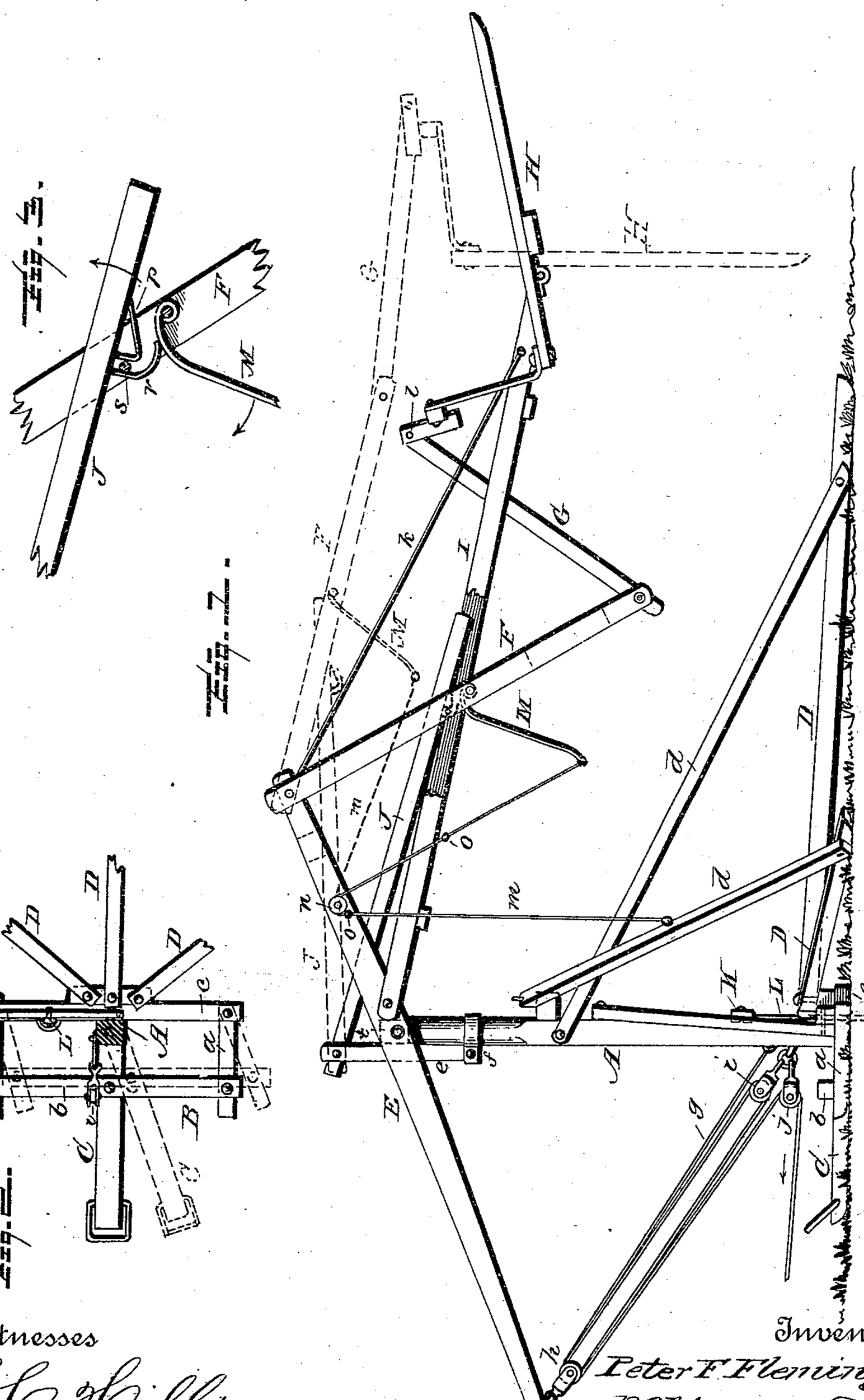
(No Model.)

P. F. FLEMING.

HAY STACKER.

No. 501,650. Patented July 18, 1893.



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PETER F. FLEMING, OF HUNTSVILLE, MISSOURI.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 501,650, dated July 18, 1893.

Application filed February 4, 1893. Serial No. 460,927. (No model.)

To all whom it may concern:

Be it known that I, PETER F. FLEMING, a citizen of the United States, residing at Huntsville, in the county of Randolph and State of Missouri, have invented certain new and useful Improvements in Hay or Straw Stackers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of hay or straw stackers provided with a swinging platform adapted to receive the load of hay or straw and controlled by suitable mechanism to swing the platform over the stack and discharge its load.

The invention is designed as an improvement upon my former patent granted December 16, 1879, No. 222,685, and consists in the several details of construction substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings represents a side elevation of my improved hay or straw stacker, showing in dotted lines the position the parts will assume when the load is being discharged. Fig. 2 represents a detail plan view of a portion of the supporting frame showing the standard in section. Fig. 3 represents a detail view of the releasing mechanism used in discharging the load.

In the accompanying drawings A represents a suitable standard, which standard is supported on a frame or base B of novel construction, the sections *a b* being pivoted together and to the section *c* and the section *b* to the tongue C.

The supporting frame B formed of pivoted sections as above described enables it to be adjusted to the line of draft, either to the right or left, thus rendering the easy turning of the frame without tearing up the mud in moving from place to place, this lateral adjustment of the frame being shown in dotted lines, Fig. 2. The tongue C is also pivoted and the standard A rigidly connected to the frame-section *c* and a plurality of pivoted supports D are employed which are strengthened by diagonal braces *d*, connected thereto and to the standard, thus forming a wide supporting base for the stacker when in use, and which can be brought compactly together to economize space when the stacker is not in use or when moving it from place to place.

Upon the upper end of the standard A is pivotally supported a suitable rectangular frame E of any desirable form and construction. The frame is pivoted to a projecting block *t* upon the upright arm *e*, as shown in dotted lines, Fig. 1, said arm having upon its lower end a collar *f* to embrace the standard, thus enabling the collar to turn on the standard and carry with it the arm *e*.

The manner of supporting the frame E upon the standard A as above described, provides a double joint connection between the frame and standard and admits of the frame being swung around to either the right or left in a horizontal direction and also enables the frame to be raised or lowered.

The frame E is controlled by a suitable cord or rope *g* having one end attached to the standard A and passing over pulley *h* on the end of the frame and pulleys *i j* on the lower end of the standard, or in place of that shown, any suitable arrangement of cord and pulleys may be used or any well known devices employed to operate the frame. To the opposite or forward end of the rectangular frame E is pivoted one end of an arm F, the opposite or lower end of the arm having one end of an arm G pivoted thereto, and to the opposite end of this latter mentioned arm is pivotally connected the platform or carriage H that receives the load of hay or straw. There may be two of the arms F, one connected to each side of the frame E and arm G, but this is left to the judgment of the manufacturer and any changes of like character which would be thought expedient or increase the strength and effectiveness of the stacker.

The platform or carriage H which may be of any well known and preferred construction, is pivotally supported upon the ends of arms I, which arms at their rear ends are rigidly connected to the frame E, so that when the frame is swung to the right or left or raised or lowered, the arms will be carried with it and assume the same relative position thereto. Diagonal braces *k* form a connection between the two frames to give increased strength and

the arm G is pivoted to the platform or carriage at a point above its plane as shown at *l*, to give greater leverage power.

A releasing device for the platform or carriage H is employed, so that when the load is placed on the same and the stacker ready for depositing the load on the stack, the carriage or platform with its connections is swung around either to the right or left and elevated the desired height to bring the load over the place of deposit. After the platform or carriage has been thus brought in position through the medium of the cords or ropes and pulleys hereinbefore described, the platform or carriage is tilted to deposit its load, the position the parts will assume when thus unloading, being shown in dotted lines Fig. 1. In order to secure this tilting action of the platform or carriage and at the proper time, the releasing device is employed, which consists of a pivoted latch M upon the arm or arms F which has connected thereto one end of a cord *m* for operating it. This cord may pass over a pulley *n* or other suitable guide upon the side of the frame E and if preferred may be connected to one of the braces *d* as shown or in any other manner brought within convenient reach of the attendant. Upon the cord *m* are suitable stops *o* to limit its movement in either direction and thereby control the extent of movement of the arms F G.

One end of bar J is pivoted to the upper end of the arm *e* and near its forward end has a keeper *p* and a fulcrum arm *r* which engage with the pin *s* on the bar or bars F. The latch M which is more properly a trip-lever, when raised as indicated by the arrow in Fig. 3, will press upward against the fulcrum arm *r* and raise the bar J sufficiently to release it, which will release it and allow the tilting of the platform or carriage H, as indicated in dotted lines, Fig. 1.

A hand-lever K is pivoted to the standard A and carries a rod L which is pivoted to the lever and has its free end pointed to enter the ground in order to steady the stacker when in use and hold the standard stationary, the hand-lever being used to force the rod into the ground and also withdraw it when changing the position of the stacker.

When the load has been dumped or deposited upon the stack, the platform or carriage will automatically swing back to its former position and be securely held by the releasing device, the same acting both to release the platform or carriage to deposit its load and to automatically hold it in the position necessary to receive another load. It will thus be seen that the device will both release and hold the platform or carriage which latter automatically swings back to its normal position, as its greatest weight is back of its pivotal connection with the frame to which it is attached.

There are many modifications or changes that may be made without departing from the principle of my invention, and in the general construction of the stacker such changes or modifications as would be considered as coming within ordinary mechanical skill may be resorted to.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a hay or straw stacker, the combination with a suitable standard, of a supporting frame or base consisting of jointed or pivoted sections, and a tongue to which the sections are pivotally connected, substantially as and for the purpose set forth.

2. In a hay or straw stacker, a suitable standard, an upright arm having upon its lower end a collar which loosely encircles the standard, a frame pivotally connected with the arm, a tilting platform or carriage, and intermediate connections between the carriage and frame, substantially as and for the purpose described.

3. A hay or straw stacker provided with a pivoted hand lever having pivotally connected to it an anchor-rod to enter the ground for steadying the stacker, substantially as and for the purpose specified.

4. In a hay or straw stacker, the combination with a tilting platform or carriage, of a releasing or holding device, consisting of a pivoted trip-lever upon an arm pivoted between the platform and frame supported upon a standard, and having a cord attached thereto, and a fulcrum and keeper upon the end of a pivoted bar to engage with a pin on the arm, 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.

PETER F. FLEMING.

Witnesses:
J. D. HAMMETT,
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