

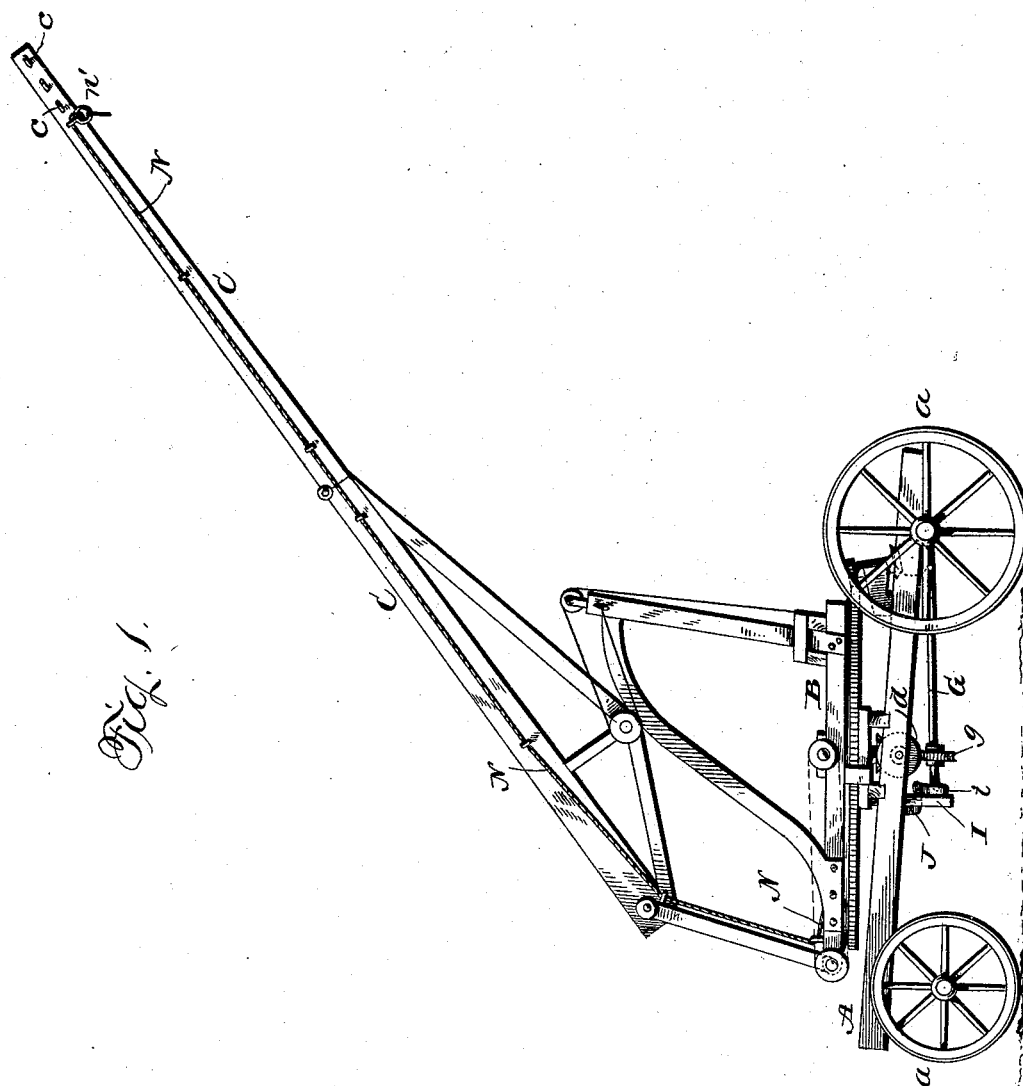
(No Model.)

2 Sheets—Sheet 1.

G. A. KENNEDY.
HAY STACKER.

No. 494,336.

Patented Mar. 28, 1893.



21.

Witnesses
C. J. Williamson.
A. L. Hough

Inventor
George A. Kennedy,
by Franklin N. Douglass
his atty.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

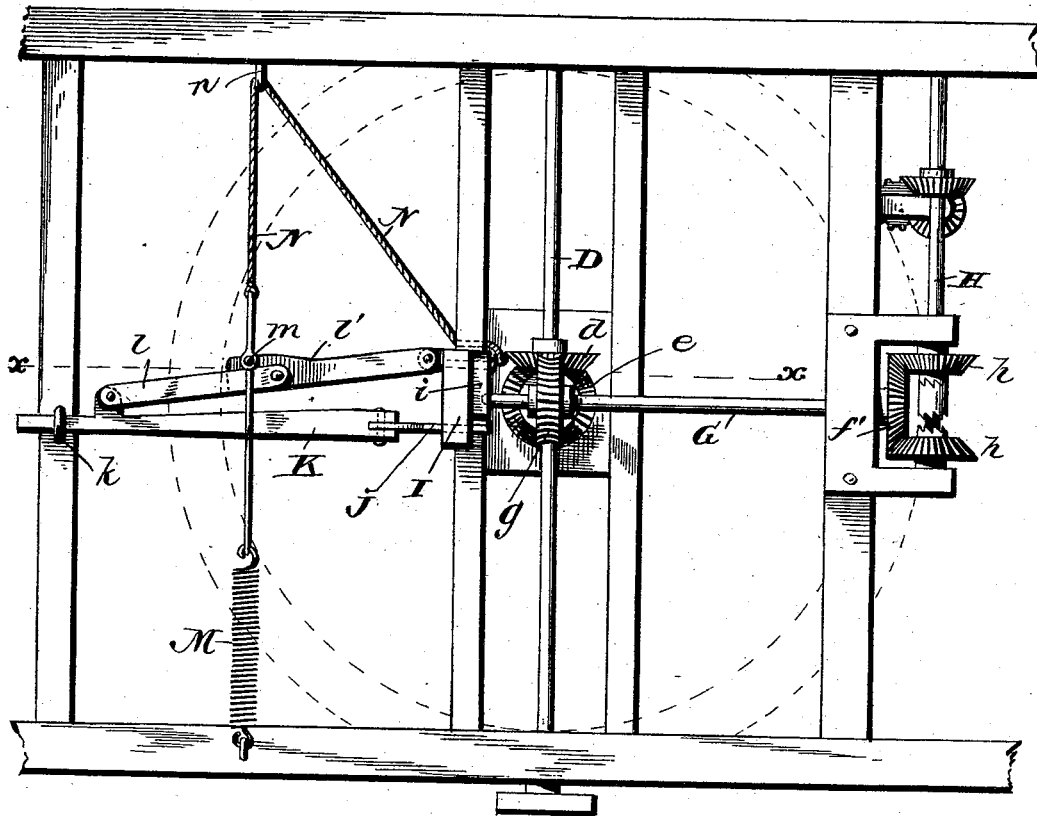
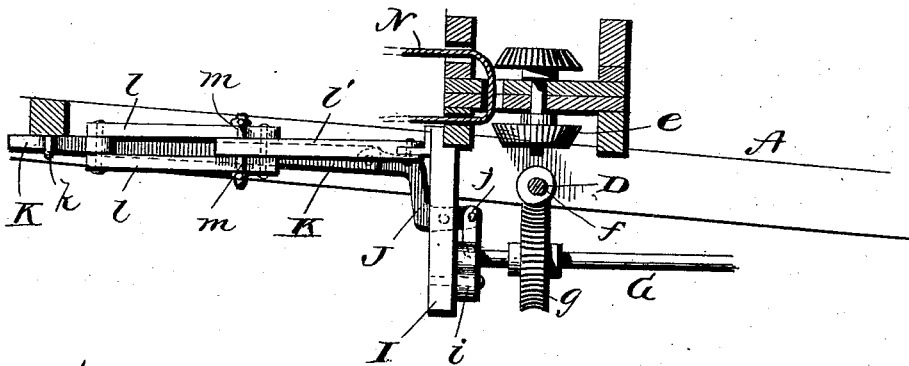


Fig. 3.



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UNITED STATES PATENT OFFICE.

GEORGE A. KENNEDY, OF OLENA, OHIO.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 494,836, dated March 28, 1893.

Application filed December 31, 1892. Serial No. 456,880. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. KENNEDY, a citizen of the United States, residing at Olena, in the county of Huron and State of Ohio, have
5 invented certain new and useful Improvements in Hay or Grain Stackers; and I do 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
10 it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to that class of hay
15 and straw stackers which employ elevators mounted on a rotary turn-table or platform which is slowly revolved as the stacking progresses, to gradually change the place of deposit in a horizontal direction. It is frequently desirable to stop this motion of the
20 elevator and to discharge in one place only, and this is effected by throwing the revolving mechanism out of gear. Heretofore the stopping has been done by a man upon the ground
25 acting under the direction of another upon the top of the stack. This, as is at once obvious, is very disadvantageous, as it necessitates the attention of two men, and is objectionable for other reasons.

30 It is the object of my invention to provide means to enable the horizontal movement of the elevator to be controlled entirely by the man upon the stack, and thus save the time and attention of the man operating the machine upon the ground, besides being more
35 satisfactory, in that the stoppage and starting can be effected immediately, when in the judgment of the man on the stack it is necessary, with out the trouble and delay incident to calling upon another person.

40 To this end my invention consists in the mechanism having the construction and combination of parts hereinafter specified, and illustrated in the accompanying drawings, in
45 which,

Figure 1, is a side elevation of one construction of stacker to which my invention is applicable. Fig. 2, is an under side view of a portion thereof. Fig. 3, is a section on the
50 line *x, x* of Fig. 2.

With the structure of the stacker proper my invention has nothing to do, and the same

may be varied without departing from my invention. The one shown comprises a supporting frame A mounted upon carrying
55 wheels *a*, a turn-table or revolving platform B, and an endless carrier or elevator frame C composed of several sections hinged together to enable such frame to be compactly folded together when not in use. Said frame
60 C is hinged to the turn-table to enable its discharge end to be raised and lowered. The mechanism for rotating the turn-table, briefly set forth, is as follows: Extending cross-wise
65 of the frame A and suitably journaled thereby is a shaft D having a bevel gear *d* receiving motion from a bevel-gear *e* driven by suitable connection with the elevator moving mechanism, or any other source of power.
Also on said shaft D, is a worm *f* adapted to
70 drive a worm-wheel *g* mounted on a shaft G extending at right angles to the shaft D and carrying on its front end a bevel-gear *f'* that meshes with two like gears *h, h* loosely mounted on a transverse shaft H, to which either is
75 adapted to be clutched to run the shaft in one direction or the other. This shaft H is connected by suitable gearing with the turn-table B and is thus adapted to rotate it slowly and in either direction.

80 The end of the shaft G near the worm-wheel is journaled in a movable block *i* pivoted to a standard I that depends from one of the cross-bars of the frame A, and to such block is connected one arm of a bell-crank lever J,
85 by a short link *j*, said bell-crank lever being pivoted to a standard I. To the other arm of said lever is pivotally connected a horizontal, rearwardly extending bar K whose rear end passes through and is guided by a loop *k* attached to one of the cross-bars of the frame
90 A. Heretofore when it was desired to stop the rotary movement of the elevator, the free end of the bar K has been grasped by the hand of the man upon the ground and said lever
95 pushed inward to swing the block *i* downward and thus move the worm-wheel *g* downward away from the worm *f*, while to start such rotary motion, said bar K is drawn outward, with the effect of restoring the engagement
100 between the worm-wheel and worm. I now propose to enable a man from the stack to control the rotary movement of the elevator, and this I accomplish as follows.

Pivoted to a lateral projection on the bar K, are two bars or links *l* which extend toward the standard I and have pivotally connected to their free ends, between them, a link *l'*, one normally kept in a straight line so as to project the bar K outward and thus keep the worm and worm-wheel in mesh by a spiral spring M having one end attached to the frame A and its other end to pins *m* projecting from the bar *l'*. Said pins *m* are arranged to engage the bars *l* on the side away from the spring and operate to prevent the bars being pulled by the spring beyond a point when they are in line, although permitting them to be moved readily in the opposite direction, to carry the bar K inward to disengage the worm-wheel. Such movement in the opposite direction is effected by a cord N, likewise connected to pins *m*, that extend thence to a pulley *n* on the frame A directly in line with the spring M, thence to and through openings at the center of the turn-table, thence to the lower end of the elevator frame, and then along side of the latter to the outer end thereof where it is provided with a ring *n'* to engage any one of the several pins *c* on said frame. Suitable guide-pulleys or eyes are of course provided for the cord, and in arranging it due consideration is given to the joints and centers of motion of the apparatus.

Normally, it will be seen that the worm and worm wheel mesh by reason of the spring, but when it is necessary to stop the rotary motion of the elevator the cord has simply to be pulled to flex the jointed bar formed of the bars *l* and *l'*. If it be desired to keep said worm and wheel out of gear, the ring *n'* is simply slipped over one of the pins *c*, and to

cause them to again mesh it is only requisite to release the cord N by disengaging the ring from the pin.

It will be seen that the rotation of the elevator is wholly under the control of the man upon the stack.

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

1. In a stacker having an elevator adapted to be rotated horizontally, the gearing for rotating the same, comprising in part a worm and worm-wheel, the means for moving these into and out of mesh comprising a jointed bar a sliding-bar to which one end of the jointed bar is pivoted a spring to move the latter in one direction and a cord extending to a distant part of the machine to move it in the opposite direction, substantially as described.

2. In a stacker having an elevator adapted to be rotated horizontally, in combination with the rotary mechanism, the means to throw the latter in and out of gear, comprising a bell crank lever a sliding bar, connected with the bell crank lever a hinged or jointed bar connected to the latter, a spring connected with the hinged bar to move it in one direction, and a cord connected to the same to move it in the opposite direction, said cord running to the outer end of the elevator, substantially as and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. KENNEDY.

Witnesses:

HENRY W. BUTLER,
JOHN C. SPENCER.