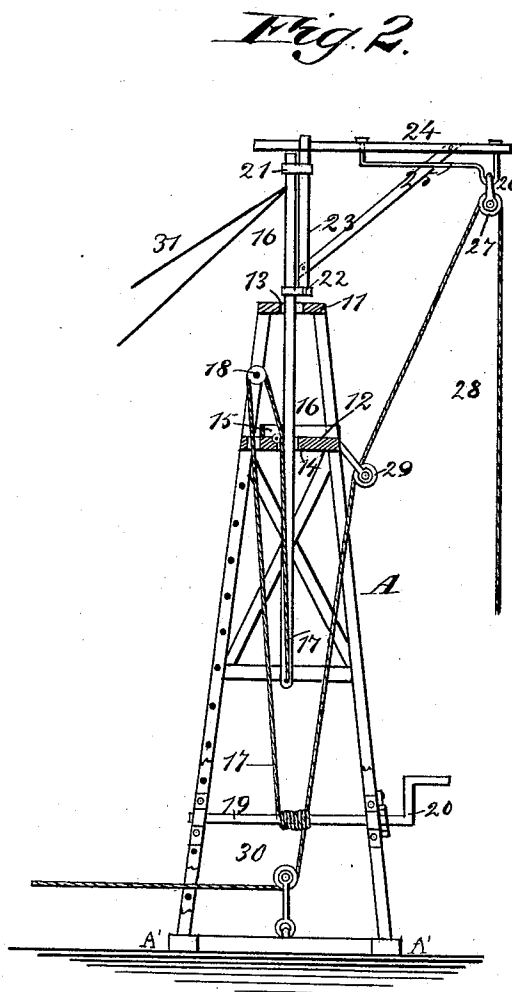
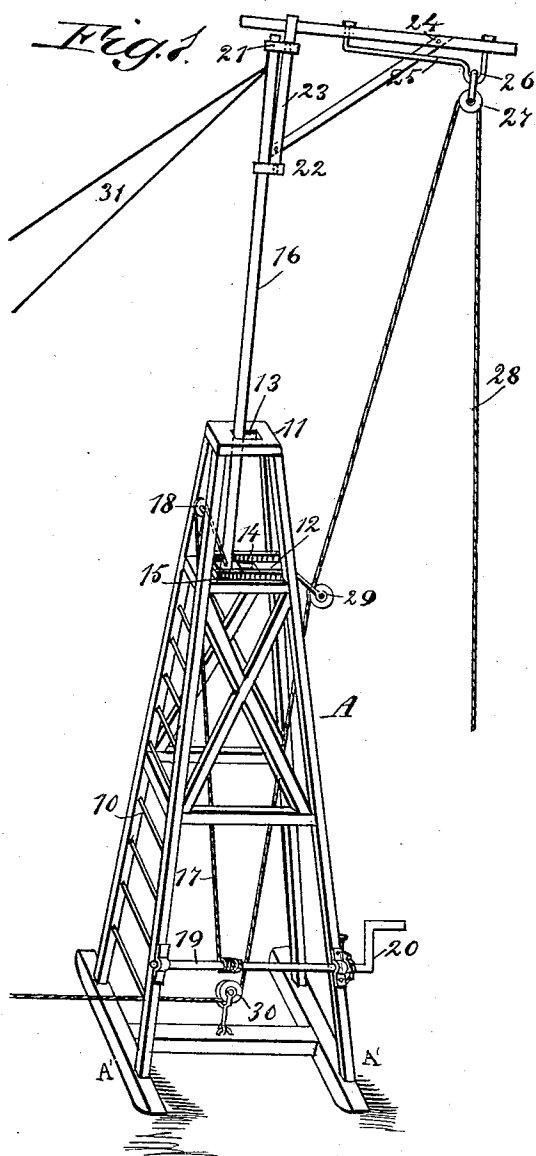


(No Model.)

O. H. BUCK.
HAY STACKER.

No. 465,157.

Patented Dec. 15, 1891.



WITNESSES:

O. H. Buck

E. M. Clark

INVENTOR:

O. H. Buck

BY *Munn & Co*

ATTORNEYS

UNITED STATES PATENT OFFICE.

OLIVER H. BUCK, OF McLEAN, ILLINOIS.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 465,157, dated December 15, 1891.

Application filed March 28, 1891. Serial No. 386,813. (No model.)

To all whom it may concern:

Be it known that I, OLIVER H. BUCK, of McLean, in the county of McLean and State of Illinois, have invented a new and useful
5 Improvement in Hay-Stackers, of which the following is a full, clear, and exact description.

My invention relates to an improvement in hay-stackers, and has for its object to provide
10 a simple, economic, and durable device, capable of being readily transported from place to place, quickly set up, and conveniently manipulated; and it consists in the novel construction and combination of these several parts,
15 as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference
20 indicate corresponding parts in all the views.

Figure 1 is a perspective view of a stacker, illustrating the mast as elevated; and Fig. 2 is a vertical section through the stacker, illustrating the mast as lowered.

25 The body of the device consists of a tower A, narrower at the top than at the bottom, the said tower being practically rectangular in cross-section, and one side of the tower is preferably constructed to form a ladder, the
30 rounds 10 thereof being secured to the side pieces, as is best shown in Fig. 1. The lower end of the tower is provided with runners A', whereby the apparatus may be readily moved from place to place. The upper end of the
35 tower is provided with a platform 11, and a second platform 12 is located between the center and the top. In the upper platform 11 an opening 13 is produced, and an opening 14 is likewise made in the lower platform 12.
40 At one side of the opening in the lower platform a socket 15 is produced, adapted at times to receive the lower end of the mast 16, which mast passes through and has free movement in the opening 13 of the upper platform. One
45 end of a cable 17 is secured to the lower end of the mast, and the said cable, when the mast is passed through both of the openings 13 and 14, extends upward through the latter opening over a friction-pulley 18, journaled preferably
50 in the side of the tower, shaped as a ladder, and from the pulley 18 the cable is carried downward and is preferably made

fast to a shaft 19, journaled at the base of the tower, which shaft may be revolved by a crank-arm 20, or the equivalent thereof. The shaft
55 is preferably provided with a ratchet-wheel engaged by a suitable pawl pivoted to the tower. A strap 21, or the equivalent thereof, is preferably attached to the top of the mast, and below the strap a horizontal lug or extension 22 is formed upon the mast, and a rod
60 or bar 23 is passed loosely downward through the strap and pivoted at its lower end upon the lug or extension 22. The upper end of the rod or bar 23 is firmly secured to the inner
65 end of a horizontal arm 24, which arm is provided with a support 25, located longitudinally upon the under side thereof, and provided with a depression 26 at or near its outer end. A pulley-block 27 is adjustably
70 attached to the support, and a cable 28 is passed over the pulley-block and carried downward in engagement with a guide-pulley 29, attached to the tower near its upper end, and over a second guide-pulley 30, located at the
75 bottom of the tower. The mast is usually supported by guy-ropes 31, in addition to the support which it receives from hoisting-cable 17 on the lower platform 12.

In operation the hay is elevated from the
80 wagon by means of any approved form of tongs or their equivalents, attached to one end of the rope 28, and the hay thus taken from the wagon may be deposited upon the ground at any desired side of the tower, as the
85 arm 24 is capable of revolving upon the mast. As the stack increases in height the mast is elevated by manipulating the shaft 19, or otherwise exerting tension upon the hoisting-rope 17. When the mast is elevated to its
90 greatest height, the heel of the mast is placed upon the lower platform 12 in the socket 15. The mast is not perpendicular, but is preferably given a slight inclination or cant in the direction of one side of the tower.

95 By constructing a ladder at one side of the tower the upper portion of the stacker is rendered readily accessible.

When the device is not in use, the cables or ropes may be detached, as they may be readily
100 placed in position again.

The tower may be made in two sections, if desired, and for purposes of transportation the mast 16 may be removed from the tower.

I desire it to be distinctly understood that I do not confine myself to the means shown for manipulating the hoisting-rope 17, as equivalent devices may be substituted there-
5 for.

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

1. A portable hay-stacker comprising a
10 tower formed of open frame-work and provided at its lower end with runners and having two centrally-apertured cross pieces or platforms, a mast within the tower and extending through said apertures, a rope for
15 raising and lowering said mast, a horizontal swinging arm mounted on top of the mast and provided with a pulley, and a hoisting-rope extending about said pulley, substantially as set forth.

2. A portable hay-stacker comprising 20 tower A, formed of open frame-work and having centrally-apertured platforms 11 12, the latter provided with a socket 15, to one side of its aperture, the mast 16 within the tower and movable freely through said apertures 25 and adapted at its lower end to rest in said socket, a rope 17, secured to the lower end of the mast and passed over a guide-pulley between the two platforms, a horizontally-swinging arm on the upper end of the mast, a lon- 30 gitudinally-extending support 25 on the under side of said arm, a pulley 27, suspended on said support, and the hoisting-rope 28, extending over said pulley, substantially as set forth.
OLIVER H. BUCK.

Witnesses:

ENOS H. FARNSWORTH,
OSCAR O. BUCK.