

No. 736,004.

PATENTED AUG. 11, 1903.

L. PAUL.
WAGON BOX OR HAY RACK LIFTER.
APPLICATION FILED MAY 14, 1903.

NO MODEL.

Fig. 1.

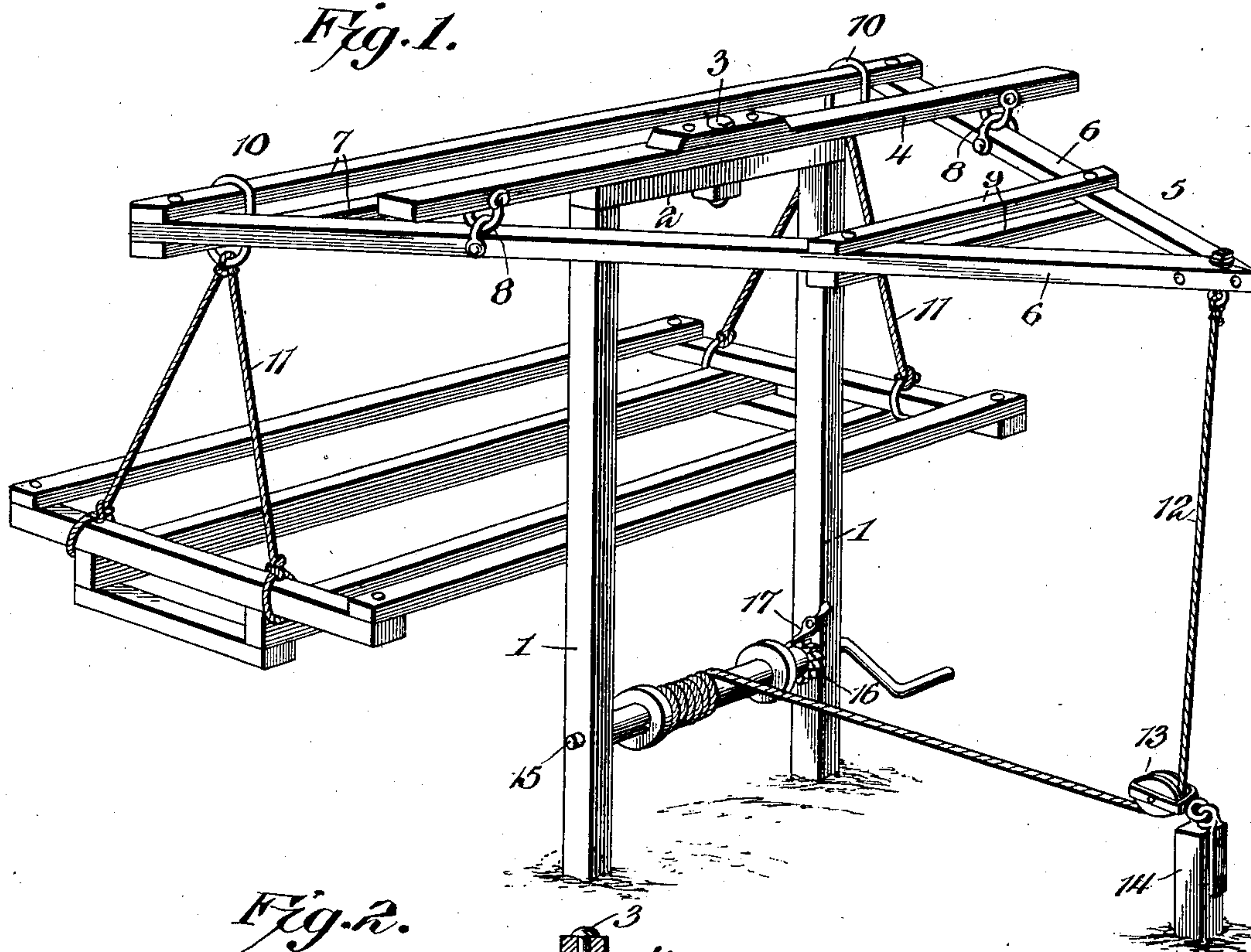
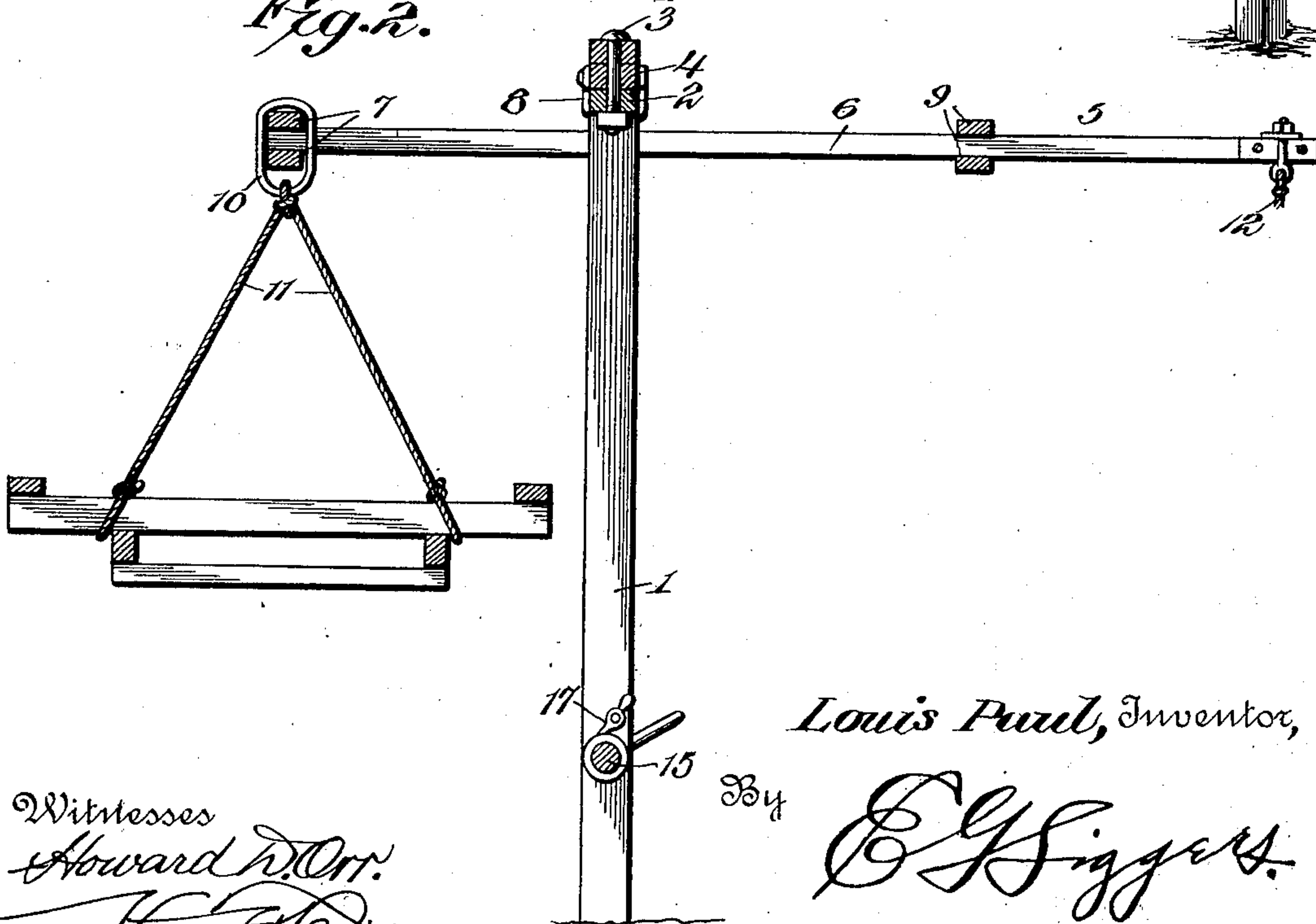


Fig. 2.



Witnesses
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LOUIS PAUL, OF OSWEGO, KANSAS.

WAGON-BOX OR HAY-RACK LIFTER.

SPECIFICATION forming part of Letters Patent No. 736,004, dated August 11, 1903.

Application filed May 14, 1903. Serial No. 157,167. (No model.)

To all whom it may concern:

Be it known that I, LOUIS PAUL, a citizen of the United States, residing at Oswego, in the county of Labette and State of Kansas, have invented a new and useful Wagon-Box or Hay-Rack Lifter, of which the following is a specification.

The invention relates to improvements in wagon-body and hay-rack lifters.

The object of the present invention is to improve the construction of wagon-box and hay-rack lifters and to provide a simple and comparatively inexpensive one of great strength and durability adapted to be readily operated by one person and capable of enabling the same to readily remove a wagon-box or hay-frame from a running-gear and to replace such wagon-box or hay-rack frame thereon.

With these and other objects in view 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, it being understood that various changes in the form, proportion, size, and minor details of construction within the scope of the claims may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of a wagon-box and hay-rack lifter constructed in accordance with this invention, a hay-rack being suspended from it. Fig. 2 is a vertical sectional view taken longitudinally of the lever-frame.

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

1 1 designate uprights connected at their upper ends by a top cross-piece 2 and forming with the same a supporting-frame for the mechanism for lifting a wagon-box or hay-rack from a running-gear. The horizontal connecting or top bar 2 is provided with a central perforation for the reception of a pivot-bolt 3, which also passes through a horizontal supporting-bar 4, and the latter, which is arranged upon the connecting top bar 2, extends from opposite sides of the supporting-frame and is adapted to support an ap-

proximately triangular lever-frame 5. The triangular lever-frame, which is composed of side bars or levers 6 and connecting front bars 7, is suspended from the horizontal bar 4 by hangers 8, consisting of clips linked into each other and secured by bolts or other suitable fastening devices to the bar 4 and to the side bars 6. The side bars or levers 6 are fulcrumed by means of the hangers; but any other suitable means may be employed for this purpose. The side bars or levers 6 are connected in rear of the supporting-frame by cross-pieces 9, arranged above and below the bars 6 and bracing the same. The front of the frame may also be reinforced by suitable braces, if desired. The triangular frame, which is of sufficient size to rotate clear of the supporting-frame, is provided at its front with suitable means for connecting it with a wagon-body or hay-rack. These means may consist of rings 10 and flexible connections 11; but any other means may be employed for this purpose, as will be readily understood. The rear end or apex of the triangular lever-frame is connected by an eyebolt or other suitable means to one end of a hoisting-rope 12, which extends downward from the triangular lever-frame to a pulley 13. The pulley, which is arranged in a block or casing, is suitably anchored to a post or stake 14, and the hoisting-rope extends from the guide-pulley 13 to a windlass-shaft 15, which is journaled in suitable bearings of the post 1. The windlass may be journaled on the post in any desired manner, as will be readily understood, and it is provided with a ratchet 16 for engagement with a pawl 17, whereby the triangular lever-frame is held at the desired adjustment.

When it is desired to remove a wagon-box or hay-frame from a running-gear, the latter is driven beneath the front portion of the lever-frame and the flexible connections 11 are attached to the body or box or rack. The lever-frame is then oscillated by means of a windlass to swing the front portion upward, and thereby lift the box or rack from the running-gear. The running-gear is then driven from under the box or rack, and the latter is lowered to the ground. The lever-frame may be swung horizontally, if desired. When the box or rack is to be replaced on

the running-gear, it is elevated by means of the windlass, and the running-gear is driven beneath it. The box or rack is then lowered upon the running-gear.

- 5 This construction will enable one person to readily remove a box or rack from a running-gear and to replace the same thereon.

What is claimed is—

1. A wagon-box and hay-rack lifter comprising a supporting-frame, a horizontal supporting-bar pivotally mounted on the supporting-frame and extending from opposite sides thereof, an open lever-frame surrounding the supporting-frame and supported by the horizontal bar, means for connecting the open lever-frame with a wagon-body or hay-rack, and means for operating the lever-frame, substantially as described.

2. A wagon-box and hay-rack lifter comprising a supporting-frame composed of uprights, and a connecting-piece, a horizontal supporting-bar pivotally mounted on the supporting-frame, an approximately triangular lever-frame suspended from the supporting-bar and arranged to swing upward and downward, means arranged at the front of the le-

ver-frame for connecting the same with a wagon-box or hay-rack, and operating mechanism connected with the rear portion of the lever-frame, substantially as described. 30

3. A wagon-box and hay-rack lifter comprising a supporting-frame composed of uprights, and a connecting top piece, a horizontal supporting-bar pivoted to the top piece and arranged to swing horizontally, a lever-frame carried by the horizontal bar and fulcrumed between its ends, means arranged at the front of the lever-frame for connecting the same with a wagon-box or hay-rack, a guide-pulley located beneath the back of the frame, a windlass mounted on the uprights, and a hoisting-rope extending from the windlass to the rear of the lever-frame and arranged on the guide-pulley, substantially as described. 35 40 45

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

LOUIS PAUL.

Witnesses:

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