

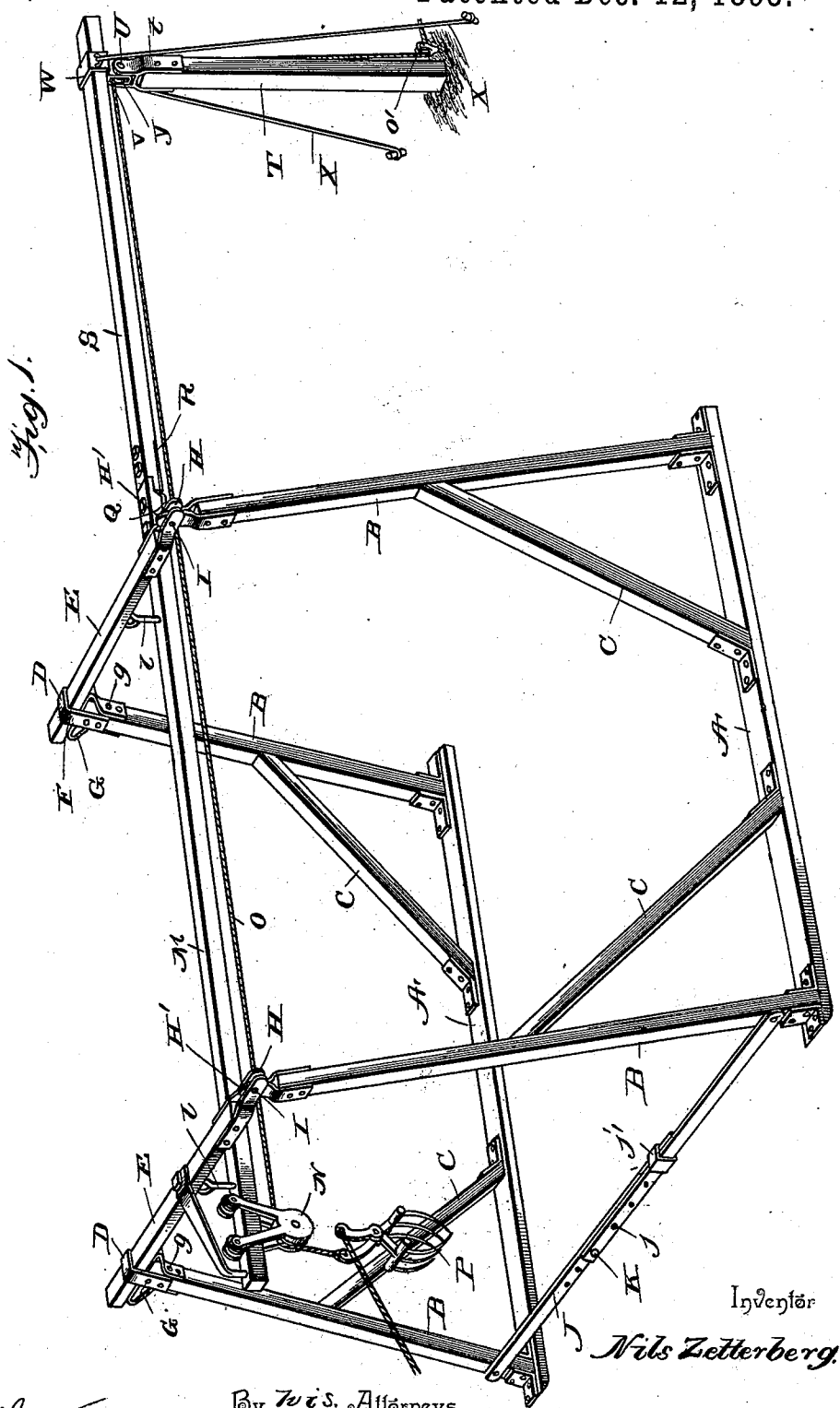
(No Model.)

2 Sheets—Sheet 1.

N. ZETTERBERG.
HAY STACKER.

No. 510,495.

Patented Dec. 12, 1893.



Witnesses

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Inventor

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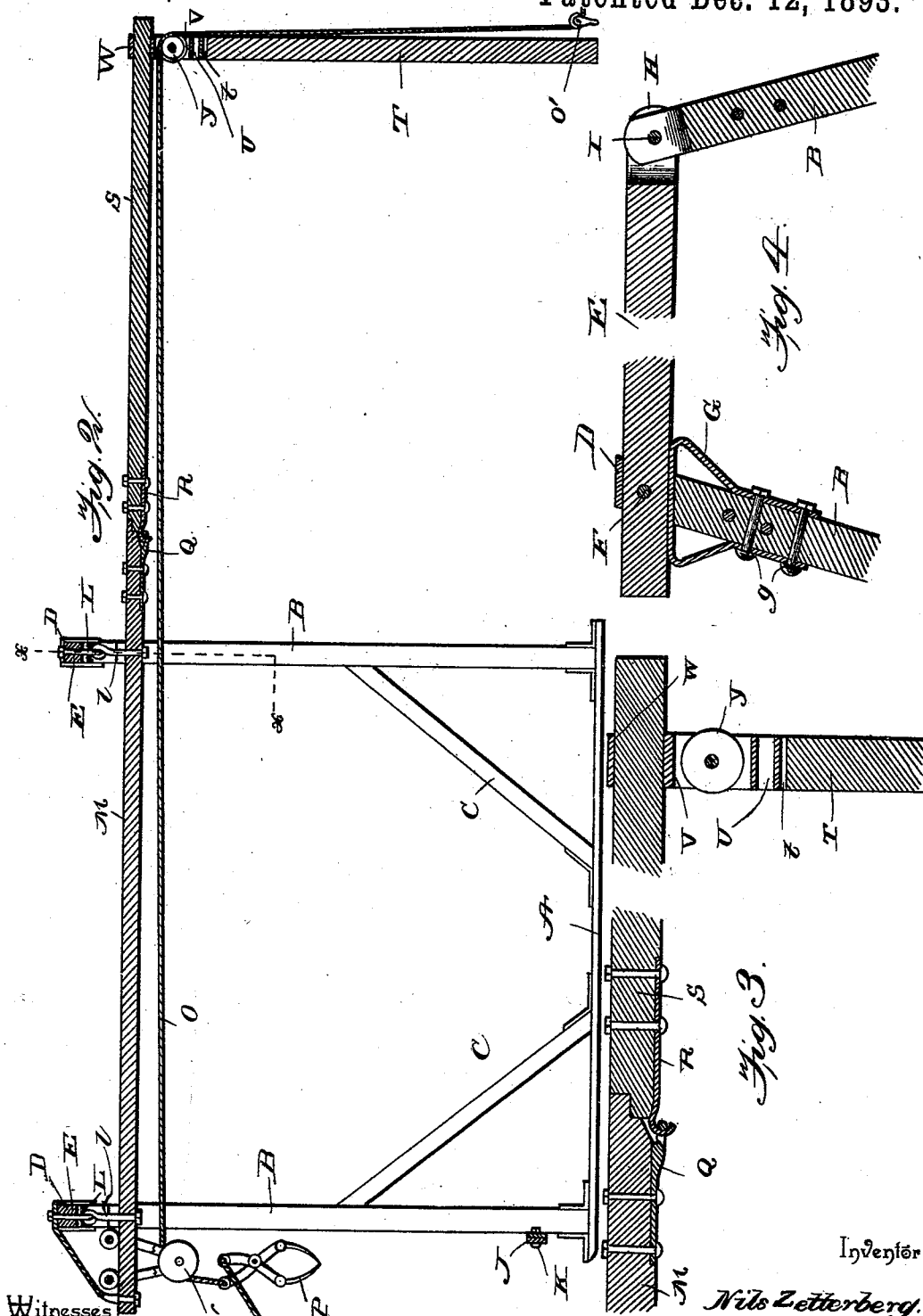
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N. ZETTERBERG.
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No. 510,495.

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UNITED STATES PATENT OFFICE.

NILS ZETTERBERG, OF BELGRADE, MINNESOTA.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 510,495, dated December 12, 1893.

Application filed May 25, 1893. Serial No. 475,488. (No model.)

To all whom it may concern:

Be it known that I, NILS ZETTERBERG, a citizen of the United States, residing at Belgrade, in the county of Stearns and State of Minnesota, have invented a new and useful Hay-Stacker, of which the following is a specification.

This invention relates to haystackers; and it has for its object to provide certain improvements in stackers of that character which are capable of being moved from place to place in piling up different stacks on a field.

To this end the main and primary object of the present invention is to provide a portable hay stacker capable of being readily knocked down and again set up for use, as well as being laterally adjustable in width to not only accommodate it to different widths of stacks, but also to permit the same to be carried through gates, over bridges, &c.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a perspective view of a hay stacker constructed in accordance with this invention. Fig. 2 is a vertical longitudinal central view thereof. Fig. 3 is an enlarged central longitudinal sectional view including the connection of the extension track with the main track, and the leg support or standard for the extension track. Fig. 4 is an enlarged detail sectional view on the line $x-x$ of Fig. 2.

Referring to the accompanying drawings, A represent the opposite runner frames which are adapted to slide on the ground when being moved from place to place, but said runner frames may be supported on wheels in order to insure the more convenient transportation of the stacker, and each of said runner frames is provided with the end uprights B, braced thereto by the brace bars C, and arising from the runners at their extremities. The end uprights of each runner frame are not truly perpendicular to the runners to which they are attached, but are disposed at an upward angle therefrom so that the opposite pairs of uprights converge toward each other, thereby forming an open frame between the same, which approximates the shape of stack or rick formed there-between. To

the upper extremities of the uprights B, arising from one of the runners, are attached the slip loops D, projected above the uprights in order to each removably receive one end of the upper cross beams E, which are held in position in said loops by the securing pins or bolts F, and which rest flat on the top of the rest plates G. The rest plates G, have the opposite side portions g , thereof, attached to opposite sides of the uprights to which the slip loops are attached, so that the top portions thereof, on which the cross beams rest, will be disposed in a horizontal plane, thereby supporting the ends of the cross beams E, in a horizontal position.

The other extremities or ends of the cross beams E, are provided with the off-standing perforated pivot ears or lugs, H, which are adapted to embrace corresponding ears H' on the upper extremities of the uprights arising from the other opposite runner, and pivot pins or bolts I, pass through the superposed ears, so that one of the runner frames is pivotally attached to one extremity of the cross beams, whereby a laterally spreading adjustment of the stacker frame may be secured. The laterally spreading adjustment of the stacker frame permits the same to be widened or narrowed, as desired, according to the nature of the work or the ground, in case of unevenness, or to permit the stacker to be carried over bridges or through gates, and the same may be held firm in any adjusted position by means of the sectional adjustable end brace J. The sectional adjustable end brace J, comprises separate perforated members j , pivoted at one end to directly opposite end uprights and held together by the loop j' , and said members are held in any adjusted position by means of a pin or bolt K, engaging any of the aligned perforations thereof.

Suspended from the eyes L, attached centrally to the cross beams E, by means of hooks l , engaging said eyes, is the main longitudinal track M, which is designed to accommodate a wheeled traveler or carrier N. The wheel traveler N, is of the ordinary construction and accommodates the fork rope O, leading to a suitable power at one end and at its other end carrying the ordinary hay fork P, which receives its load from one end of the stacker, and carries it over and distributes it onto the stack arranged under the track M. The track M is provided at one end, beyond

one end of the stacker frame, with the eye plate Q, which is adapted to removably receive the attaching hook R, secured to one end of the track extension S, and both said track extension S and the main track M, are rabbeted as at s, at their meeting ends, so as to provide a continuous unbroken line of track for the carrier N, to travel on. The other outer extremity of the track extension S, is firmly supported in position by means of the folding leg standard T, the lower end of which is adapted to rest on the ground, and the upper end of which has attached thereto the casting t, provided with the parallel lugs U, between which is pivoted the open pulley box V. The open pulley box V, is a part of the loop casting W, which loosely embraces the track extension S, and is free to slide thereon, so that the leg standard T, can be adjusted to rest in any desired position under the track extension, to give it the proper support, and when adjusted, suitable guy ropes X, may be run from the loop W, to the ground. The open pulley box V, is disposed below the loop portion W, of the casting, and accommodates inside thereof the rope pulley Y, over which passes the fork rope O, which leads under the ground pulley O', and thence to the horse or other power for operating the traveler. It is to be observed that the journal of the rope pulley forms the pivot for the loop casting W, or at least the pivot for the leg standard T, which may be folded up against the track extension S, when it is detached from the main track of the stacker, and it will be further observed that the disposition of the rope pulley, not only provides for a convenient arrangement of the rope, but places the strain therefrom directly on top of the said leg standard, as will be easily understood.

The construction of stacker herein described not only provides for the portability and adjustability just described, but at the same time is such that the several parts of the stacker may be easily separated from each other and put in a knock down condition, and quite as easily set up again for use, and I will have it understood, that changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a hay stacker, the opposite runner frames capable of lateral adjustment to and from each other, the top cross beams removably connecting the upper ends of the opposite frames together, a sectional adjustable brace connecting the two runner frames, the track suspended from the cross beam, and the hay carrier, substantially as set forth.

2. In a hay stacker, the opposite runner frame, having end uprights, cross beams removably attached to the upper extremities of

one pair of uprights and pivotally to the opposite pair, a track suspended from said cross beams, and a hay carrier arranged to travel on the track, substantially as set forth.

3. In a hay carrier, the opposite runner frames having end uprights, slip loops attached to the upper extremities of one pair of uprights, pivot ears attached to the corresponding extremities of the opposite pair of uprights, cross beams removably fitted at one end into the slip loops of one pair of uprights and having at their other ends pivot ears pivotally connected to the ears on said uprights, an adjustable brace for the two runner frames, the track suspended from said cross beams, and the hay carrier mounted to travel on said track, substantially as set forth.

4. In a hay stacker, the opposite runner frames having end uprights, slip loops attached to the upper extremities of one pair of uprights, rest plates attached to the same uprights and having horizontal top portions, cross beams removably fitted at one end into said slip loops and resting on said rest plates and having their other ends pivotally joined to the upper extremities of the other pair of uprights, a sectional adjustable brace connecting the two runner frames, a track suspended from said cross beams, and a hay carrier mounted on the track, substantially as set forth.

5. In a hay stacker, the combination, with the connected runner frames carrying top cross beams, of a main track suspended from said main top cross beams and having an eye plate at one end, a track extension having an attaching hook at one end adapted to removably engage the eye plate of the main track, and a folding leg standard adjustably connected to the track extension, substantially as set forth.

6. In a hay stacker, the combination with the connected runner frames carrying top cross beams; of a main track suspended from said top cross beams and having an eye plate at one end, a track extension having an attaching hook at one end adapted to removably engage the eye plate of the main track, a loop casting loosely embracing the track extension and having an integral depending open pulley box, a rope pulley journaled in said open pulley box, a folding leg standard having parallel attaching lugs at its upper extremity adapted to pivotally embrace the open pulley box, the hay carrier moving over the aligned tracks, and the fork rope adapted to pass over the rope pulley in said open pulley box, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

NILS ZETTERBERG.

Witnesses:

C. BORGERDING,
A. NELSON.