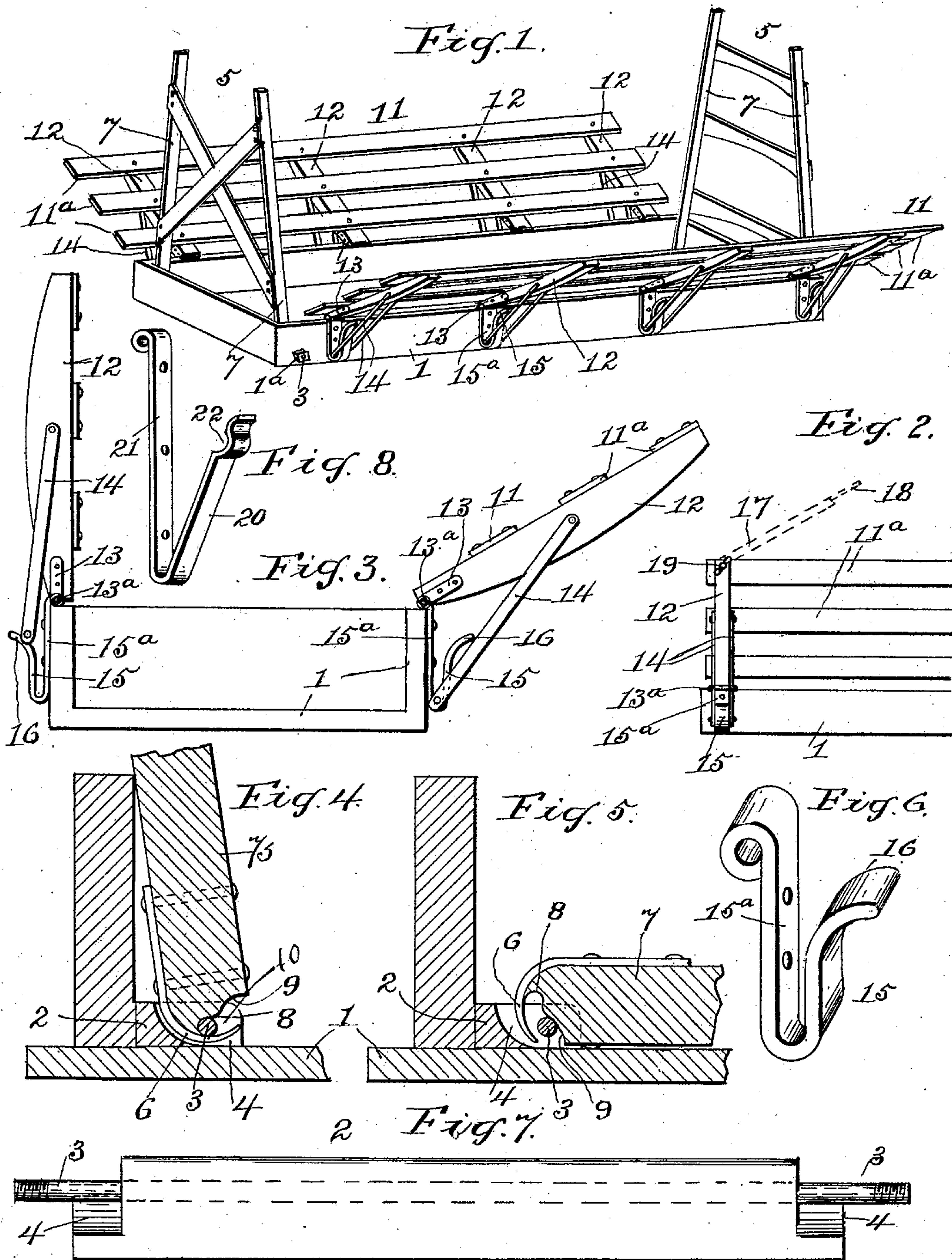
Patented Dec. 24, 1901.

W. P. LEY.

COMBINED ANIMAL RACK, HAY RACK, AND WAGON BODY.

(Application filed Aug. 12, 1901.)

(No Model.)



Witnesses
T. Whitman
A. H. Hargan

by

Inventor
William P. Ley
C. J. Bell
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM P. LEY, OF ROME, WISCONSIN.

COMBINED ANIMAL-RACK, HAY-RACK, AND WAGON-BODY.

SPECIFICATION forming part of Letters Patent No. 689,594, dated December 24, 1901.

Application filed August 12, 1901. Serial No. 71,682. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM P. LEY, a citizen of the United States, residing at Rome, in the county of Jefferson and State of Wisconsin, have invented certain new and useful Improvements in a Combined Animal-Rack, Hay-Rack, and Wagon-Body, of which the following is a specification.

This invention relates to a combination wagon-body and rack; and the object of the invention is to provide a novel and peculiar construction adapted to be adjusted to form a wagon-body, hay-rack, or animal-rack.

A further object of the invention is to provide a special connection between the hinged sides and bed and a novel connection between the ladder or end-gate of the rack and the bed.

Other objects, advantages, and improved results accruing from the special construction and arrangement of parts will be disclosed in the specification and pointed out in the claims to follow.

In the accompanying drawings, forming part of this application, Figure 1 is a perspective view of the device as a hay-rack. Fig. 2 is a perspective view of one end of the device as an animal-rack or wagon-body, showing in dotted lines the movable position of the end-gate. Fig. 3 is an end view showing the two positions of the hinged sides with the end ladders removed. Fig. 4 is an enlarged sectional view, partly broken away, showing the connection between the ladders and bed. Fig. 5 is a similar view showing the ladder in position to be removed. Fig. 6 is a perspective view of the hinge member having a hook. Fig. 7 is an elevation of a cut-out brace and its rod. Fig. 8 is a perspective view of a modified form of hinge.

The same numeral references denote the same parts throughout the several views of the drawings.

The bed 1 is of ordinary construction, having end cross-braces 2, through which a rod 3 extends through cut-outs 4 in the ends of the braces and through the sides of the bed 1 to receive nuts 1^a. The gate end ladders 5 are provided with hooks 6, pointing inwardly and extending around the bottom end of the ladder-standards 7, which ends have two cavities 8 and 9, between which and the hooks 6 the gates are worked on the projecting ends

of the rods 3. When the ladders are in upright position, the rods 3 engage the hooks 6 and the cavity 8, and when the ladders are to be removed or not in use they are turned down flat upon the bed 1, with the cavity 9 engaging the rods 3. In this position they are free to be detached by lifting them, so that the rods may pass through the opening or socket 10 between the hooks and the cavities 9. This construction produces a simple and positive connection between the bed and the ladders and permits the latter to be adjusted or removed without employing tools or the operation of other devices or mechanisms.

The sides 11 are composed of a series of slats 11^a, secured to arms 12, having hinge members 13 secured thereto and a lever 14 pivoted to each arm. These levers are preferably U-shaped, and their free end is held in movable position by a hook 15 on the hinge members 15^a, secured to the bed 1, and connected to members 13 by bolts 13^a, so that the loop of the hooks support and hold the free end of the levers when the sides 11 are dropped to form a hay-rack, and when said sides are in vertical position, forming an animal-rack or wagon-body, the said lever ends are supported by the lip or projecting end 16 of the hooks. The bolts 13^a only have to be removed to detach the sides 11. It will be seen that the hooks not only hold and support the sides when the latter are in dropped position, but when the sides are in raised position the free end of the levers are supported by the tongue or lip of the hooks, and thus brace the sides and relieve the hinges of some of the strain thereon. The spaces between the slats 11^a may be occupied by boards to make the body sides closed. When the sides are employed to form an animal-rack or wagon-body, end-gates 17 are provided having bottom cleats 18, which engage the ends of the bed 1 and are pivotally hung from rods 19, passed through the top slats of the sides and through the top end of the gates. It is obvious that these rods 19 have simply to be removed to permit the sides to drop into position for a hay-rack and the gates lifted out and the end ladders substituted. The gates may be swung upwardly without removing them for the purpose of forming an

animal or other passage of various size. When the gates are closed, the cleats prevent their swinging outwardly.

Referring to the modification shown in Fig. 8, the projecting end 20 of the hinge 21 has a bearing 22 for the free end of the levers 14.

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

10 1. In a hay-rack, the combination, with the cross-braces having cut-outs, and a rod through each brace and the cut-outs, of the ladders having cavities, and the hooks secured to the ladders and extending inwardly over
15 said cavities and working in the cut-outs against said rods.

2. The combination, with the rack having cross-braces provided with cut-outs, and rods extending through the braces and the cut-
20 outs, of the ladders having concavities in their bottom ends, and the hooks secured to said ends and extending inwardly over the cavities to form sockets for the said rods.

3. The combination, with a rack having
25 sides provided with hinge members, and the levers pivoted to the sides, of the hinge members secured to the rack-bed and having a hook projecting upwardly and outwardly therefrom in which the free ends of the levers

are operated, and upon which outwardly-pro- 30
jecting portions said ends rest.

4. In a rack, the combination, with the bed having end cross-rods, hinge members having
hooks and secured to the sides of the bed, rack sides having the other hinge members, 35
and the ladders, of the levers pivoted to the rack sides and having one end working in the hooks, and the hooks secured to the ladders and pointing inwardly thereunder to form a
socket for the said rods. 40

5. In a hay-rack, the combination of the bed-braces having cut-outs, rods extending
through the braces and terminating in the cut-outs, end ladders having inwardly-turned
hooks to engage the rods and forming a socket 45
or passage for the latter between the ladder ends and the hooks, hinged sides, levers pivoted to the sides, and hooks formed on a portion of the hinges and in which the said levers
are operated, substantially as and for the pur- 50
pose set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

WILLIAM P. LEY.

Witnesses:

P. W. CARTWRIGHT,
ETTE CARTWRIGHT.