

No. 609,148.

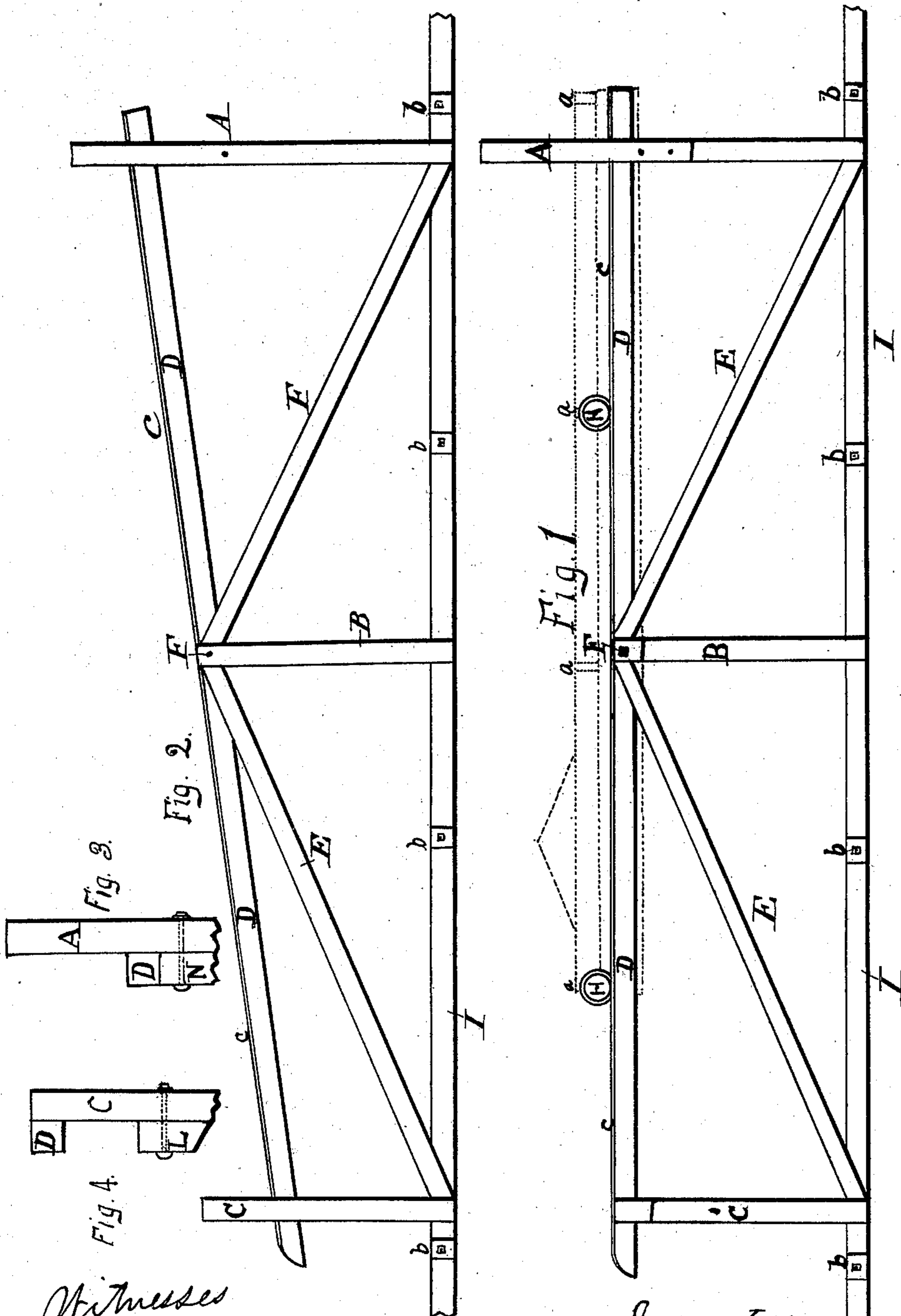
Patented Aug. 16, 1898.

S. KELLUM.  
HAYRACK LOADER.

(Application filed Apr. 7, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
John M. Johnson  
Allison V. Bascom.

Inventor  
Seth Kellum

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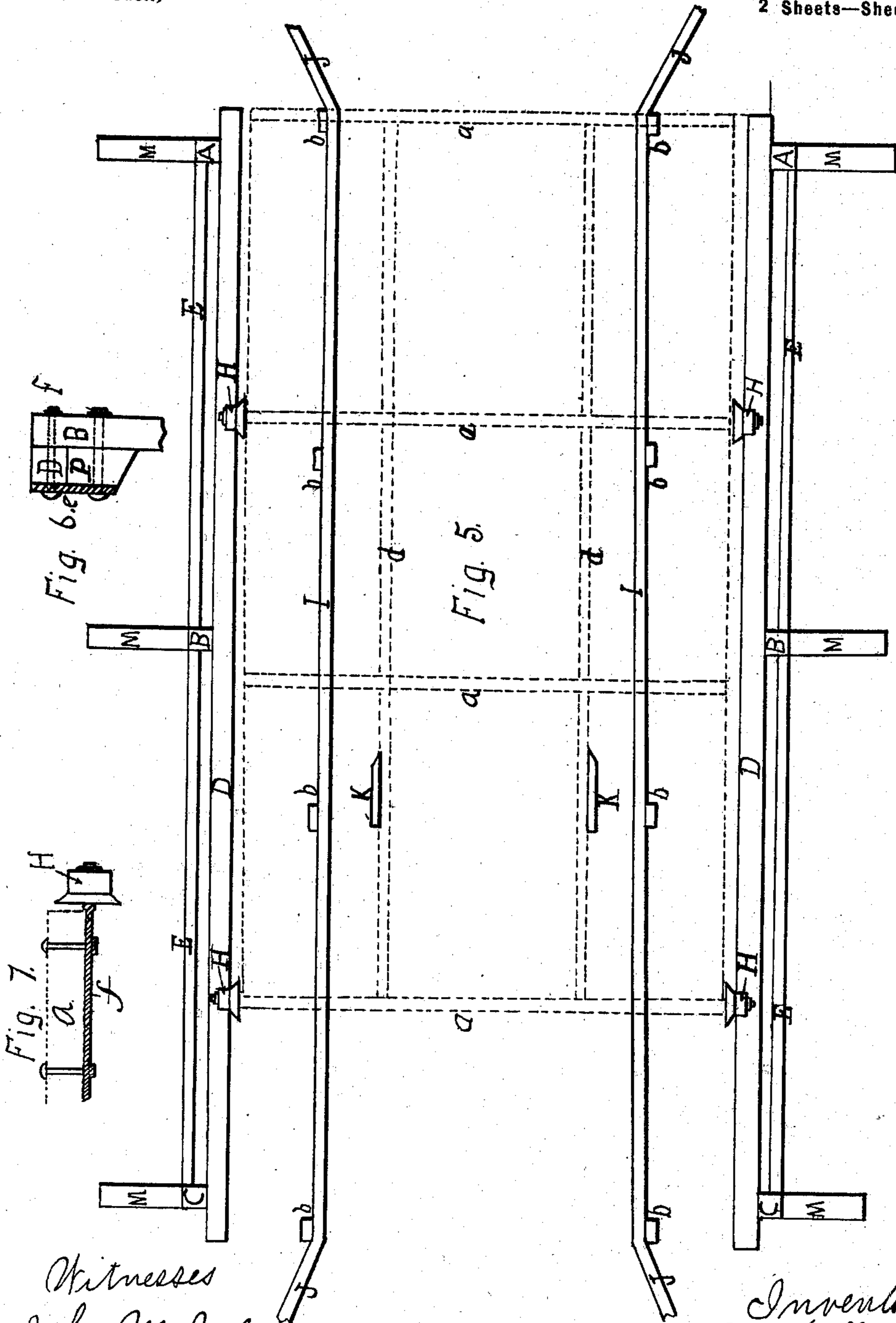
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# UNITED STATES PATENT OFFICE.

SETH KELLUM, OF MILFORD, IOWA, ASSIGNOR OF ONE-THIRD TO A. W. BASCOM, OF DICKINSON COUNTY, IOWA.

## HAY-RACK LOADER.

SPECIFICATION forming part of Letters Patent No. 609,148, dated August 16, 1898.

Application filed April 7, 1898. Serial No. 676,757. (No model.)

*To all whom it may concern:*

Be it known that I, SETH KELLUM, a citizen of the United States, residing at Milford, in Dickinson county, Iowa, have invented a new and useful Automatic Machine for Lifting a Hay-Rack Off and On a Wagon, of which the following is a specification.

My invention relates to a machine for taking a hay-rack off a wagon and putting it on again without the usual lifting. I attain these objects by the mechanism illustrated in the accompanying drawings.

Figure 1 is a side view of the entire machine with hay-rack, represented by dotted lines, resting upon it. Fig. 2 shows the machine when the hay-rack is off. Fig. 3 shows one of two similar blocks fastened one to each of A A in Fig. 5 to support the front ends of the tracks D D when the machine is in the position shown in Fig. 1. Fig. 4 shows one of two similar blocks fastened one to each of the posts C C in Fig. 5 to support the rear ends of the tracks D D when the front ends of the tracks are tilted up, as shown in Fig. 2. Fig. 5 is a top view of the machine. Fig. 6 shows one of two similar pivots upon which the tracks D D tilt, fastened one to each of the posts D D, shown in Fig. 5. Fig. 7 shows how each of the flanged wheels H H H H, which support the weight of the rack on the tracks D D, is fastened to the cross-pieces of the rack.

The machine consists, essentially, of two timbers four by four inches and about four feet longer than the hay-rack, as shown in D D, Figs. 1, 2, and 5, hung on pivots F F and supported at the front ends by blocks N N, bolted to the posts A A, as shown in Fig. 3, when loaded with hay-rack, as shown, and supported at the rear ends by blocks L L, bolted to the posts C C, as shown in Fig. 4, when the tracks are in the position shown in Fig. 2. The pivots F F, on which the centers of the tracks D D tilt, are supported by two posts, the ends of which are shown at B B, Fig. 5, and one of which is shown at B in Figs. 1 and 2. The two posts B B, on which the centers of the tracks D D tilt at the pivots F F, are set in the ground far enough apart to allow the hay-rack to pass between them and room left for the tracks

D D between the posts and the rack, as shown in Fig. 5.

The posts A A, the ends of which are shown in Fig. 5 and one of which is shown in Figs. 1 and 2, are set in the ground at the front end of the machine and placed the same distance apart as B B. The posts C C, the ends of which are shown in Fig. 5 and one of which is shown in Figs. 1 and 2, are placed near the rear end of the machine and the same distance apart as the posts B B. Four small flanged wheels H H H H, as shown in Fig. 5, are fastened to the ends of the second and fourth cross-pieces from the front end of the rack and carry the rack on the tracks D D. These wheels are fastened to the ends of the cross-pieces of the rack by iron straps bolted to the said cross-pieces, as shown in Fig. 7.

The pivots F F, fastened to the posts B B, and the blocks N N, fastened to the posts A A, must be of such height that when the tracks D D are horizontal the rack resting upon them will be lifted clear of the wagon. The blocks L L, fastened to the posts C C, must be of such height that when the rear ends of the tracks D D rest upon them the front flanged wheels H H will just pass upon the top of the rear ends of the tracks D D when the wagon is drawn between the tracks to unload the rack.

I I are two two-by-four-inch timbers set up edgewise on the ground and fastened to the stakes b b b b b b b b, as shown in Fig. 5. The timbers I I are intended for guards for the wagon-wheels and are so placed that the wheels of the wagon will just pass between them when taking off or putting on the rack. Short pieces of timbers J J J J the same size as I I diverge from the ends of the wheel-guards I I and are joined to them to form approaches to the wheel-guards.

The letters E E E E in Fig. 5 refer to longitudinal braces to hold the posts B B in position, two of which braces are shown in Figs. 1 and 2. Short cross-braces M M M M M M are placed one to each of the posts A A B B C C, as shown in Fig. 5.

To take the hay-rack off the wagon, the wagon, with the rack on, is drawn between the tracks from the rear end of the machine, the wheel-guards I I keeping the wagon from run-

ing to one side or the other when the front flanged wheels H H, fastened to the cross-pieces of the rack, travel up the incline of the tracks D D as the wagon is drawn forward, 5 raising the front end of the rack off the wagon and continuing up the incline until the front flanged wheels, which carry about two-thirds of the weight of the rack, reach a point in front of the pivots F F, where a greater 10 portion of the weight of the rack will rest upon the front ends of the tracks D D, when D D will balance down at the front ends and rest upon the blocks N N, fastened to the posts A A, thus raising the rear end of the 15 rack off the wagon. The wagon can then be drawn from under, leaving the rack on the machine.

To put the rack on the wagon, the wagon is backed up to the front end of the machine, 20 so that the wheels of the wagon will come between the wheel-guards. The wagon is backed under the rack, the horses pushing the rack back until a greater part of the weight of the rack falls behind the pivots F F, when 25 the rear ends of the tracks D D will balance down and rest on the blocks L L, fastened to the posts C C, as shown in Fig. 4. The rack

starts to roll down the incline of the tracks D D, but is kept from running too far back by the blocks K K, fastened to the sides of 30 the bed-pieces of the rack *d d*, as shown in Fig. 5, which catch on the standards of the hind bolster of the wagon. The wagon is backed up, letting the front end of the rack 35 down to its place in the bolster as the front flanged wheels H H roll down the incline-tracks D D. When the rack is on the wagon, the wagon is backed away from the machine.

What I claim as my invention, and desire 40 to secure by Letters Patent, is—

A device for lifting a hay-rack off and on a wagon comprising supporting-frames, beams centrally pivoted upon said frames and adapted to serve as tracks for wheels upon the hay- 45 rack, said beams capable of being tilted to and from a horizontal position, stops upon said supports to limit the movement of said beams, and guards to guide the wagon-wheels, substantially as set forth.

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Witnesses:

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