(No Model.)

C. A. PURVIS.

HAY STACKER.

No. 478,021. Patented June 28, 1892.

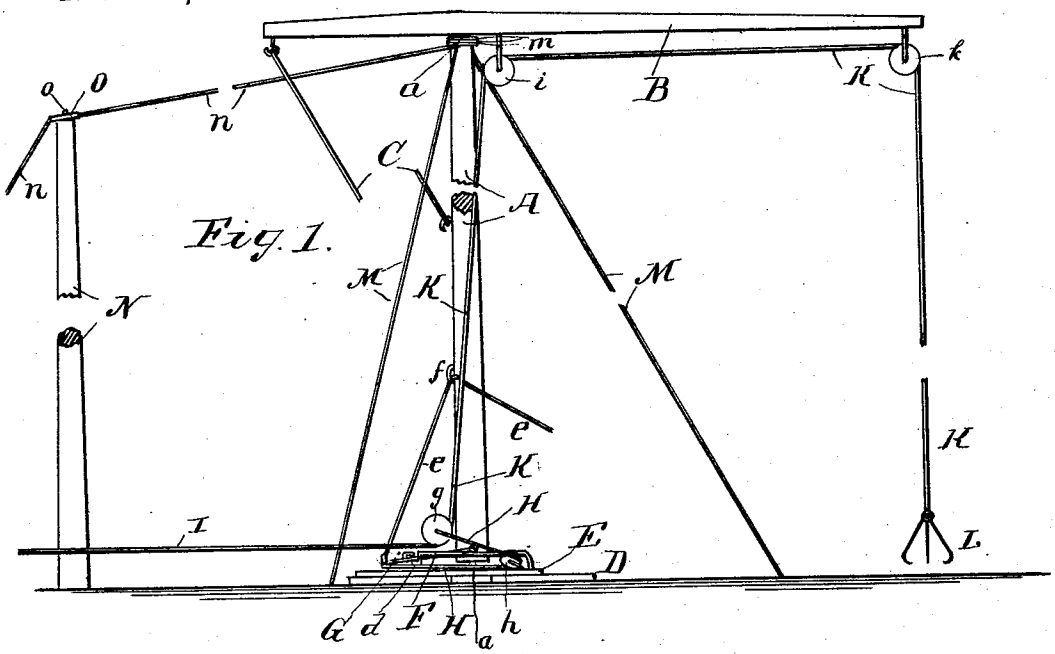

Fig. 1.

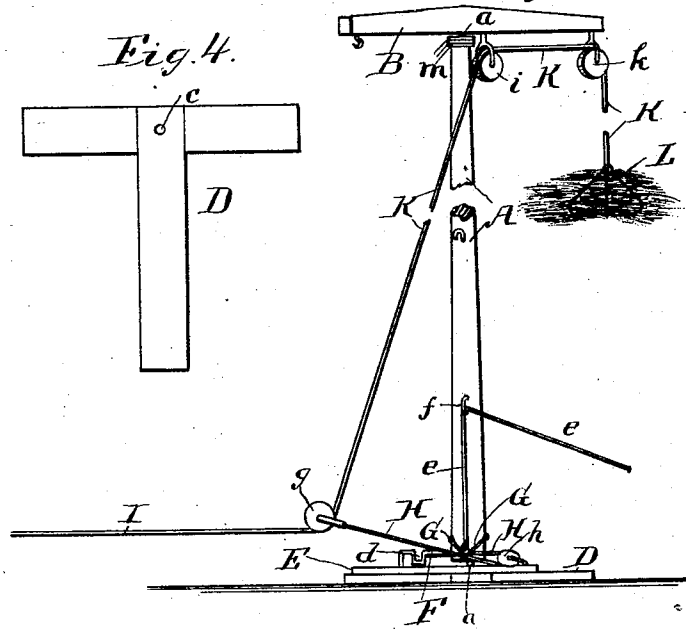

Fig. 2.

Fig. 4.

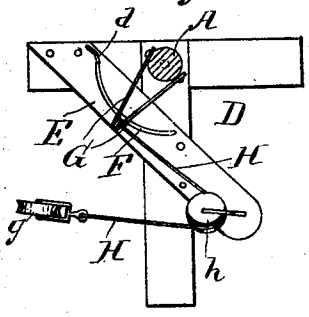

Fig. 3.

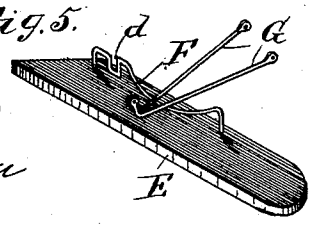

Fig. 5.

WITNESSES:

Edwin S. Clarkson

A. L. Watson

INVENTOR.

Charles A. Purvis

BY

C. J. Bell

ATTORNEY.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES A. PURVIS, OF PURVIS, MISSOURI.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 478,021, dated June 28, 1892.

Application filed April 15, 1892. Serial No. 429,348. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. PURVIS, a citizen of the United States, residing at Purvis, in the county of Camden and State of Missouri, have invented certain new and useful Improvements in Hay-Stackers, of which the following is a specification.

This invention relates to hay-stackers, and its novelty will be fully understood from the following description and claims, when taken in connection with the annexed drawings; and the object of the invention is to provide a simple, cheap, and durable stacker to allow the hay raised thereby to be placed upon a stack at any height.

A further object of the invention is to provide a positive latch-and-catch attachment for the purpose of operating the stacker.

In the accompanying drawings, forming part of this specification, Figure 1 is a front view showing the stacker in position to raise hay from the ground. Fig. 2 is a similar view showing the hay raised and the stacker turned to drop the hay upon a stack without the guy-ropes. Fig. 3 is a plan view of the bottom portion of the stacker with the other portions broken off. Fig. 4 is a plan view of the base, and Fig. 5 is a detached perspective view of the latch and its catch-rod.

The same letters of reference denote the same parts throughout the several figures.

A denotes the upright pole or standard of the stacker having at its bottom a pivot joint or journal *a*, and upon the top of the standard or upright is secured the cross-beam B, which is held in a horizontal position and at right angles to the upright A by means of the stay C, connected to the short end of the beam and to the upright A below its middle portion, forming a triangle between the said beam, the upright, and the stay.

D denotes the T-shaped base, having a bearing *c* for the pivot-point *a*. To one arm of the cross portion of this T-shaped base is secured one end of a plate E, the other end of which is secured at or about the middle of the long arm of the said base. The plate E is provided with a curved rod F, in the form of an arc of a circle, the center of which is the bearing *c*. The rod F has a U-shaped depression or catch *d*, formed therein and at right angles thereto to catch and positively retain the free end of a latch G, pivoted to the lower portion of the upright A, and thereby free to swing in a vertical plane. To the free end of this latch is connected the latch-cord *e*, from whence it is passed through an eye *f* on the upright A to raise and disengage the latch G with the catch *d*.

H refers to the latch-pulley cord, which has one end secured to the free end of the latch and the other end secured to the pulley *g*, which is free to follow every movement of the latch-pulley cord H, having an intermediate pulley *h*, secured to the base D. This pulley *g* is engaged by the draft end I of the hoist-rope K. From thence it passes over a pulley *i*, secured near the upright A to the cross-beam B, and then over a pulley *k* at the extreme end of the said beam, and its end is provided with grapple-hooks L.

M represents two of the three guy-ropes, having metal loops *m* connected to the top of the upright A, so as to allow the upright to turn in them.

N is a prop or raise pole for the purpose of raising the third guy-rope *n*, which would otherwise come in contact with the hay-stack. This guy-rope *n* is provided with a metal loop O to engage a projection *o* on the top of the raise-pole N.

The operation of the stacker is as follows: The grapple-hooks being filled with hay the draft end I of the hoist-rope K is pulled by horse or any other suitable power, (the latch being seated in its catch, as shown in Fig. 1,) which raises the hay to the desired height. When the draft is stopped, the latch-cord is pulled by hand, raising the latch from the catch and seating it on the arc-shaped catch-rod F, where it is left free to slide according to the movement of the upright A and its cross-beam, causing the said upright and the beam, and therefore the hooks containing the hay, to be swung around to the desired position. It will be observed that by this operation the time, labor, and expense of backing the draft-power to swing and lower the hay to its place is entirely avoided.

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

1. In a hay-stacker, the combination of the catch-rod, the latch pivoted to the upright of

the stacker, the hoisting-rope operatively connected with the latch, and means, substantially as shown and described, for operating the said latch, for the purpose set forth.

2. In a hay-stacker, the combination of the base, the catch-rod connected thereto, and the latch pivoted to the upright of the stacker, so as to engage the catch in the said rod, the hoisting-rope operatively connected with the latch, substantially as and for the purpose set forth.

3. In a hay-stacker, the combination of the catch-rod, the latch, the fixed pulley, the latch-pulley cord, the free pulley, the hoisting-rope adapted to be operated by engaging the free pulley, and the latch-cord for operating the latch, whereby the upright of the stacker is kept in a fixed position while the hay is being raised and released and left free to turn after the hay is raised, substantially as set forth.

4. In a hay-stacker, the combination of the latch, the latch-cord and the pulley-cord, both connected to the free end of the latch of the base, the pulley secured to the base, the free pulley secured to the free end of the latch-pulley cord, the hoisting-rope adapted to be operated by engaging the free pulley, and the arc-shaped catch-rod, substantially as and for the purpose set forth.

5. In a hay-stacker, the combination of the upright A, the cross-beam B, the T-shaped base, in which is journaled the upright, and the bar E, secured to one arm of the cross portion of the base and to the middle of the long arm of the base, with the catch-rod secured upon the bar E, the latch pivoted to the said upright so as to swing in a vertical plane, and means, such as shown, for operating the latch, for the purpose set forth.

In witness whereof I hereunto set my hand in the presence of two witnesses.

CHARLES A. PURVIS.

Witnesses:
ALFRED GARRISON,
JOSIAH S. TRAW.