G. HERSMAN.

HAY ELEVATOR.

No. 191,282. Patented May 29, 1877.

Fig. 1.

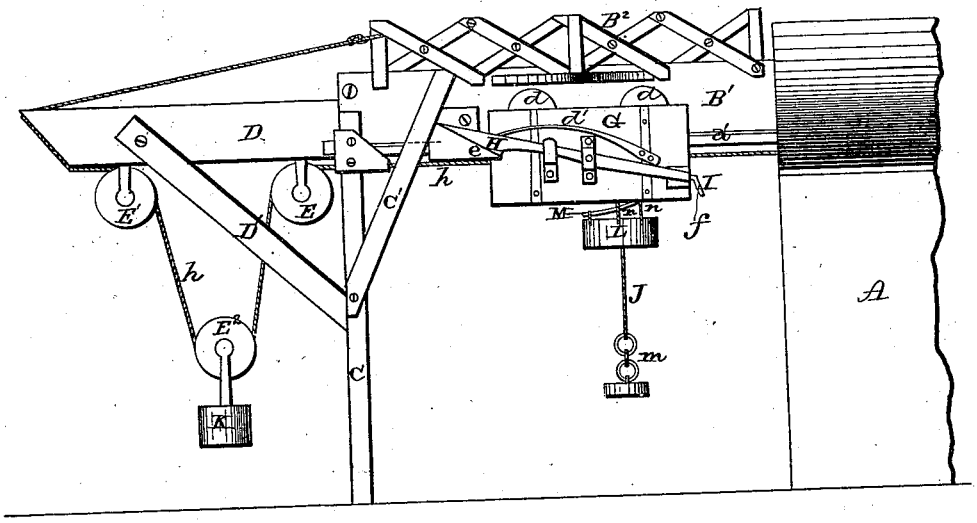


Fig. 2.

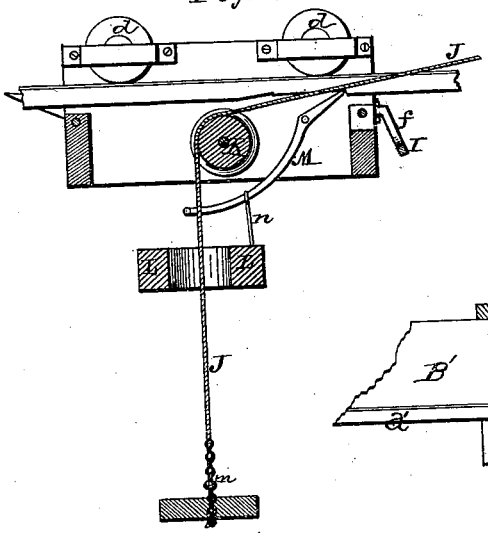


Fig. 4.

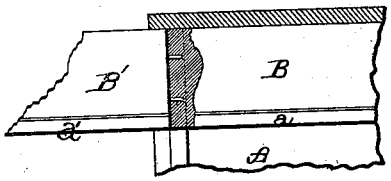
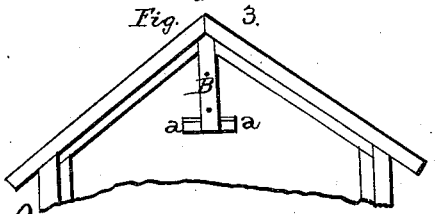


Fig. 3.



WITNESSES:

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per

F. A. Lehmann, Atty.

UNITED STATES PATENT OFFICE.

GEORGE HERSMAN, OF HERSMAN, ILLINOIS.

IMPROVEMENT IN HAY-ELEVATORS.

Specification forming part of Letters Patent No. **191,282**, dated May 29, 1877; application filed April 9, 1877.

To all whom it may concern:

Be it known that I, GEORGE HERSMAN, of Hersman, in the county of Brown and State of Illinois, have invented certain new and useful Improvements in Hay-Elevator; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

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

The annexed drawings, to which reference is made, fully illustrate my invention.

A represents a barn, hay-mow, or other similar building. Along the ridge, within the house A, is a beam, B, on each side of which, along the lower edge, is formed a track, *a*, as shown. B^1 represents an extension-beam, provided with tracks *a'* on its sides, and on top it has suitable truss-work B^2, to strengthen the beam. The outer end of the extension-beam B^1 is supported on each side by means of braces C and C', in the manner shown in the drawing. These braces are so arranged that they hold the ends of the beams B B^1 together, they being further united by dowel-pins. A third beam, D, is placed against the outer end of the extension-beam B^1, and supported by braces D' against the braces C C. From the beam D are suspended two pulleys, E E^1. These various beams and braces can be easily and quickly put up and taken down again, as required. G represents the car or carriage suspended under the beams B B^1 by means of wheels *d d* running upon the tracks *a a'*. On each side of the car G is a pivoted hook, H, pressed downward by means of a spring, *d'*, so as to catch on a lug, *e*, on the side of the beam B^1, to hold the car firmly while the load is being hoisted. The rear ends of the two hooks H H are connected by means of a cross-bar, I, at the end of the car, and the center of said cross-bar is bent to form a loop or bend, *f*, projecting downward, as shown. At the front end of the car G is attached a rope, *h*, which passes over the inner pulley E, under the beam D, then around a pulley, E^2, from which a weight, K, is suspended, and from this pulley the rope passes over the outer pulley E^1, around the outer end of the beam D, and is attached to the end of the truss-work B^2. J is the hoisting-rope, which passes out through an aperture at the opposite end of the house A. This rope lies in the loop or bend *f* of the cross-bar I, and passes over a pulley, K, within the car. This end of the rope I is, by a short chain, *m*, connected with the fork, or other device, for holding the load. This chain and hoisting-rope are guided to the pulley K by means of an annular weighted guide, L, through which the rope passes, said guide being suspended by cords *n n* from a bail, M, pivoted to the sides of the car.

The car being held over the load of hay by hooks H H catching upon the lugs *e e*, the fork or other hoisting device is loaded in the usual manner. The hoisting-rope J is then operated to raise the fork, the car remaining stationary until the chain reaches the loop or bend *f*. This chain being too large to pass through said loop, the cross-bar I is, by the strain on the hoisting-rope, depressed so as to raise the hooks H from the lugs *e*, thus disengaging the carriage, and the carriage will then pass along the tracks *a' a* into the mow to any point where it is desired to deposit the load. As the car thus moves inward it takes the rope *h* with it, the weighted pulley E^2 rolling on said rope, between the pulleys E E^1. As soon as the load has been deposited, and the strain on the hoisting-rope released, the weighted pulley E^2 at once carries the car back to its former position, where it is retained by the hooks H catching on the lugs *e* again.

This device may be applied to many other purposes, as well as for loading and stacking hay and straw.

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

1. The combination, with the stationary ridge-beam B, having tracks *a a*, of the detachable beam B^1, with tracks *a' a'*, detachable braces C C', and the detachable beam D, with braces D' and pulleys E E^1, substantially as and for the purposes herein set forth.

2. The combination of the car G with its wheels *d d*, the pivoted hooks H H, springs *d'*,

cross-bar I, with loop or bend *f*, and the lugs *e e*, substantially as and for the purposes herein set forth.

3. The combination, with the car G, of the hoisting-rope J, chain *m*, cross-bar I, connecting the hooks H, the pulley K, and the annular weighted guide L, suspended from the pivoted bail M, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 24th day of March, 1877.

GEORGE HERSMAN.

Witnesses:
JOHN J. MCDONNOLD,
NELSON LOVEITT.