No. 681,175. Patented Aug. 20, 1901.

I. N. CONDRA.

PORTABLE STRAW STACKER.

(Application filed June 4, 1901.)

(No Model.) 2 Sheets—Sheet 1.

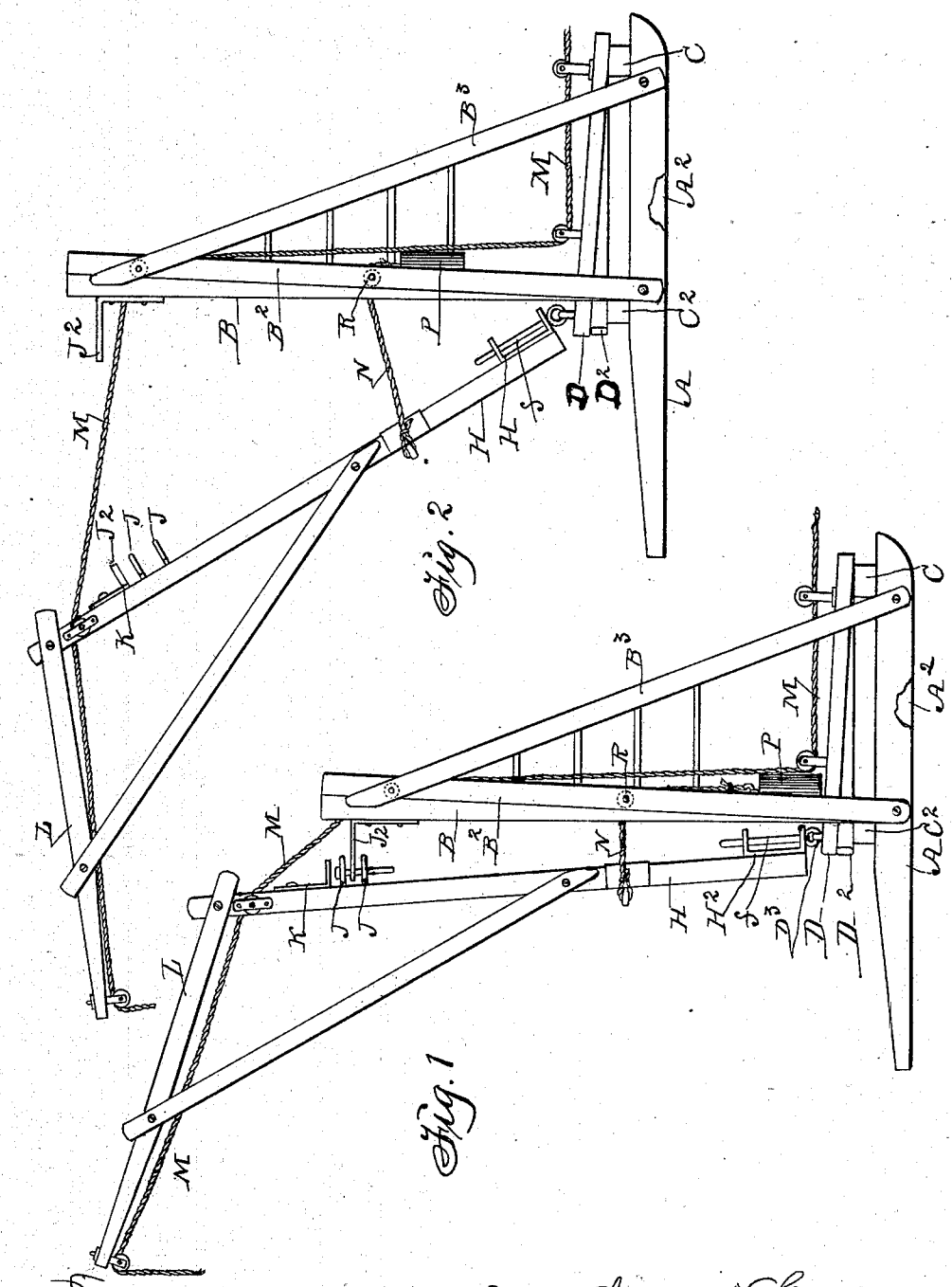


Fig. 2

Fig. 1

Witnesses:
Reuben B. Orwig
L. H. Orwig

Inventor: Isaac N. Condra,
By Thomas G. Orwig, Attorney.

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

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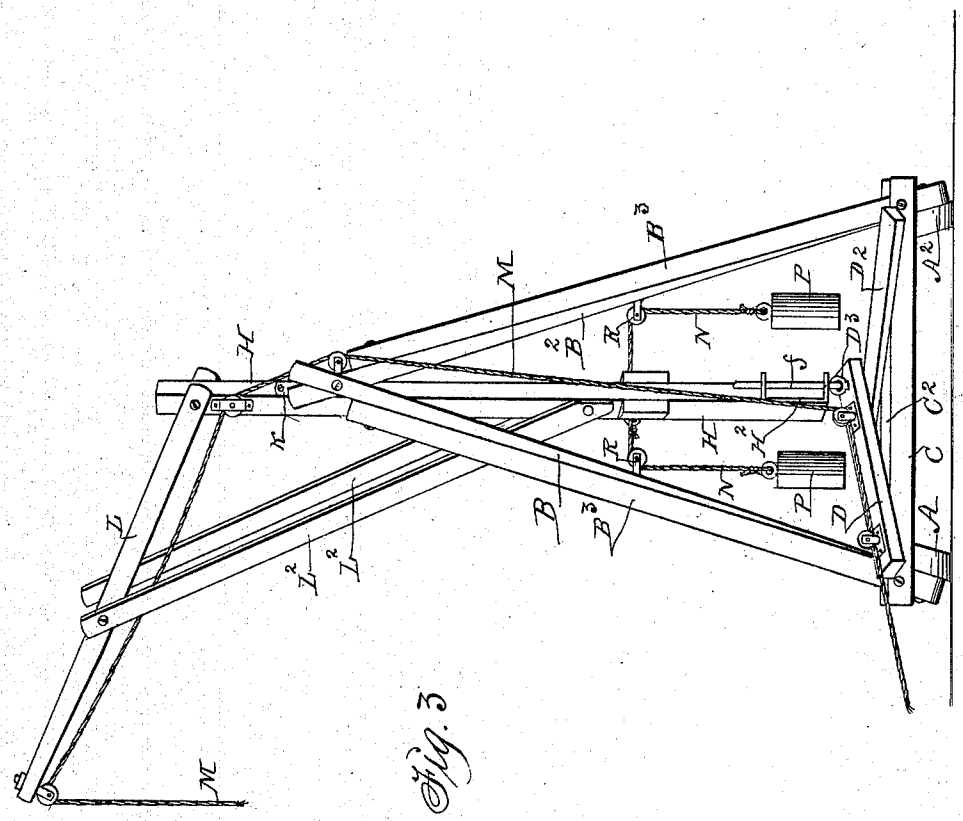


Fig. 3.

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

UNITED STATES PATENT OFFICE.

ISAAC N. CONDRA, OF SEYMOUR, IOWA.

PORTABLE STRAW-STACKER.

SPECIFICATION forming part of Letters Patent No. 681,175, dated August 20, 1901.

Application filed June 4, 1901. Serial No. 63,127. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. CONDRA, a citizen of the United States, residing at Seymour, in the county of Wayne and State of Iowa, have invented a new and useful Portable Straw-Stacker, of which the following is a specification.

My object is to provide a portable hay-stacker that can be readily adjusted for building large stacks upon a broad base and also for building stacks varying in diameter and height.

A further object is to detachably connect the different parts, so they can be compactly stored away when not in use and readily connected as required for practical use.

My invention consists in the arrangement and combination of a portable frame, a post pivotally connected with the base of the frame, and a crane-arm fixed to the post, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation showing all the parts connected as required for hoisting and delivering hay upon a stack. Fig. 2 shows the pivoted post detached from the top of the frame and inclined as required to show the manner of raising and lowering the crane-arm and post. Fig. 3 is an end view.

The letters A and A^2 designate parallel base-pieces of the frame in the form of runners adapted for sliding upon the ground, as required to facilitate the movement of the machine from place to place without taking it apart.

B and B^2 are uprights detachably fixed to each one of said parallel base-pieces by means of screw bolts and nuts, and the top ends of the said uprights are also detachably bolted together.

C and C^2 are cross-bars resting upon the base-pieces A and A^2 and detachably bolted to the uprights B and B^2.

D and D^2 are stay-pieces detachably bolted to the end portions of the cross-bar C and also jointly and detachably bolted to the center of the cross-bar C^2. A rigid portable frame is thus produced that can be readily taken apart at pleasure. The bolt D^3, that extends through the overlying ends of the stay-pieces and the cross-piece C^2, has an eye, and *f* is a pin that has a swivel connection with the eye of said bolt.

H is a post and to its lower end is fixed a metal plate H^2, and the ends of the plate extend at right angles and have coinciding perforations to admit the pin H^2, as required to pivotally and detachably connect the lower end of the post with the portable rigid frame. Hinge members J are fixed to the top of the post, and a corresponding hinge member J^2 is fixed to one of the uprights of the frame in such a manner that the top of the post is detachably hinged to the frame by simply inserting a pintle J^3 in the hinge members. An elbow-shaped plate K is pivoted to the post above the upper hinge member J in such a manner that in its normal position it will overlie the head of the pintle and keep the post securely hinged to the frame. A crane-arm L is detachably fixed to the top of the post by means of a bolt and supported by stay-pieces L, detachably bolted to the central part of the post and the central part of the arm. A rope M is extended over direction-pulleys attached to the frame, the pivoted post, and the free end of the crane-arm in such a manner that a hay-fork may be attached to one end of the rope and a horse hitched to the other end, as required to operate the hay-stacker.

Ropes N are attached to the sides of the pivoted post H and weights P fixed to the ends of said ropes in such a manner that when the ropes are extended over pulleys R, fixed to the uprights of the frame, they will aid in retaining the post upright and balanced, and when one of the weights is placed upon the ground the other one will aid in swinging the post and crane-arm in the direction it is desired to have it move when carrying a load. When the post is unhinged from the top of the frame and the two weights are suspended upon the hooks fixed to the uprights of the frame, the two weights will aid in retaining the swinging arm and post in a vertical plane and also aid in pulling the post into a perpendicular position, as required for restoring its hinged connection with the top of the frame.

It is obvious a person can readily climb to the top of the frame for removing and replacing the pintle J^3, as required for un-

hinging and rehinging the post to the frame whenever desired.

Having thus described the construction, arrangement, and combination of the different parts of my invention, its practical operation and utility will be readily understood by persons familiar with the art to which it pertains, and

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

1. In a straw-stacker, a portable frame, a post having a crane-arm bolted to its top end portion, stay-pieces bolted to the central part of the post and the central part of the arm, a metal strap fixed to the lower end of the post and its end extended at right angles and provided with coinciding pin-holes, a pin swiveled to the frame and extended upward through said pin-holes, a hinge member fixed to the top of the frame and two hinge members fixed to the top end portion of the post, a pintle extended down through the perforations in the hinge members and an elbow-shaped plate pivoted to the post to engage the head of the pintle, all arranged and combined to operate in the manner set forth for the purposes stated.

2. In a hay-stacker, a frame having fixed hooks on its uprights, a post, having a fixed crane-arm at its top, pivoted at its lower end to the center of a cross-bar fixed to the frame, ropes fixed to the post and weights fixed to the ends of the ropes, arranged and combined to operate in the manner set forth for the purposes stated.

3. A portable hay-stacker comprising a portable frame, a post pivotally connected with the center of a cross-bar at the lower end of the frame and detachably hinged to the top of the frame, a crane-arm fixed to the top of the post, ropes fixed to the post and weights fixed to the ends of the ropes, hooks fixed to the uprights of the frame for connecting the ropes and weights with the frame, pulleys attached to the crane-arm, the post and the frame and a rope extended over said pulleys, all arranged and combined to operate in the manner set forth for the purposes stated.

ISAAC N. CONDRA.

Witnesses:
D. H. KERBY,
J. W. CONDRA.