(No Model.)

J. W. & P. M. HOGELAND.

HAY STACKER.

No. 318,429. Patented May 19, 1885.

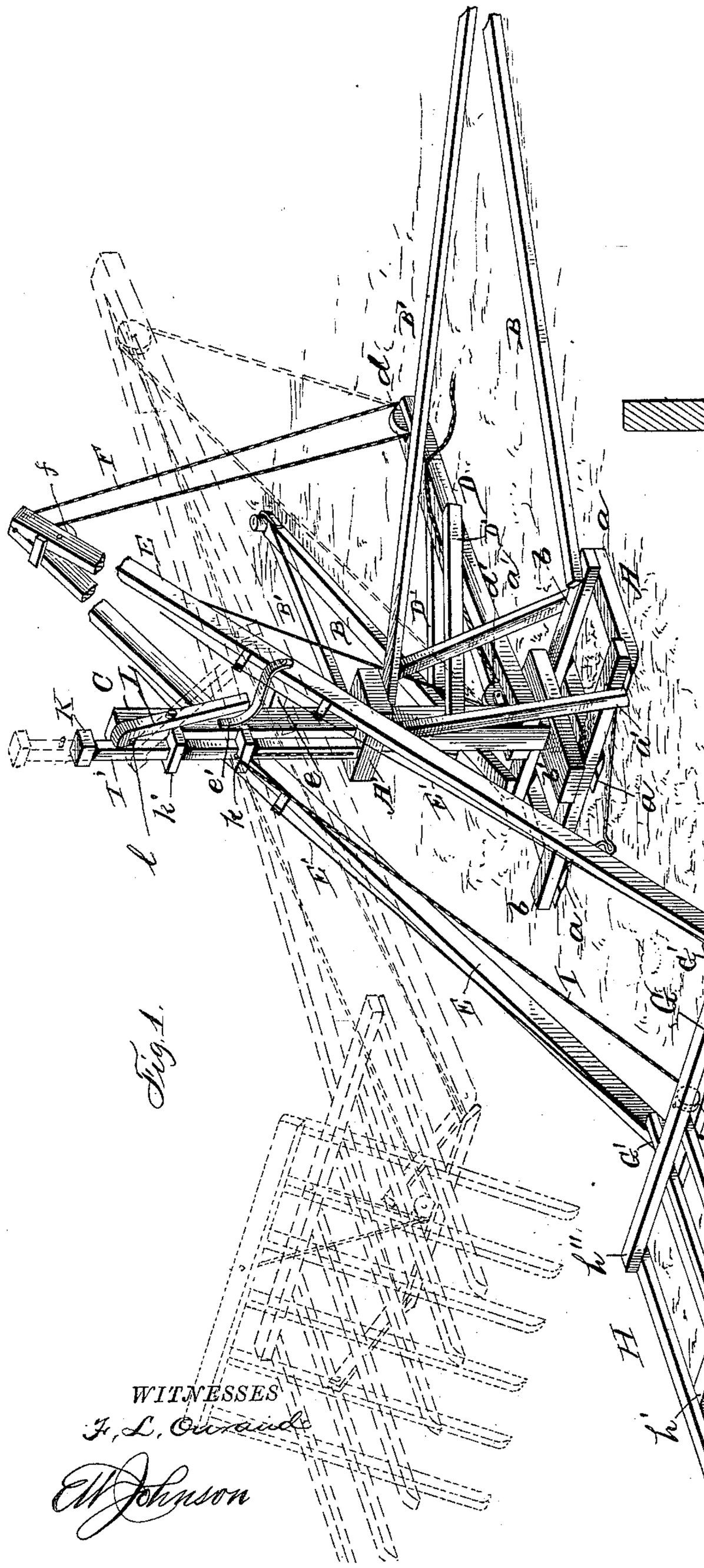

Fig. 1.

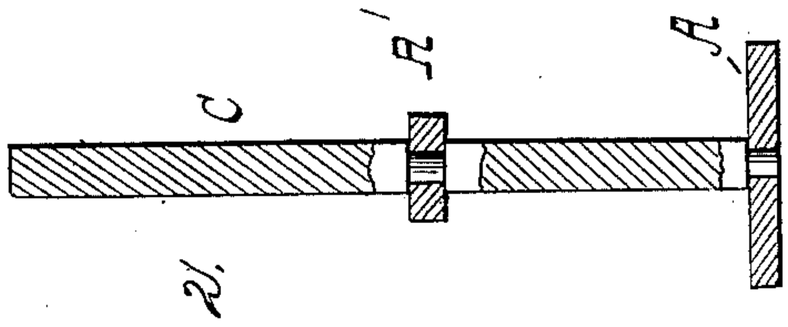

Fig. 2.

WITNESSES

F. L. Ourand

E. W. Johnson

John W. Hogeland

Peter M. Hogeland

INVENTORS

Attorney

UNITED STATES PATENT OFFICE.

JOHN W. HOGELAND AND PETER M. HOGELAND, OF LOVILIA, IOWA.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 318,429, dated May 19, 1885.

Application filed February 12, 1885. (No model.)

To all whom it may concern:

Be it known that we, JOHN W. HOGELAND and PETER M. HOGELAND, citizens of the United States of America, residing at Lovilia, in the county of Monroe and State of Iowa, have invented certain new and useful Improvements in Hay-Stackers; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to certain new and useful improvements in a device for stacking hay; and it consists in the construction and combination of the parts, as will be hereinafter fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, forming part of our specification, Figure 1 is a perspective view of our invention, the position of the parts being shown in full and dotted lines; and Fig. 2 is a detailed sectional view.

A represents a suitable base, which is preferably mounted upon the runners *a a*, said runners being connected to each other by cross-bars *b b* and a central support, *b'*. An upper frame, A', is secured to the lower support by means of inclined braces *a'*, which are rigidly attached to the support and frame A A'.

To the rear corners of the support A are pivoted arms B, the ends of said arms having loops, through which may be passed pins for securing the ends of the same to the ground.

From near the ends of the arms B B extend upwardly-inclined braces B', which are secured to the same and are pivoted to the under side of the platform A'. By means of these arms the support and its platform may be secured to the ground, and, as said arms may be spread, they will not interfere with the operating parts of the hay-elevator.

An upright post, C, is journaled within the platform A' and upon the cross-bar *b'* of the support, and to this post C are attached the movable parts of our improvement.

To the lower end of the post C is rigidly attached an arm, D, which is provided at its outer end with a pulley, *d*, the opposite end of said arm being bifurcated so as to embrace the post, and between said bifurcations is attached another pulley, *d'*, which may be journaled between the parts of said arm or attached to the lower end of the post C. The arm D is braced to the post C by means of stays D'. It will be readily seen that by moving the end of the arm D the post will be turned, and the hay-elevating mechanism may also be turned.

Above the platform A', to the rear side of the post, is rigidly attached a horizontal cross-bar, *e*, to the ends of which are pivoted the side bars of the crane E. Straps *e'* serve to further secure said side bars to the post. The arms of the crane E are braced by means of truss-bars E'.

To the extreme rear end of the crane E is attached a cord or rope, F, which passes over the pulley *d*, and from thence upwardly over a pulley, *f*, which is attached to the under side of the crane, after which said cord is led over the pulley *d'*, after which it may be secured to a cleat or pin attached at any suitable point upon the arm D. It will be readily seen that by drawing upon the cord F the crane will be elevated.

The ends of the crane are connected to each other by a cross-bar, G, and have attached rigidly to their ends and to said cross-bar bars G', which will extend horizontally therefrom when the outer end of the crane is lowered, so as to be on a line with the platform A.

To the outer ends of the bars G' is pivoted a frame, H, which consists of a series of teeth, *h*, which are connected to each other by cross-pieces *h' h''*, said frame being pivoted to the ends of the bars G'.

To the rear cross-bar of the frame H is attached a cord, I, which passes over a pulley, *i*, which is attached to the central portion of the cross-bar G. This cord then passes over a block, *k*, which is attached to the post, and from thence to the base of a vertically-sliding bar, which is movably secured to the center post.

The vertically-sliding post hereinbefore referred to, and indicated by the letter I', is secured to the post by means of blocks or bails

k k', and the upper portion of said sliding bar is provided with a weight, K. From one side of the sliding bar I' projects a pin, *l*, which is located near its upper end, and is adapted to engage with a latch, L, which is pivoted to the post C, as shown. The upper end of said latch has a projecting portion, which engages with a pin, *l*, and adjacent to said projecting portion the latch is provided with a cord for releasing the same, and the opposite end of said latch may be either provided with a cord or weight for bringing the same in position over the pin *l*.

It will be noticed that the frame H, upon which the hay or straw to be elevated is placed, has its greater portion extending beyond its pivots, so that the major portion of the hay will be located at its outer end, and will overbalance the rear portion, thus causing the frame to tilt when the cord I is released.

The front portion of the support A may have attached thereto a bar, which is looped at its center, so that a draft attachment can be connected thereto, and when it is desired to move the apparatus from one part of the field to another the parts which secure the same to the ground may be folded so as to lie in a line with each other, and the crane-arm elevated at its front end, thus providing a space under said arm under which the horses may be hitched.

The operation of our invention is as follows: The hay or straw to be stacked is placed upon the frame H, and the cord F is then drawn, which elevates the crane, and while said crane is being elevated the frame will remain in a horizontal position, said movement being caused by the weight of the hay upon the same and the cord I. After the frame has been elevated it may be turned by moving the arm D, thus bringing the hay upon the frame to the desired position over the stack. When it is desired to dump the hay upon the frame, the string attached to the latch is pulled so as to bring said latch out of contact with the pin *l*, and will allow the sliding bar I' to rise, which movement will lengthen the cord I and dump the hay which has been placed on the frame. After the hay has been dumped the frame H will be brought back to its original position by the downward movement of the sliding bar I', which is weighted, and when said sliding bar moves downwardly it will automatically re-engage with the latch.

We claim—

1. In a device for stacking hay and straw, the combination of a frame or support, a pivoted crane, a hay-carrying frame pivotally attached at one end of said frame, means for elevating the crane, a sliding bar carried at the other end, and a cord attached to said bar and to the hay-carrying frame at the end of the crane, so as to maintain said frame in a horizontal position when the crane is elevated, the parts being organized substantially as shown and set forth.

2. In the device for stacking hay and straw, the combination of a frame or support, an upright post pivotally mounted upon said support, a crane, and means located at one end of said crane for elevating the same, arms located at the other end, a carrying-frame pivoted thereto, a sliding bar, I, attached to said vertical post, and an automatic latch also attached to said post so as to engage with the sliding bar, and a cord attached to the frame and to the lower end of the sliding bar, substantially as set forth.

3. In a device for stacking hay or straw, the combination of the frame or support A, mounted on runners, the platform A', supported above said frame, arms B B', pivoted to said frame and platform, a vertical post, C, journaled in the frame and platform, and provided with a pivoted crane, the frame H, carried by the crane at one end, a vertical sliding bar attached to said post, a latch, L, a connecting-cord, and means for elevating the crane, substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN W. HOGELAND.
PETER M. HOGELAND.

Witnesses:
DAVE L. HENDRIX,
DAVID MANLY.