M. ENGESSER.

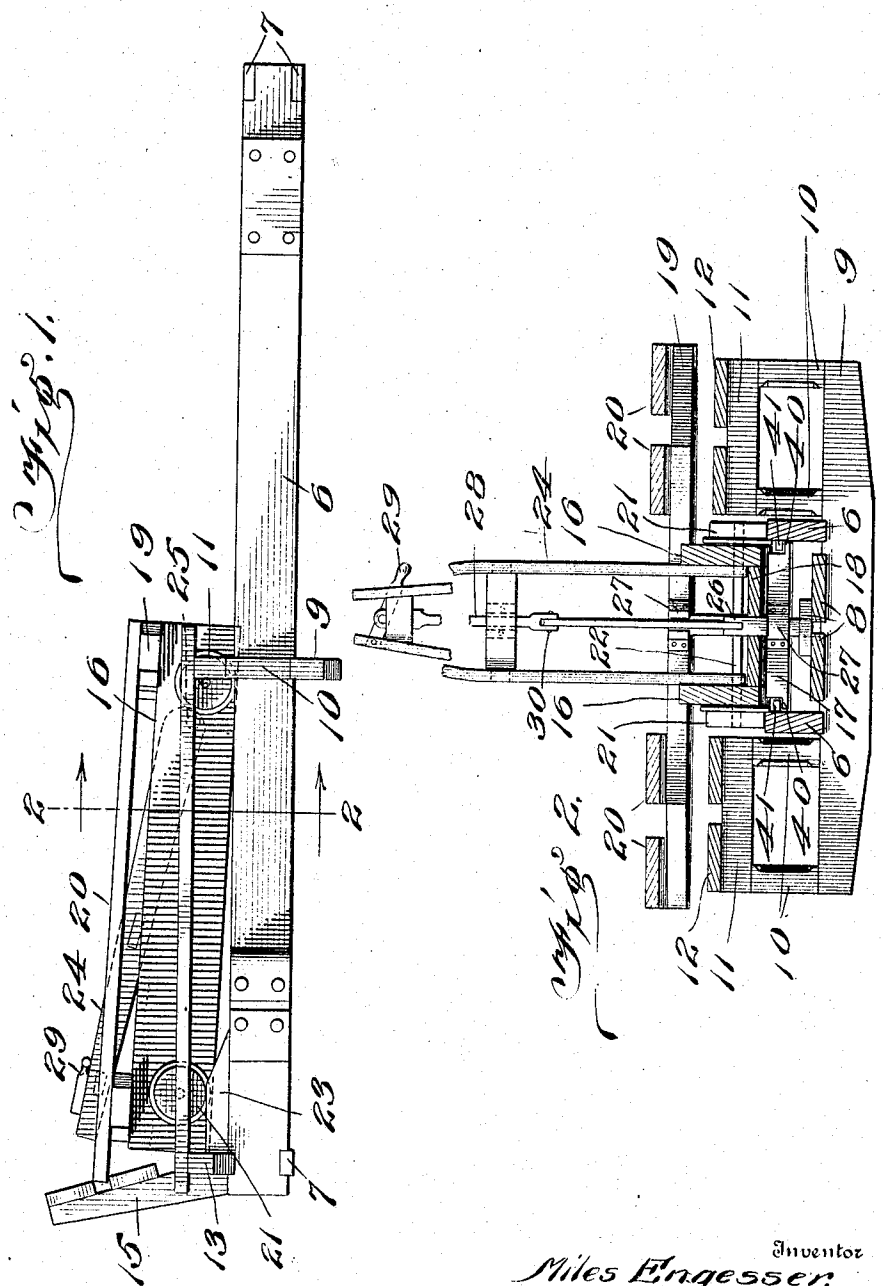
HAY RACK.

APPLICATION FILED MAR. 10, 1909.

930,365.

Patented Aug. 10, 1909

2 SHEETS—SHEET 1.



Witnesses

Ted Thom

Harold Megrew

Inventor

Miles Engesser

By Wm. E. Jew

Attorney

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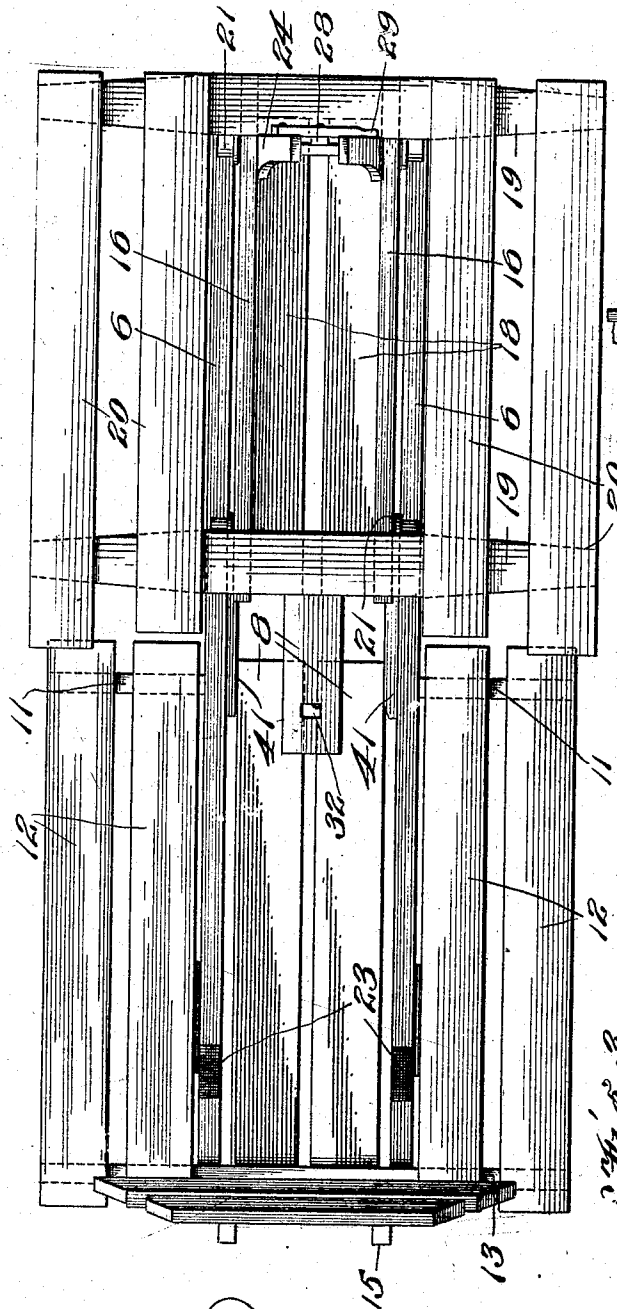

Fig. 3.

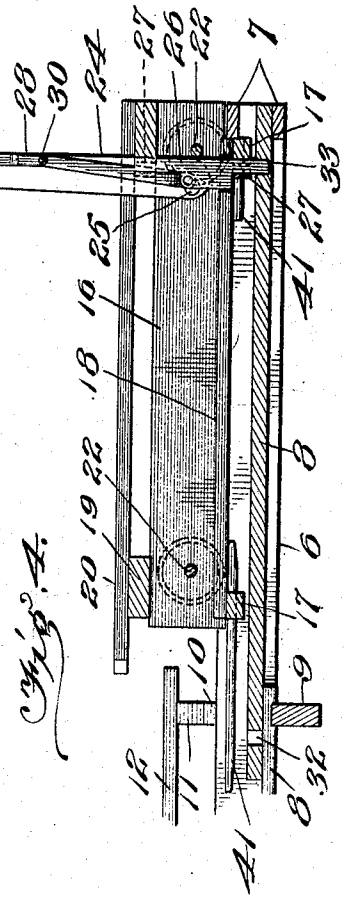

Fig. 4.

Witnesses

Fred L. Thorn

" Harold Megrue

Inventor

Miles Engesser

By Geo. E. Jew

Attorney

UNITED STATES PATENT OFFICE.

MILES ENGESSER, OF REDWOOD, NEW YORK.

HAY-RACK.

No. 930,365. Specification of Letters Patent. Patented Aug. 10, 1909.

Application filed March 10, 1909. Serial No. 482,598.

To all whom it may concern:

Be it known that I, MILES ENGESSER, citizen of the United States, residing at Redwood, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Hay - Racks, of which the following is a specification.

This invention relates to hay racks, and has for its object to provide an improved rack particularly adapted for use in connection with a hay loader which follows the hay wagon.

The hay rack is made with a sliding front section which is movable to and from the rear end of the rack, whereby the front section can first be loaded and then moved forward to allow the rear section to be loaded. This is advantageous and practically necessary in connection with a rear end loader, and also is decidedly advantageous with respect to unloading, as the load does not have to be torn apart, but has a clear line of division at the middle which allows each half to be unloaded with much fewer operations of the unloading fork than when the whole load is undivided.

The invention is attended with advantages with respect to the means for moving the front section forward after it is loaded, this being done automatically by means of inclines down which the front section will roll after the release of a latch which holds the section against movement while being loaded and also locks the same after being moved forward. This automatic operation is decidedly advantageous, since one man can manage it, without stopping the team, and without the use of any separate power devices.

The invention has various other advantages of simplicity and convenience as will more fully appear from the following description and the accompanying drawings.

In the drawings, Figure 1 is a side elevation of the rack; Fig. 2 is a vertical cross section on the line 2—2 of Fig. 1. Both of these show the sliding section at the rear end of the rack; Fig. 3 is a plan of the rack with the sliding section moved forward; Fig. 4 is a detail in longitudinal vertical section showing the latch arrangement in connection with the front folding standard.

Referring specifically to the drawings, the bed of the rack is seen to consist of longitudinal side sills 6 connected at their front and rear ends by cross pieces 7 and having floor boards 8. At the middle is a cross beam 9 extending across under the sills and on which the sills and the floor rest. Uprights 10 at the ends of this beam support cross pieces 11 on which the front ends of the side slats 12 rest, the rear ends of said slats being supported by a cross beam 13 which also supports the rear standard 15 consisting in the embodiment shown of two uprights and two cross pieces thereon.

The front or movable section of the rack consists of longitudinal side sills 16 and beams 17 thereunder, with floor boards 18 resting on the beams. Cross beams 19 are mounted upon opposite ends of the sills 16, and support the side slats 20 which are conveniently located in line with, but somewhat above, the side slats 12 of the rear section. The front section is mounted upon wheels 21 carried by axles 22 extending through the front and rear ends of the sills 16. These wheels run along upon the sills 6 which form a track for the wheels, so that the front section may be rolled from the front to the rear end of the rack, or vice versa. At their rear ends the sills 6 are provided with inclines 23 forming a part of the track and when the front section is in its rearmost position the rear wheels 21 are located upon said inclines, whereby the front section will tend to roll forwardly along the tracks.

The front standard is indicated at 24, and may be of any suitable construction. It is pivoted at 25 to the side sills 16 so that it may be swung down between the same. The standard carries a latch bolt 26 which slides vertically in guides 27 fixed to the frames of the front section, and it is connected by a rod 28 to a lever 29 at the top of the standard. The rod 28 is made in two sections hinged together at 30, in order to allow for the variation in movement or direction incident to swinging down the standard. The hand lever 29 is located at the top of the standard so that it may be manipulated by a man on top of the load. The bolt is adapted to engage in either a rear hole 32 in the floor of the rack, or a front hole 33 therein. When the movable section is rolled back the bolt is shoved down and engages in the hole 32 and so locks the front section against movement. When the section is loaded a man on the load by pulling up on the lever 29 will release the latch and by reason of the incline of the tracks the front

section will roll down forwardly until stopped by the cross beam at the front end of the rack, and the bolt is then shoved down to engage in the hole 33 and lock the movable section against further movement.

The front and rear sills 17 of the movable section are rabbeted as at 40, at the ends, forming projections which engage under ribs 41 produced or fastened on the inner side of the main sills 6. This holds the movable section to the main sills and prevents the wheels jumping the track.

The rack will of course be set upon a suitable running gear and the hay loader hitched on behind, the movable section being run to the rear end of the rack. When the section is loaded the latch is released and it rolls forwardly and the rear section can then be loaded. No windlass or other hauling apparatus is required to advance the movable section, and it is unnecessary to stop the team or for the man to get off the load, inasmuch as he can control the team and also the movement of the movable section from the top of the load. There are no ropes or the like to foul the load or become entangled in the unloading fork. The front section of the rack is made slightly wider than the rear section so that overhanging hay will not bind against the rear section and thereby possibly prevent movement of the front section. The weight of the load on the front section makes no difference with respect to its forward movement, since it moves by gravity.

I claim:

1. A hay rack having longitudinal sills 6 forming a track and having inclines at their rear ends extending forwardly and downwardly, a middle cross beam extending under the said sills at the middle thereof, a cross beam at the rear ends of said sills, slats at opposite sides, supported on the said beams in raised position above the top of the sills thereby forming a depressed track between the side slats, a front section having longitudinal sills thereunder located in the space above said track and provided with wheels which travel on said sills 6, and means to hold said section against movement.

2. A hay rack having a track and fixed section, a section movable back and forth on said track and having a folding standard at the front, and a latch comprising a vertically movable bolt mounted in guides at the bottom of the standard and engageable with the floor of the fixed section to hold the movable section, and a jointed rod connected to the bolt and extending to the top of the standard.

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

MILES ENGESSER.

Witnesses:

LETIE A. BUTTERFIELD,

JOHN E. GRAPPOTT.