

UNITED STATES PATENT OFFICE.

RUFUS H. FAWCETT, OF SALISBURY, MISSOURI, ASSIGNOR OF TWO-THIRDS HIS RIGHT TO JAMES L. DOBSON, OF SAME PLACE.

IMPROVEMENT IN HAY-LOADERS.

Specification forming part of Letters Patent No. **196,441**, dated October 23, 1877; application filed August 25, 1877.

To all whom it may concern:

Be it known that I, RUFUS H. FAWCETT, of Salisbury, in the county of Chariton and State of Missouri, have invented a new and valuable Improvement in Hay-Elevators; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my hay-elevator. Fig. 2 is a longitudinal vertical sectional view, and Figs. 3 and 4 are details thereof.

The nature of my invention consists in the construction and arrangement of a hay-stacker, wagon-loader, and elevator, as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

A A represent the bed-sills of the frame A', connected by suitable cross-bars, and each sill provided on the outer side, near one end, with a loop or box, B, in which is mounted a wheel or roller, C. At this end of the bed-frame is a draft-bail, E, for attaching the team, for moving the elevator from place to place. The opposite ends of the sills A A are beveled, as shown at *a a*, to allow the carriage, hereinafter described, to get down on the ground. The bed-frame is held stationary to the ground by means of stakes *b*, driven into the ground through staples *d*, fastened in the sills, substantially as shown.

To the sills A A, near their rear beveled ends, are attached inclined beams or ways D D, supported near their front ends by means of uprights or braces D' D', the lower ends of which are inserted in the front ends of the loops or boxes B B, and held therein by pins *e*. The lower ends of the braces D' are perforated with series of holes for the passage of the pins *e*, so that the braces can be adjusted up and down, as required, to regulate the inclination of the beams or ways D D.

In the upper end, between the beams D D, is pivoted a tilting frame, G, which folds downward between said beams, and is locked to a

cross-bar connecting the beams by means of hooks *h h*, pivoted or hinged to the frame G, and taking into staples *i i* on said cross-bar.

At the upper end of the frame G, in the center, are attached two bars, *k k*, between which are mounted two pulleys, *m m*, as shown.

At the lower end of said frame G is pivoted a hook, *p*, which passes through an eye, *n*, on the cross-bar, between the beams D D.

The carriage is composed of a slatted or skeleton platform, H, provided with a weighted frame, I, hinged to its under side near the outer edge. In the inner edge of the platform H, and in the lower end of the frame I, are mounted rollers *s s*, as shown, which are to run upon the inclined beams or ways D D. On the outer side or end of each roller a cross-bar of the platform and frame, respectively, extends outward, to form guides *t t* on the outer sides of the beams or ways D.

J is the hoisting-rope, one end of which is fastened to the upper ends of the bars *k k* on the frame G, and from there the rope passes around a pulley, *v*, connected to the platform H, and thence over and around the pulleys *m m*, between the bars *k k*. From these pulleys the rope J is passed under and around a pulley, *w*, arranged in the bed-frame A.

The operation is as follows: The raked hay having been dumped upon the platform H, or said platform otherwise loaded, the rope J is pulled, which causes the platform H to rise horizontally, its rollers *s* bearing against the inclines D. The frame I is provided at each end with a hook, *y*, which passes through an eye, *x*, on the platform H. Now, when the platform has been raised far enough for the hooks *y* to catch on the eyes *x*, the frame I will also move with the platform up the inclines D. When the inner side of the platform H reaches the upper end of the pivoted frame G, two hook-arms, *z z*, attached to the frame I, strike the hooks *h h*, and release the same from the staples *i i*, allowing the frame G to tilt over, dumping the load off from the platform. The platform is prevented from falling off the frame G by the arms *z z* bearing against a cross-bar in said frame. As soon as the load is thus dumped the rope J is slacked, when the

frame G resumes its former position, and the platform and frame I pass down the inclines of their own gravity, the hooks *h h* at once engaging with the staples *i i*, to hold the frame G in its place.

When the frame I in its descent reaches the beveled ends *a* of the sills A, pins *a'* at each end of the frame catch upon stops *b'* in the ends of the sills, and stop the movement of this end of the frame. The platform H continues its descent, the frame I turning on its hinges, until the platform lies down on the ground.

The bars *k* at the top of the pivoted frame G act as a head-stop for the upward movement of the platform H.

It is, of course, understood that the beams D D, as well as the frames G and I, are suitably braced, by cross-bars, diagonal rods, &c., to make them as strong as may be required.

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

1. In an elevating and loading machine, an elevating-carriage, in combination with a tilting frame and operating mechanism, substantially as described, and for the purpose set forth.

2. In an elevating and loading machine, a

carriage composed of a skeleton platform, H, and provided with a weighted frame, I, hinged to its under side, substantially as and for the purpose set forth.

3. The combination, substantially as hereinbefore described, of an inclined frame, a platform with a hinged frame, and a tilting frame, with their connecting mechanism, all operating in the manner as set forth, and for the purpose described.

4. The pivoted frame or dumper G, with head-stop *k*, and pivoted hooks *h h*, with the staples *i i*, in combination with the beams D D, and platform H, with hook-arms *z z*, all substantially as and for the purposes herein set forth.

5. The combination of the platform H, hinged frame I, rollers *s*, guides *t*, arms *z*, and hooks *y*, with eyes *x*, all substantially as and for the purposes set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

RUFUS HAYWOOD FAWCETT.

Witnesses:

JOHN H. THOMAS,
R. W. MINOR.