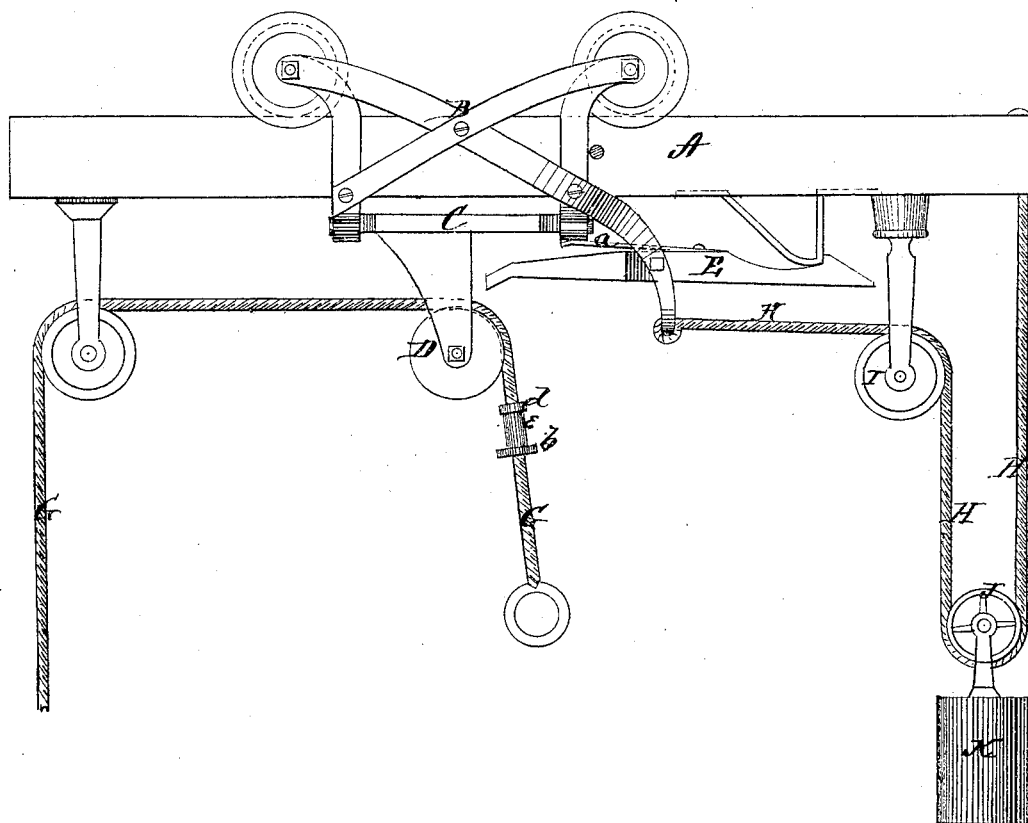


JAMES M. VAN DEMARK & M. BARLOW.

Improvement in Hay-Elevators.

No. 114,496.

Patented May 2, 1871.



Witnesses.

Witnesses,
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Inventor.

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United States Patent Office.

JAMES M. VAN DEMARK AND MOSES BARLOW, OF PHELPS, NEW YORK.

Letters Patent No. 114,496, dated May 2, 1871.

IMPROVEMENT IN HAY-ELEVATORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, JAMES M. VAN DEMARK and MOSES BARLOW, of Phelps, in the county of Ontario and in the State of New York, have invented certain new and useful Improvements in Hay-Elevators; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in the construction and arrangement of a "hay-elevator," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a side view of our elevator.

A represents the track, and

B the car moving on the same.

The track is secured to the peak by nailing pieces across from one rafter to the other and passing bolts through the track and up through the pieces, whereby it is held secure and is more permanent than when put up with fixtures that allow it to swing.

In the lower part of the car B, below the track A, is pivoted a rocking bar, C, to which the pulley D is attached, allowing said pulley to swing from side to side.

Heretofore the pulley on all hay-cars has been made stationary, so that the rope that passes over this pulley when drawn out of a line of said pulley must draw across the edges of the pulley or bind against its frame, thereby creating friction, which causes a heavy wear upon the rope.

In our hay-car the pulley is swinging or self-adjusting, so that at any point the operator may be required to use the rope it will pull directly in the center of the pulley, doing away with all cutting and all unnecessary wear of the rope.

In the front lower end of the car B is pivoted the

pawl E, which is operated upon by a spring, *a*, to hold the car in position for loading, by causing the pawl to catch on a suitable projection on the track.

On the hoisting-rope G, which passes over the adjusting-pulley D, are placed two rings, *b* and *d*, connected by a hollow tube, *e*, the large ring *b* on one end of the tube, and the small ring *d* on the other end. The large ring is for the purpose of tripping the catch to the car, and the small one to prevent the pawl slipping off the tube, thus preventing the rope from running back and holding the hay or grain in its place while being removed to its required point.

We also use a double rope, H, one end of which is attached to the car, then passing over a pulley, I, that is fastened to the track A, thence to the floor and through a pulley, J, that has a weight, K, attached, and then up to the track and fastened.

The object of this double rope is to allow the car to move twice the distance that it would with a single rope, and to bring the car back to its proper place for reloading after being run off on the track with its load of hay or grain to deposit on the mow.

Having thus fully described our invention,

What we claim as new, and desire to secure by Letters Patent, is—

1. In combination with a hay-car, B, the rocking-bar C and pulley D, constructed and arranged substantially as and for the purposes herein set forth.

2. In combination with a trip-pawl or lever, E, and pulley, D, the hoisting-rope G provided with the two rings *b* *d*, which are connected by the hollow tube *e*, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 8th day of March, 1871.

JAMES M. VAN DEMARK.
MOSES BARLOW.

Witnesses:

COOPER SAYRE,
SILAS H. BANNISTER.