

No. 760,268.

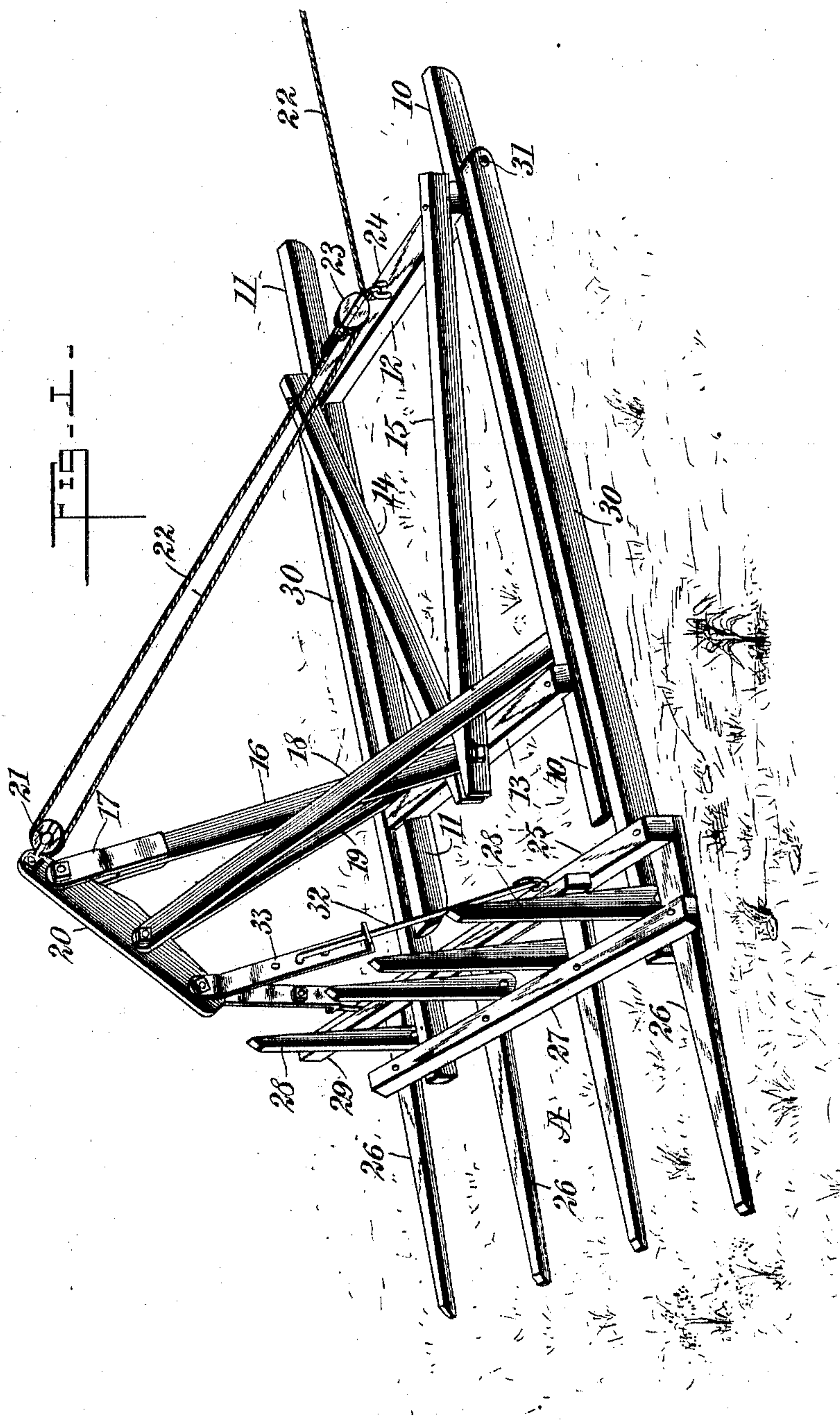
PATENTED MAY 17, 1904.

O. D. STALCUP.
HAY STACKER.

APPLICATION FILED OCT. 3, 1903.

NO MODEL.

2 SHEETS—SHEET 1.



WITNESSES:

Paul Hunter
Oscar D. Stalcup

INVENTOR

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BY

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ATTORNEYS

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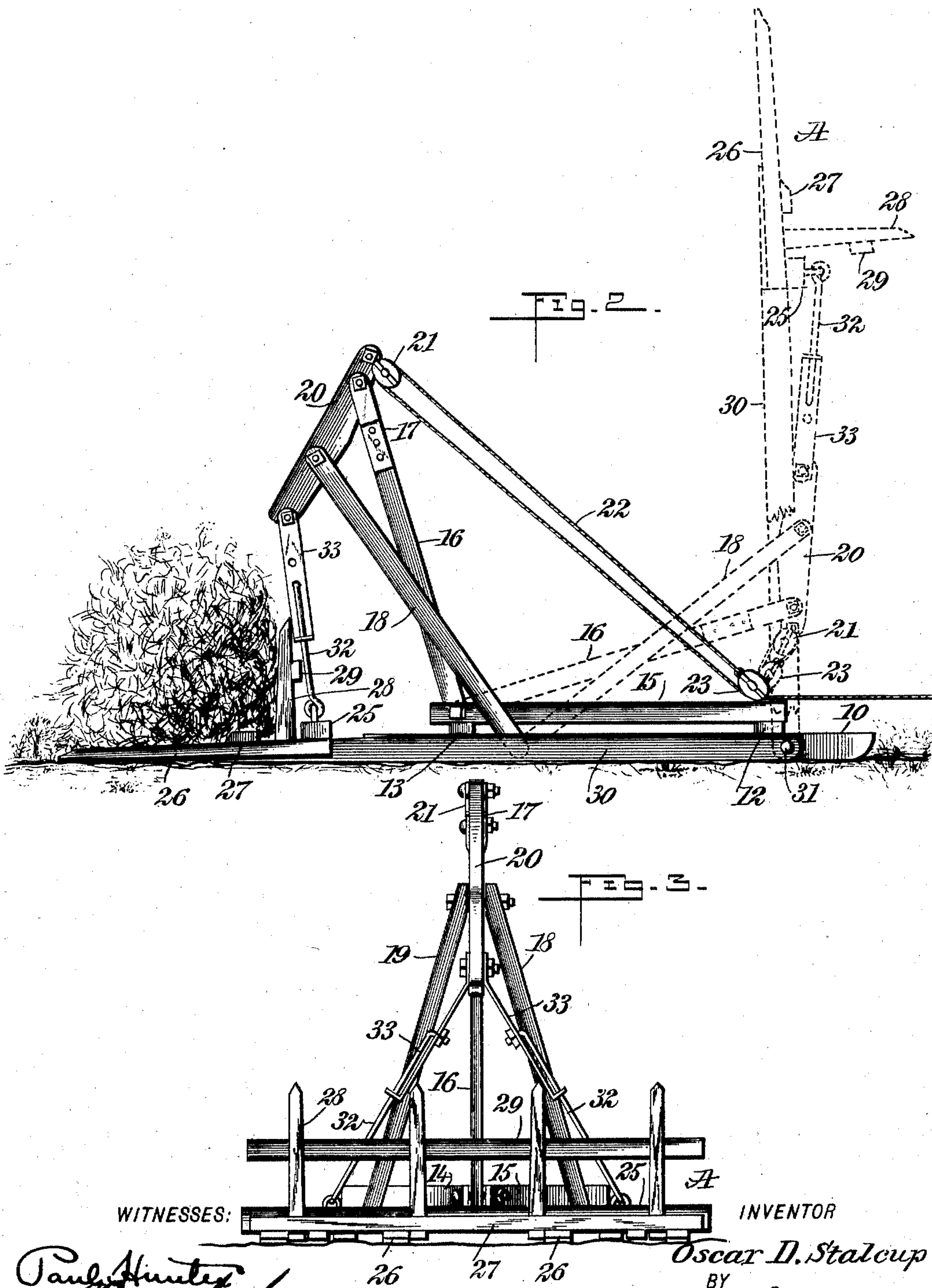
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UNITED STATES PATENT OFFICE.

OSCAR D. STALCUP, OF UNIONVILLE, MISSOURI.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 760,268, dated May 17, 1904.

Application filed October 3, 1903. Serial No. 175,838. (No model.)

To all whom it may concern:

Be it known that I, OSCAR D. STALCUP, a citizen of the United States, and a resident of Unionville, in the county of Putnam and State of Missouri, have invented a new and Improved Hay-Stacker, of which the following is a full, clear, and exact description.

The purpose of my invention is to provide a hay-stacker which will be simple, durable, and economic and which can be operated close to the stack, thereby enabling an operator to keep the stack upright and in desirable shape.

Another feature of the invention is to so construct the stacker that springs or weights are not required to start it back on the return from its upright or delivery position and to so construct the draft device and mountings for the carrying-head that the head may be operated without interference, no matter how close the device may be to the stack.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the device in normal position. Fig. 2 is a side elevation of the device, illustrating it in normal or receiving position in positive lines and in delivery position in dotted lines; and Fig. 3 is a front elevation of the device.

The base structure of the device consists of parallel side sills 10 and 11 of suitable length, a front cross-bar 12, connecting the sills, and a rear cross-bar 13, also attached to the sills. Intermediate longitudinal beams 14 and 15 extend from the ends of the forward cross-bar 12 to the central portion of the rear cross-bar 13, and between the rear or converging ends of the beams 14 and 15 the lower end of an upright arm 16 is suitably pivoted, the upper portion 17 of the said arm 16 being bifurcated.

Two standards 18 and 19 are pivoted at their lower ends to the inner faces of the side sills 10 and 11 forward of the pivot-point of the arm 16, the pivotal attachment of the said

standards 18 and 19 with the said sills 10 and 11 being made forward of the rear cross-bar 13 of the base.

A cross-head 20 is pivoted between the uprights 18 and 19 at a point to the rear of its center, and the forward portion of the said cross-bar 20 is pivoted in the bifurcated section 17 of the upwardly-extending pivoted arm 16. At the forward end of the cross-head 20 a block 21 is suitably attached, and a rope, chain, or cable 22 is passed over this block 21 and over a second block 23, attached, by means of a staple 24, for example, to the forward cross-bar 12 of the base, one end of the said rope, chain, or cable 22 being attached to the lower block 23, and at the other end of the said rope, chain, or cable 22 a suitable draft device is secured—as, for example, a single or a double tree.

The receiving-head A of the device, or the head which is to receive the hay and deliver it for stacking purposes, consists of a forward cross-bar 25 (best shown in Fig. 1) and a series of longitudinal rearwardly-extending fingers 26, attached to the forward cross-bar preferably at its under face, together with a rear cross-bar 27, extending over all of the fingers 26 and attached thereto. The said head is completed by the addition of a series of vertical fingers 28, attached to the horizontal fingers 26 between the cross-heads, as is also shown best in Fig. 1. These vertical fingers 28 are stayed or strengthened by means of a cross-bar 29, connected with all of the vertical fingers, as is also shown in Fig. 1, the said stay-bar 29 engaging with the forward edges of the said vertical fingers.

The receiving-head A is attached, by means of its cross-bars 25 and 27, to beams 30, which beams extend along the outer sides of the sills 10 and 11 of the base and are pivotally attached to the base near the forward ends of the said sills 10 and 11, as is shown at 31 in the drawings. An adjustable connection is provided between the receiving-head A and the cross-head 20, and such connection consists of links 32, which are pivotally attached to the forward cross-bar 25 of the receiving-head, one at each side of its center, and straps 33, which are pivotally attached to the rear

end of the cross-head 20 and are adjustably connected with the aforesaid links 32.

In the operation of the device when the receiving-head A is in its normal or horizontal position the hay to be elevated and stacked is placed thereon, as is shown in Fig. 2. After the head has received its load and the chain, rope, or cable is drawn upon the head is elevated to the upper approximately vertical position shown by dotted lines in Fig. 2, the arm 16 is carried to a forwardly-inclined position, and the beams 18 and 19 likewise to a forwardly-inclined position extending above the arm 16, the cross-head 20 being straight or vertical, and as the preponderance of weight of the receiving-head A is in direction of the rear of the device when the said head is in position to dump its load, and especially as the beams 18 and 19 are pivoted at one side of the center of the cross-head and the arm 16 at the opposite side of the center of the cross-head near its lower end when the receiving-head is in dumping position, the moment that the rope, chain, or cable 22 is relieved from tension the receiving-head will automatically drop back to its receiving position, restoring the mountings for the said head to their normal position. (Shown in Fig. 2.) By using the two blocks 21 and 23 there is but little friction and the device is rendered exceedingly strong and safe with respect to its elevating medium.

It will thus be observed that the return movement of the head is effected solely by gravity and that it will positively return to receiving position at all times when tension on the draft device is relieved. It will likewise be seen that all springs and weights ordinarily employed to secure like results are dispensed with, thereby simplifying the device and rendering it exceedingly strong, durable, and capable of convenient operation.

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

1. In a hay-stacker, a base, a receiving-head, beams attached to the head and pivoted to the base, an upright arm pivoted on the base at the rear of the attachment of the head-beams to the base, a cross-head pivoted at its forward end to the said upright arm, standards pivoted to the base forward of the pivot-point of the upright arm, which standards are pivoted to the cross-head between its center and rear end, and a pivotal connection between the receiving-head and the rear portion of the cross-head, as described.

2. In a hay-stacker, a base, a receiving-head pivoted to the base, mounts for the cross-head carried by the base, including an upright arm, standards at opposite sides of the upright arm, the upright arm being pivoted to the base and likewise the said standards, the pivotal connection of the standards to the base being forward of the pivotal connection of the upright arm to the base, a cross-head pivotally

attached at its forward end to the upright arm and pivotally connected with the standards between its center and its rear end, and an adjustable pivotal connection between the said head and the rear portion of the said cross-head, as described.

3. In a hay-stacker, a base, a receiving-head pivoted to the base, mounts for a cross-head carried by the base, including an upright arm and standards at opposite sides of the upright arm, the upright arm being pivoted to the base and likewise the said standards, the pivotal connection of the standards to the base being forward of the pivotal connection of the upright arm to the base, a cross-head pivotally attached at its forward end to the upright arm and pivotally connected with the standards between the center and its rear end, an adjustable pivotal connection between the said head and the rear portion of the said cross-head, pulleys located one at the forward end of the cross-head and the other at the forward portion of the base, and a draft rope, chain or cable attached to the lower pulley, being passed over the upper pulley and returned in engagement with the lower pulley, as set forth.

4. A hay-stacker, comprising a base, a receiving-head mounted to swing forwardly on the base to delivery position, a cross-head connected at its rear end with the receiving-head and at its forward end with block-and-tackle mechanism adapted to move the cross-head forwardly to bring the receiving-head to delivery position, said cross-head having independent pivotal supports between its ends, one pivoted in advance of the other, said supports being also pivoted at their lower ends to the frame, one in advance of the other, the one pivoted rearwardly on the cross-head being the forward one of the two at their lower ends, whereby when the device is moved forwardly by the operating means, said cross-head is rocked causing its rear end to move upwardly relatively to its forward end to assist in elevating the receiving-head of the stacker.

5. A hay-stacker, comprising an elongated base, a receiving-head at the rear end of said base, supporting-beams for said head pivoted at the forward end of the frame and extending rearwardly to engage said head, a cross-head, a link at the rear end of the cross-head pivotally connecting the same with said receiving-head, said cross-head being connected at its forward end with block-and-tackle mechanism, the cooperating block of said mechanism being attached to the forward end of the frame to move said cross-head forwardly to delivery position, two independent pivotal supports for said cross-head between its ends, one pivoted in advance of the other, said supports being also pivoted at their lower ends to the frame, between its ends, one support being in advance of the other at this end also, the one

pivoted rearwardly on the cross-head being the forward one of the two at their lower ends, said latter support being longer than the other support.

- 5 6. A hay-stacker, comprising a base, a receiving-head mounted to swing on the base to delivery position, a cross-head, independent pivotal supports for said cross-head, said supports being pivoted to the base one in front of
10 the other, means for pivotally connecting said

receiving-head and said cross-head, and means for swinging said cross-head to bring the receiving-head to delivery position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

OSCAR D. STALCUP.

Witnesses:

LORENZO JONES,

P. T. WILLIAMS.