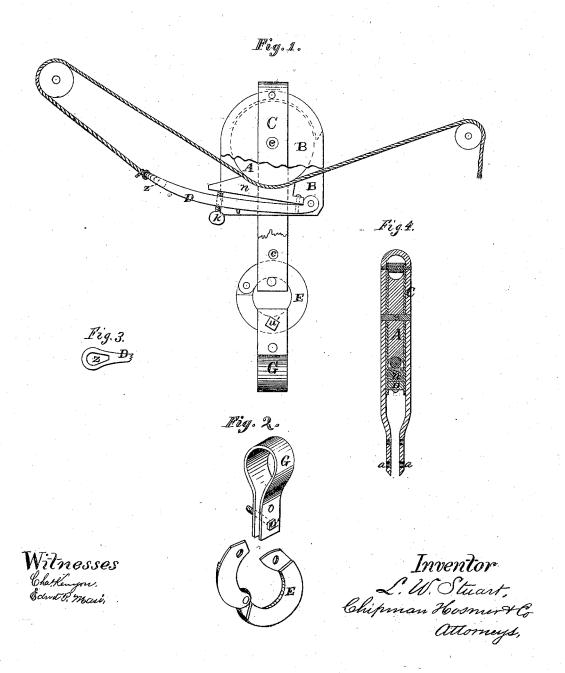
I. M. Stuart,

Hay Elevator.

10, 113,362.

Talented Apr. 4, 1871.



## United States Patent Office.

## LEVERETT W. STUART, OF NARROWSBURG, NEW YORK.

Letters Patent No. 113,362, dated April 4, 1871; antedated March 23, 1871.

## IIMPROVEMENT IN HOISTING APPARATUS.

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

To all whom it may concern:

Be it known that I, LEVERETT W. STUART, of Narrowsburg, in the county of Sullivan and State of New York, have invented a new and valuable Improvement in Pulleys for Hay-Forks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a front view of my invention.

Figure 2 is a detailed view of the ring and loop.

Figure 3 is a view showing the loop in the end of the lever.

Figure 4 is a vertical transverse section of the pulley and block.

My invention has relation to an improvement in means for carrying hay from the wagon into the shed or mow, and consists in the construction and novel arrangement of the traveling-pulley, and the self-adjusting brake thereto attached.

The letter A of the drawing represents the pulley. B B are the chutes of the block, formed of thin metal, and serving as guides to keep the rope in place.

C designates an iron bar, which passes transversely over the pulley and extends down on each side, clasping the metal chutes B B.

The pivot e, on which the pulley turns, is firmly secured in the bar C.

The ends of the bar C extend down below the pulley and are secured together by the rivet c.

Below this rivet are the bolt-holes a.

D represents a lever, pivoted between the chutes B B below the pulley, and at the side thereof.

The free end of the lever is provided with a loop, Z. Resting on the lever is a wooden block, n, having its upper edge concave to suit the curve of the pulley. The forward end of this block is secured to the lever near its pivot.

The other end of the block is adjustable by means of a set-screw, k, passing through the lever. This

block forms the brake which operates on the rope under the pulley.

E represents a jointed annular plate or ring, designed to be suspended between the ends of the bar C by means of a bolt passing through the boltholes a.

Attached to the ring, by means of the bolt n', which holds the ends thereof together, is the loop G, which serves for the attachment of a hay-fork.

The operation of my pulley may be thus described: The rope on which the pulley runs is designed to pass over a pulley above the hay-mow, and at one side thereof. Thence it passes under the movable pulley, above described, and over the hay-mow to a pulley fixed on the other side of the same. Passing around this pulley the rope returns to the movable pulley and is attached to the end of the brake-lever.

Supposing a load of hay to be brought alongside the mow, the fork attached to the movable pulley is inserted into the same. When the rope is tightened in pulling up the fork the brake will operate automatically to keep the rope from passing under the pulley. Hence the pulley and fork will be drawn away from the side of the mow at the same time that they are elevated, and therefore there will be no contact between the hay on the fork and the side of the mow to displace the hay already stacked. When the fork is sufficiently elevated it may be drawn to the proper position and its load deposited on the mow.

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

The elevating and traveling-pulley A B C, in combination with the rope a and the brake D, when the same are arranged for operation by attaching the rope a to the end of the brake-lever, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

LEVERETT W. STUART.

Witnesses:

COMMODORE C. MURRAY, C. H. MURRAY.