

UNITED STATES PATENT OFFICE.

FREDERICK GLASSCOE ANDERSON, OF FORT McLEOD, CANADA, ASSIGNOR OF ONE-HALF TO HARRY H. WHITE, OF SAME PLACE.

HAY-RACK LOADER AND UNLOADER.

SPECIFICATION forming part of Letters Patent No. 495,952, dated April 25, 1893.

Application filed August 22, 1892. Serial No. 443,754. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK GLASSCOE ANDERSON, of Fort McLeod, (New Oxley P. O.,) Northwest Territory, Dominion of Canada, have invented certain new and useful Improvements in Hay-Rack Loaders and Unloaders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to appliances for loading racks or receiving-frames upon the reaches or running-gears of hay-wagons, and the like and also for un-loading such racks from said running-gears.

The objects of my invention are to produce a hay-rack loader which shall be simple, durable, strong, and inexpensive in construction, and perfectly effective in operation, and which shall entirely avoid the excessive labor heretofore necessary for loading racks upon their running-gears, and for unloading such racks from said gears.

To the above purposes my invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings in which:

Figure 1 is a perspective view of a hay-rack loader embodying my invention; the parts being in position to receive a rack from a reach or running-gear. Fig. 2 is a side elevation of the loader; the figure showing a rack upon the outer ends of the receiving-arms of the loader, and showing also, in dotted lines, the rack upon the inner or rear ends of the receiving-arms of the loader.

In the said drawings, 1 designates two vertical posts which are driven into the ground, and which rise therefrom to a suitable height, these posts being parallel with and precisely opposite from each other.

2 designates two other vertical posts which are also driven into the ground, a suitable distance back of the posts 1 and which are parallel with and also precisely opposite from each other, and each of which is in alignment with one of the posts 1. The posts 2 are taller

than the posts 1 and at its upper end each of these posts 2 is formed with a vertical slot 3, for a purpose to be presently explained. Each of the posts 2 at one side of the frame, is connected to the corresponding post 1 by a horizontal brace 4, one end of said brace being bolted, or otherwise suitably secured to the outer side of the upper end of the corresponding post 1, and the opposite end of which is similarly secured to the outer side of the corresponding post 2, at a point about midway of the length of said post, or slightly below the lower end of the slot 3 of the post. The two posts 1 and 2 at each side of the frame are also connected together by an oblique brace 5, one end of which is bolted or otherwise securely attached to the lower end of the post 2 and the opposite end of which is similarly secured to the upper end of the post 1.

6 designates two vertical posts which are driven into the ground at points precisely opposite each other, and each of which is located immediately in front of one of the posts 1, at a suitable distance therefrom. Each post 6 is connected to the post 1 at the corresponding side of the frame by an oblique brace 7 one end of which is bolted or otherwise securely attached to the lower end of the post 1, and the opposite end of which is similarly secured to the upper end of the post 6. Each post 6 is also braced forwardly by an oblique brace 8 the upper end of which is bolted or otherwise secured to the upper end of the post 6, and which extends forward and downward from said post; the lower ends of these braces being inserted obliquely into the ground, as shown.

9 designates the pivotal receiving bars or arms of the device, these bars or arms being of such length as to extend rearwardly from the posts 1 to the posts 2, and forwardly from the said posts 1 a distance greater than the distance from the posts 1 to the posts 6; the arrangement being such that the bars or arms 9 shall normally rest at their forward portions upon the upper ends of the posts 6, and thus normally incline downward, and forward, as shown in solid lines in Fig. 2. The upper ends of the posts 1 are reduced, as at 11 and enter longitudinal slots 10, one of which is formed in each of the bars or arms 9, while

the rear ends of the bars or arms are reduced, as at 12; the reduced portions 12 working in the slots 3 of the posts 2. The upper ends of the posts 2 are connected together by a horizontal cross-bar 13 which firmly braces these posts laterally.

In unloading a rack, such for example as is shown at 14, the wagon is driven in at the left hand end of the frame and between the receiving bars 9. The rack will thus be carried over and upon the receiving-bars 9 and will slide upon these bars, and thus be lifted off of the front end of the running-gear or reach. As soon as the front end of the rack reaches the posts 2, the wagon is stopped, and the front end of the rack is pulled down, depressing the rear ends of the bars 9 and correspondingly elevating the front ends of said bars, owing to the pivotal mounting of the bars 9. This elevation of the front ends of the bars 9 lifts the rear end of the rack from the reach also, and brings the rack in horizontal position clear of the reach or running-gear. The wagon is now drawn out from beneath the frame, leaving the rack upon the bars 9, the rear ends of which descend and rest upon the lower ends of the slots 3. In order to again load the rack upon the reach or running-gear, the wagon is backed under the right-hand ends of the bars 9 until the rear bolster of the wagon comes under the usual niche in the rack. The front ends of the bars 9 are then depressed allowing the rack to drop upon the rear bolster of the reach. The wagon is now backed entirely through the space between the bars 9, so as to draw the rack off of the bars 9, and allowing it to drop upon the front bolster of the reach or running-gear. The cross-bar 13 is, of course

at such a height from the ground as will readily permit the reach or wagon to pass beneath it.

From this description it will be seen that I have produced a hay-rack loader and unloader which is simple, strong, durable, and inexpensive in construction, and easy to operate, and also very rapid in its operation, and which avoids all of the excessive labor heretofore involved in loading and unloading hay racks from reaches or running-gears.

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

A hay-rack loader and unloader, comprising a pair of vertical oppositely disposed pivot-posts having reduced upper ends, a pair of oppositely disposed vertical posts of greater height than the pivot-posts and vertically slotted at their upper ends, and also located a suitable distance to the rear of the pivot-posts, a number of braces connecting the pivot-posts with the rear posts, a pair of oppositely disposed vertical posts located a suitable distance in front of the pivot-posts, and shorter than said pivot-posts, and also connected to the pivot-posts by suitable braces, and a pair of oppositely disposed parallel receiving-bars each slotted to receive the upper ends of the pivot-posts, and entering at their rear ends the slots in the rear posts, substantially as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

FREDERICK GLASSCOE ANDERSON.

Witnesses:

N. SHAW,
J. H. WRIGLEY,