

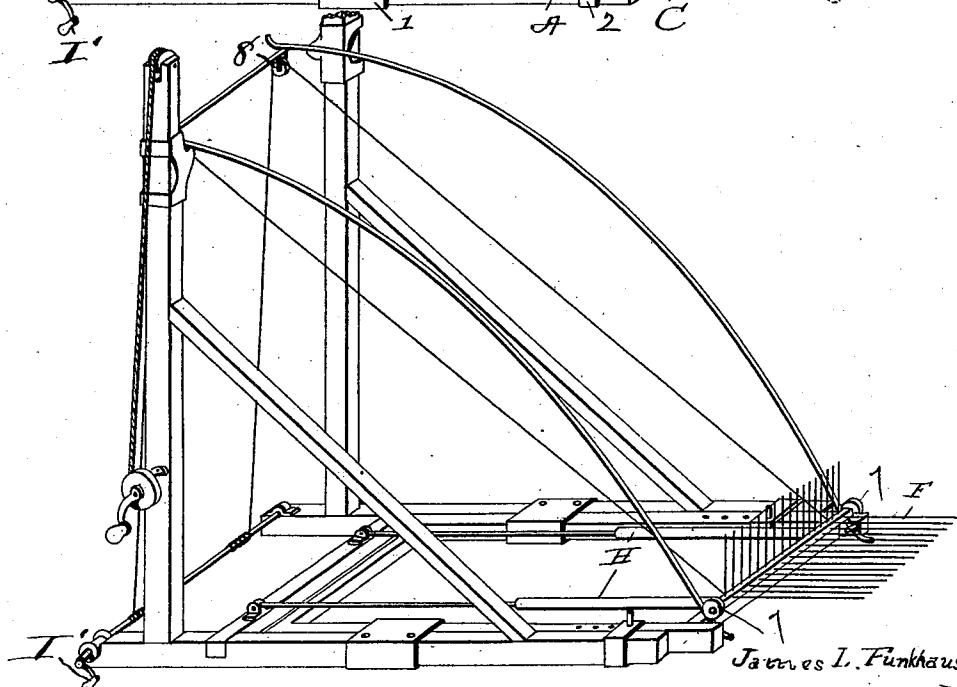
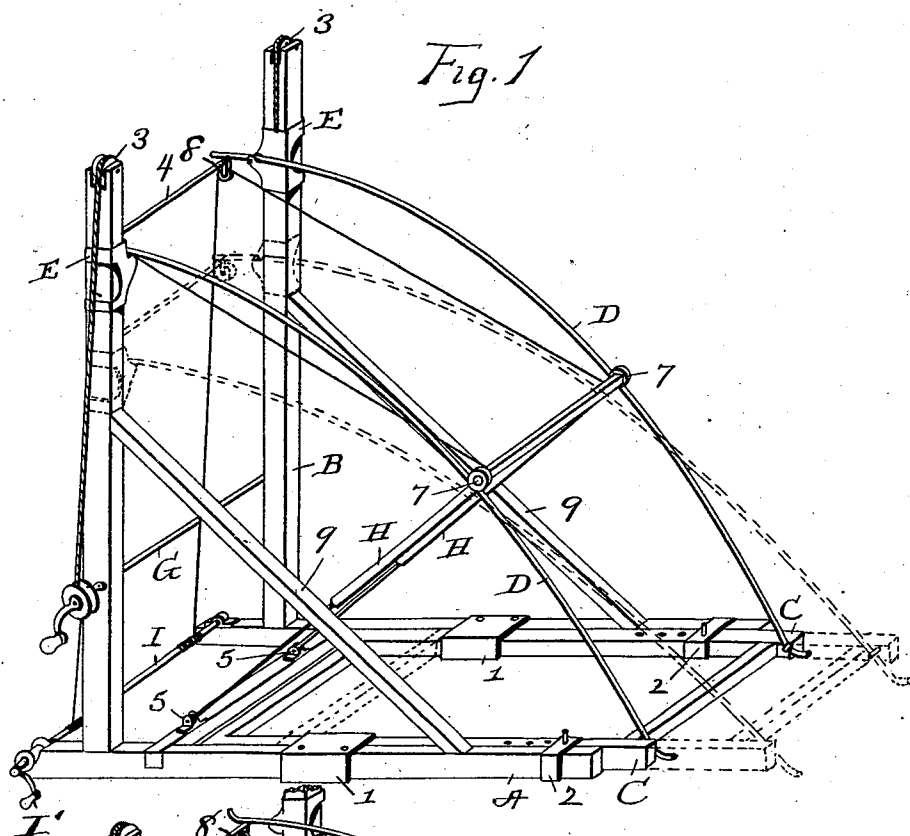
(No Model.)

2 Sheets—Sheet 1.

J. L. FUNKHAUSER.
HAY STACKER.

No. 517,099.

Patented Mar. 27, 1894.



Witnesses:
Chas. Gunder
N. C. Meyer

Fig. 2

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Inventor

By *Wm. A. Bell & Co.*
Attorneys.

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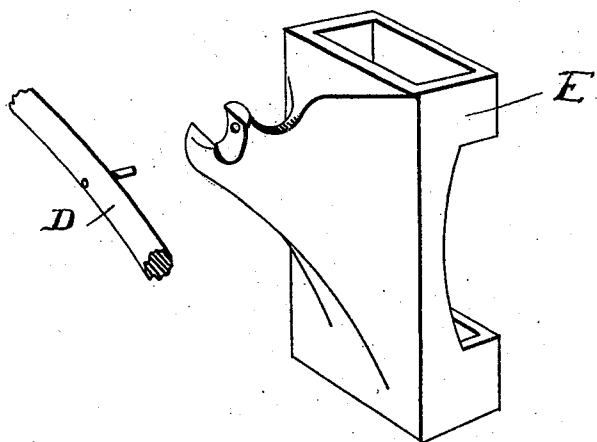


Fig. 3.

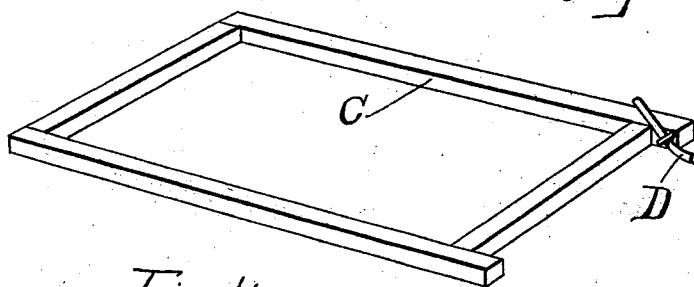


Fig. 4.

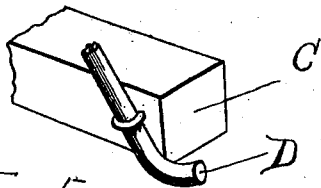


Fig. 5.

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UNITED STATES PATENT OFFICE.

JAMES L. FUNKHAUSER, OF MORAVIA, IOWA.

HAY-STACKER.

SPECIFICATION forming part of Letters Patent No. 517,099, dated March 27, 1894.

Application filed July 15, 1893, Serial No. 480,661. (No model.)

To all whom it may concern:

Be it known that I, JAMES L. FUNKHAUSER, a citizen of the United States, residing at Moravia, in the county of Appanoose and State of Iowa, have invented certain new and useful Improvements in Hay-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 it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a hay stacker which can be easily and quickly adjusted to deliver the hay at different heights, and with this object in view I have constructed the following devices and combinations hereinafter described and claimed.

In the drawings Figure 1 is a view of my device, showing the elevator track raised, the outline view showing the elevator track lowered and the slidable frame extended. Fig. 2 shows the telescopic tubes or pipes which support the rake. Fig. 3 shows the slidable bracket and the manner of attaching the elevator track to the same. Fig. 4 shows one part of the slidable frame. Fig. 5 shows manner of attaching the elevator track to the sliding frame.

In the drawings, A is the main frame.

C is a slidable frame placed inside of the main frame A and held in place by suitable collars or keepers 1, 1 and 2, 2. The collars or keepers 1, 1 and 2, 2 are fastened to the main frame A, but allow the slidable frame C to move freely in a parallel direction with the side pieces of the main frame A.

B B are uprights or standards extending upward at right angles from the main frame A; each is provided at the upper end with a sheave 3 3.

D D represent the curved elevator track; the lower ends of the same are fastened to the outer end of the slidable frame C; the upper ends are connected by a cross piece 4 and at a short distance from the end they are fastened to the slidable brackets E E. In the drawings the elevator track is shown as being made of iron piping, the same being bent at the lower end to afford a resting place for the rake

or elevator F when lowered. The cross piece 4 prevents the elevator or rake from leaving the track at the upper end. The slidable brackets E E are placed on the standards B B and connected to the windlass G, which is provided with a handle and ratchet wheel, by means of ropes, the ropes passing over the sheaves 3 3. It will be seen that by this arrangement the slidable brackets E E can be simultaneously raised or lowered on the standards B B. The elevator track D D is fastened to the slidable brackets E E in such a manner as to permit the slidable brackets E E to be raised or lowered, carrying the elevator track D D with them, without cramping.

F is the elevator or rake; the same is provided with suitable grooved wheels 7 7 at each end which run on the track D D.

H H are telescopic tubes or pipes, rigidly fastened to the cross-bar of the elevator or rake F and connected to the cross piece of the main frame A by means of hinge joints 5 5. It will be seen that by this arrangement the teeth of the elevator or rake F are always held parallel with the telescopic tubes or pipes H H.

I is a windlass provided with a suitable operating handle I'. The elevator or rake F is connected to the windlass I by means of suitable ropes which pass over the pulleys 8 8. When the handle I' is operated, the windlass is caused to revolve, winding up the rope fastened to the elevator or rake F carrying the same up the track D D until stopped by the cross piece 4, where the hay is delivered. A suitable brake can be applied to retard the descent of the elevator or rake F.

The operation of my machine is as follows: The slidable brackets E E are lowered by means of the windlass G until they touch the braces 9 9; the elevator track D D being fastened to said slidable brackets, is brought down with the same, and the lower end of the elevator track being fastened to the slidable frame C causes said slidable frame to be drawn outward as shown in Fig. 1. The telescopic tubes or pipes H H automatically adjust themselves to the different distances the elevator or rake may be from the cross piece of the main frame A. Thus arranged the machine is ready for operation and will deliver the hay near the

ground; as the stack increases in height the elevator track is raised by means of the windlass G; when the upper end of the elevator track is raised it assumes a more perpendicular position, and consequently draws the slidable frame C inward. By means of this arrangement I am able to have the stacker deliver the hay at just the proper height and can adjust the stacker for various heights by means of the windlass G in a moment's time. The slidable brackets E E may be provided with suitable holes and corresponding holes in the standards B B through which a bolt may be passed to relieve the windlass G and connecting ropes from undue strain. The slidable frame C can also be held rigid by placing a bolt through the collars or keepers 2 2 and the side pieces of the slidable frame C.

I do not claim anything on the windlass I nor the elevator or rake F, which may be constructed in a variety of forms, but

What I do claim, and desire to secure by Letters Patent of the United States, is—

1. In a hay stacker, the combination of a suitable supporting base, vertical standards mounted on the same, slidable brackets mounted on said standards, means for raising and lowering said brackets, an inclined elevator track having its upper ends secured in said brackets and its lower ends attached to the base, an elevator mounted on said track and adapted to travel on the same, telescoping rods pivoted at their lower ends to the base and secured at their upper ends to the elevator, means for actuating said elevator and means for permitting the movement of the

track to accommodate itself to any position of the brackets, substantially as described.

2. In a hay stacker, the combination of a supporting base comprising a stationary portion and a longitudinally adjustable portion, vertical standards mounted on the stationary portion of the base, track adjusting means applied on the standards, an inclined track secured at its upper end to the adjusting means on the standards and at its lower end to the movable portion of the base, an elevator mounted on said track, and means for actuating said elevator, substantially as described.

3. In a hay stacker, the combination of a suitable supporting base, a portion of which is stationary and the other portion longitudinally adjustable, vertical standards secured in the stationary portion of the base, vertically adjustable track elevating brackets applied on the standards, a windlass for operating said brackets, an inclined track secured at its upper end in the brackets and attached at its lower end to the movable portion of the base, an elevator mounted and adapted to travel on said track, telescoping arms pivoted at their lower ends to the stationary portion of the base and secured at their upper ends to the elevator, and a windlass for operating the elevator, substantially as described.

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

JAMES L. FUNKHAUSER.

Witnesses:

E. T. MAIKEN,
G. WILLS.