

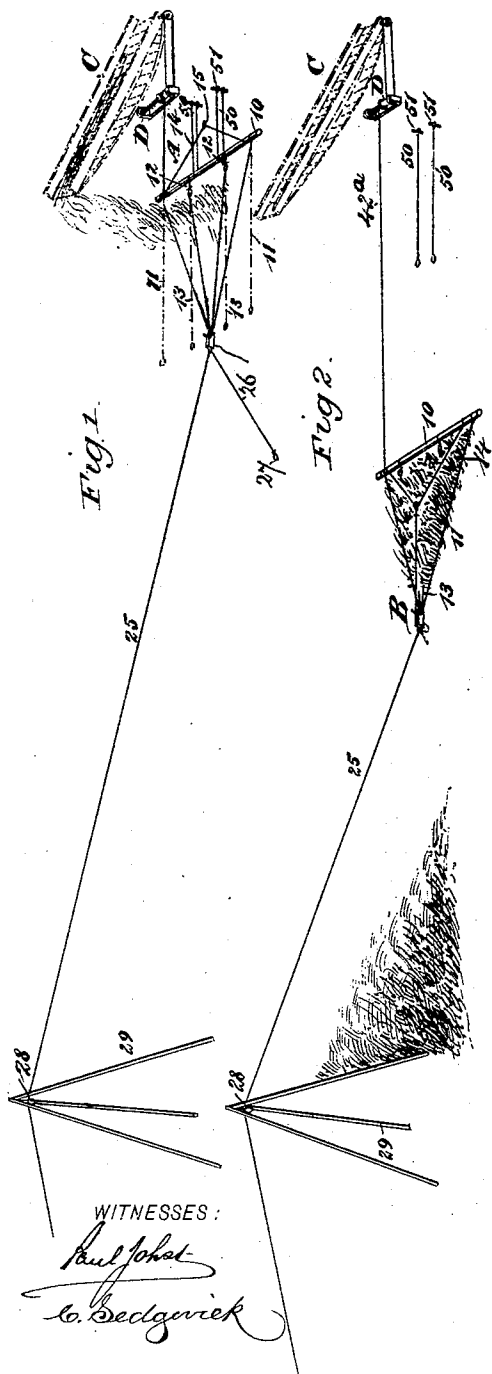
(No Model.)

2 Sheets—Sheet 1.

J. M. KELLOGG.
HAY SLING.

No. 487,575.

Patented Dec. 6, 1892.



WITNESSES:

Paul Johat
C. Sedgwick

INVENTOR:

J. M. Kellogg
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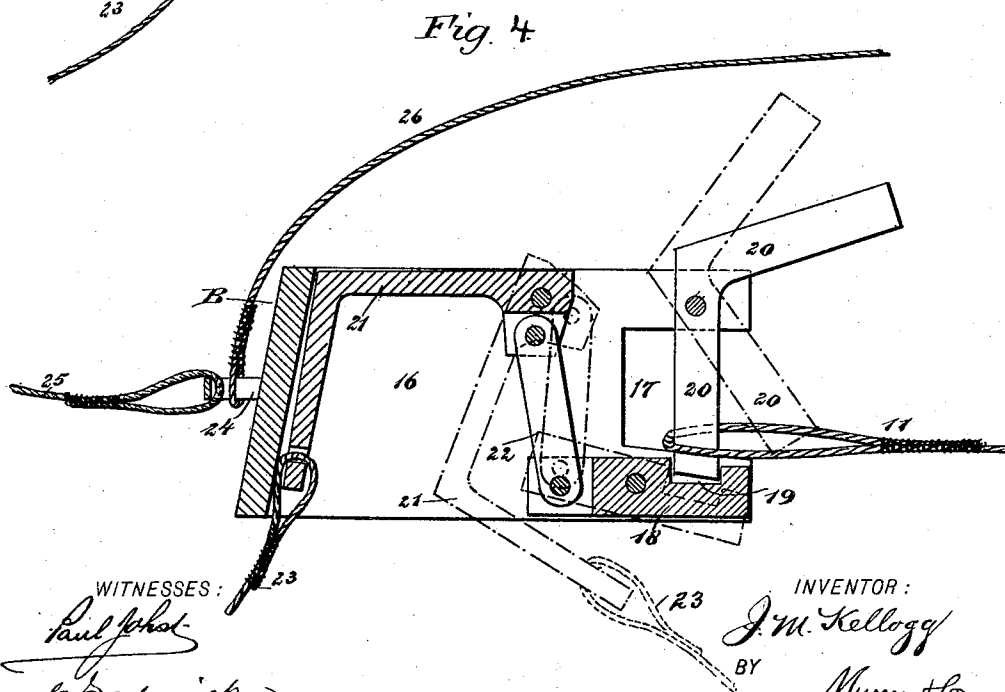
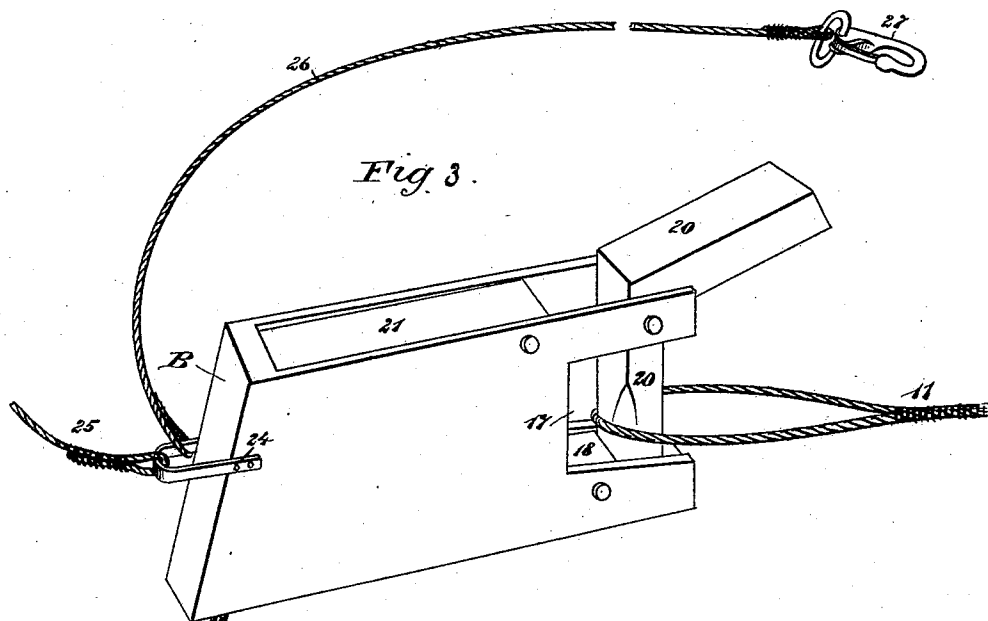
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UNITED STATES PATENT OFFICE.

JAMES M. KELLOGG, OF BOZEMAN, MONTANA.

HAY-SLING.

SPECIFICATION forming part of Letters Patent No. 487,575, dated December 6, 1892.

Application filed January 29, 1892. Serial No. 419,677. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. KELLOGG, of Bozeman, in the county of Gallatin and State of Montana, have invented a new and useful Improvement in Hay-Slings, of which the following is a full, clear, and exact description.

My invention relates to an improvement in hay-slings or hay-carriers, and has for its object to provide a device whereby the hay or straw may be carried from the delivery-spout of a thrashing-machine to the place where a stack is to be formed.

A further object of the invention is to provide a device of simple and economic construction, whereby the hay or straw will not be spilled out therefrom until it is desired by the operator to dump the same.

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 figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the carrier, illustrating it in position to receive a load. Fig. 2 is a similar view of the carrier, illustrating it as having received a load which is in transit to the stack. Fig. 3 is a perspective view of a trip-block employed in connection with the carrier, illustrating it in its closed position; and Fig. 4 is a vertical section through the block, the positive lines illustrating the parts in closed position and the dotted lines in open position.

The carrier proper A consists of a pole 10, near each end of which a length of rope 11 is secured, the free ends of the rope 11 terminating in rings or loops. Snaps 12 of any approved construction are attached to the pole 10, one at each side of the center thereof, and in connection with the pole two center ropes 13 are employed, terminating at each end in a loop or ring, one end of each of the center ropes being adapted for attachment to the snaps 12, and the pole 10 has further attached thereto a rope 14, which forms a loop by having both ends secured near the ends of the pole, and at the central portion of this rope 14 a ring 15 is secured.

In connection with the carrier proper above described a trip-block B is employed. This trip-block is preferably made of metal and is somewhat of rectangular shape, containing an interior chamber 16, opening from the top and bottom of the block and also at one end, and at the open end of the block B a longitudinal recess 17 is produced in each side. Within the block at the lower portion of its open end a keeper 18 is fulcrumed, the said keeper being of block form and provided with an extension at the rear of its fulcrum and with a recess 19 in its upper face. In the upper portion of the casing of the trip-block, at its open end, a trigger 20 is fulcrumed, the said trigger being practically L-shaped, and the lower end of this trigger is adapted to enter the recess 19 in the keeper 18 when the latter is in its horizontal or locked position. The movement of the keeper 18 is controlled through the medium of an angled lever 21, the horizontal member of which is pivoted within the casing of the trip-block at the top near the center and the vertical member extends normally downward practically parallel with the closed end thereof, as shown in Fig. 4. The fulcrum of the lever 21 is at the forward extremity of its horizontal member, and just below the fulcrum of the lever it is connected with the rear end of the keeper 18 through the medium of a link 22, as is likewise best shown in Fig. 4. When the lever 21 is drawn downward, so that its vertical member will extend through the bottom of the trip-block casing, as shown in dotted lines, Fig. 4, the keeper will be lowered and the trigger will be free to disengage itself therefrom. A rope 23 is attached to the lower end of the lever 21, and at the top or closed end of the trip-block a staple 24 is located, or the equivalent thereof, and to this staple two ropes are attached, (designated, respectively, as 25 and 26.) By means of the rope 25 the trip-block is drawn in direction of the stack, and the rope 26, which terminates at one end in a snap 27, is adapted to connect with the ring 15 on the rope 14 upon the carrier proper. The rope 25, by which the carrier-block is drawn, is adapted to be passed over a pulley 28, suspended from the upper portion of a tripod 29, the said tripod to be located at the point where the stack is to be formed, and after

passing over the pulley 28 the rope 25 is connected with any form of motor that may be desired.

The drum is made in two diameters in order that the returning cable 42^a may be secured to the smaller section of the drum and wind upon or unwind from the larger section, thus preventing the possibility of the cable becoming tangled and insuring its free coiling upon or uncoiling from the drum.

In the operation of the device the carrier A is placed in such a position beneath the delivery-spout C of the thrashing-machine as to receive straw therefrom, the four ropes 11 and 13 being carried outward at an angle to the pole 10, and the rope 14 is thrown over at the back of the pole. Two ropes 50, corresponding in length and in character to the central ropes 13 of the carrier, are placed back of the pole, and the loops or rings of these ropes 50 are temporarily placed over posts 51, located at the back of the pole, and the cable 42^a from the winding mechanism is connected with one end of the pole. As the carrier is being filled the trigger of the trip-block is freed from its keeper and the rings or loops of the four ropes 11 and 13 are passed around the vertical member of the trigger, and the trigger is then restored to a locking engagement with its keeper. This causes all of the ropes 11 and 13 to form, in connection with the pole, a triangle, and the straw is bunched in this triangle. After the carrier has been filled, and in order that none of the straw shall slip out at the back, and also to tie the straw upon the carrier, the rope 26, attached to the forward end of the trip-block, is carried over the block, and its snap 27 is connected with the ring 15 of rope 14, carrying said rope over the body of the straw-carrier. The motor attached to the end of the draft-cable 25 is then set in motion; but previous to this the operator at the carrier disengages one of the rings of each auxiliary rope 50 from the post 51, and, holding the rope in his hand, follows the carrier until the rings of said ropes 50 slip through his hands. The rope 23, attached to the lever 21, is secured to the outer face of the trip-block in any approved manner, and as the trip-block is drawn forward, taking with it the straw and carrier, as soon as the carrier arrives at a proper position to deposit its load the load is dumped by the operator at the stack by drawing down upon the rope 23, thus disengaging the trigger 20 from the keeper 18 and permitting the ropes 11 and 13 of the carrier to free themselves from the trigger. At this time the load is dumped, and as the trip-block is carried farther over in direction of the stack tension is exerted upon the binding-rope 14, and the pole 10 is thereby drawn from beneath the deposited load. The draft-rope 25 is then slackened and the winding mechanism is set in motion, thereby drawing the carrier again to the machine. The rope 26 and its snap 27 are disconnected from the binding-rope 14, and the pole is then placed

in position to receive another load. In receiving the second load the central ropes 13 are disengaged from the pole and the snaps 12 are connected with the ropes 50, which formerly acted as guide-ropes. These ropes will have received all of the overplus straw which dropped from the machine as the preceding load was removed, and these ropes with their load are carried to a position parallel with the outer ropes 11 of the carrier and are attached to its pole, the former intermediate ropes being utilized as guide-ropes for the load in lieu of those that acted in that capacity at the last loading of the carrier. This interchanging of the intermediate ropes of the carrier is effected each time the carrier is loaded. It will be observed that by the use of the central ropes the straw or hay is kept from falling from the carrier, and this result is further augmented through the medium of the upper tie-rope 14 and the rope 26, connecting it with the trip-block. Again, through the medium of the trip-block the load may be dumped wherever the operator at the stack may wish to deliver it.

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

1. In a hay-carrier, the combination, with a pole, a binding or tie rope connected at its ends near the ends of the pole, and ropes attached at each end of the pole, terminating at their outer ends in loops or rings, of an intermediate rope terminating at both ends in rings or loops and detachably connected with the pole, and duplicates of the intermediate rope adapted at times as guides for the pole and at other times for direct attachment thereto, whereby when serving in the former capacity the auxiliary ropes receive the overplus straw from the delivery apparatus, as and for the purpose set forth.

2. In a hay-carrier, the combination, with a trip mechanism and a tie-rope connected therewith, of a hay-carrier consisting of a pole, a series of ropes projected from the pole, terminating at their outer ends in rings or loops and all adapted for attachment to the trip mechanism, and a back rope having both ends secured to the pole and adapted for connection with the tie-rope of the trip mechanism, as and for the purpose set forth.

3. The combination, with a trip mechanism consisting of a trigger, a keeper engaging with the trigger, and a trip-lever connected with the keeper, of a hay-carrier comprising a pole, a series of ropes connected with and leading from the pole, which ropes are connected with the trigger of the trip mechanism when said trigger is in engagement with its keeper, a tie-rope connected with the casing of the trip mechanism, and a rope which forms a loop by having both ends connected to the pole of the carrier, the said rope being adapted for connection with the tie-rope of the trip mechanism, as and for the purpose set forth.

4. The combination, with a trip mechanism comprising a casing, a trigger, a keeper adapted for engagement with the trigger, and a trip-lever connected with the keeper, of a hay-carrier consisting of a pole, a series of ropes projected from the pole, the outer ones being firmly attached to the pole and the inner ones detachable therefrom, all the ropes terminating at their outer ends in rings or loops adapted to receive the trigger of the trip mechanism, a back rope, which forms a loop by having both ends secured to the pole, and a tie-rope attached to the casing of the trip mechanism and adapted for engagement with the back rope of the carrier, all combined for operation substantially as shown and described.

5. The combination, with a tripod carrying a friction-roller, a trip mechanism provided

with a trigger and a trip-lever connected therewith, and a draft-rope attached to the trip mechanism and passing over the friction-roller of the tripod, of a hay-carrier consisting of a pole, a series of bottom ropes projected from the pole, all of which are provided with loops or rings to receive the trigger of the trip mechanism, a back rope attached at both ends to the pole of the carrier, a rope secured to the trip mechanism and adapted for engagement with the said back rope, and guide-ropes adapted for use in connection with the carrier, substantially as shown and described.

JAMES M. KELLOGG.

Witnesses:

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ALBERT SMITH.