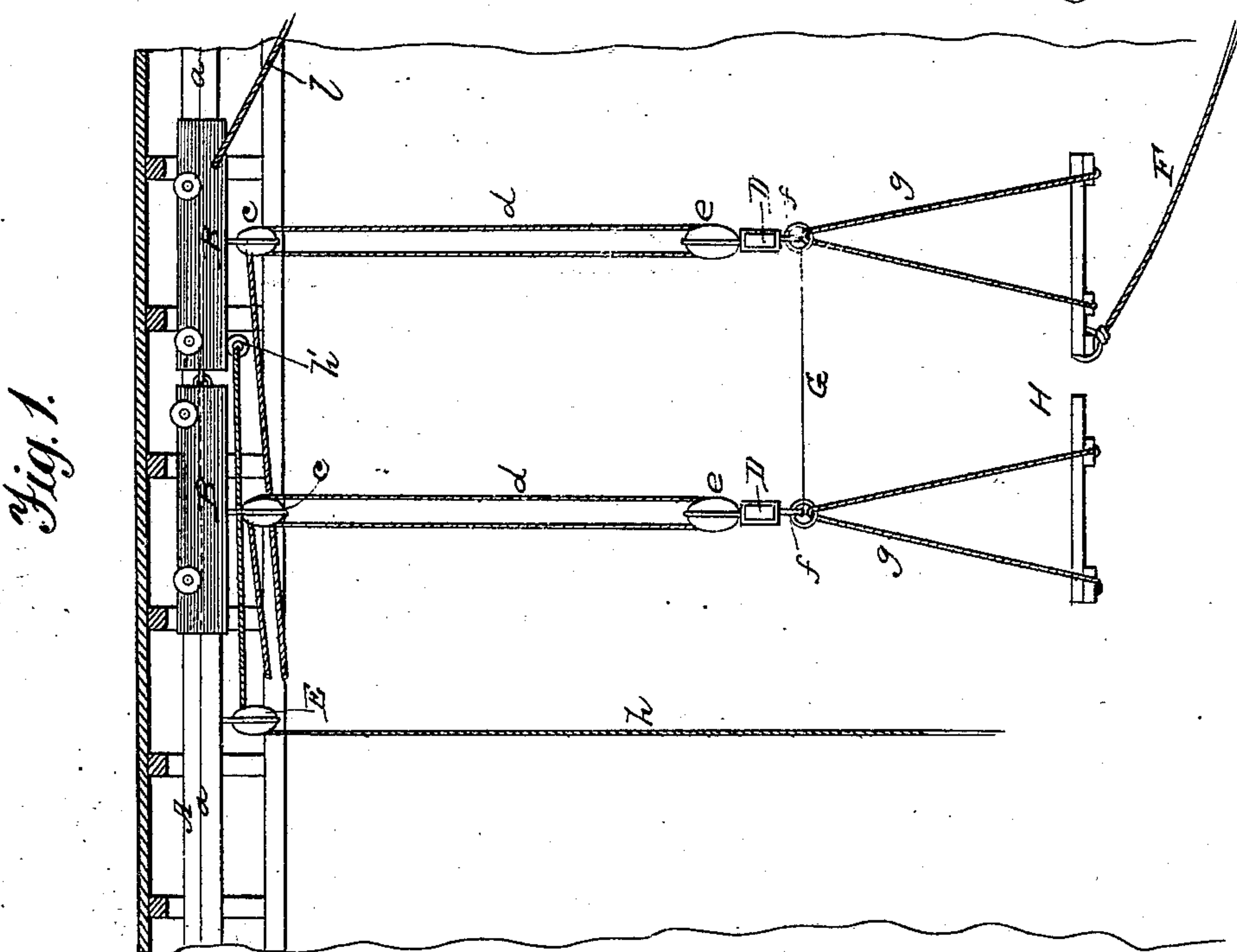
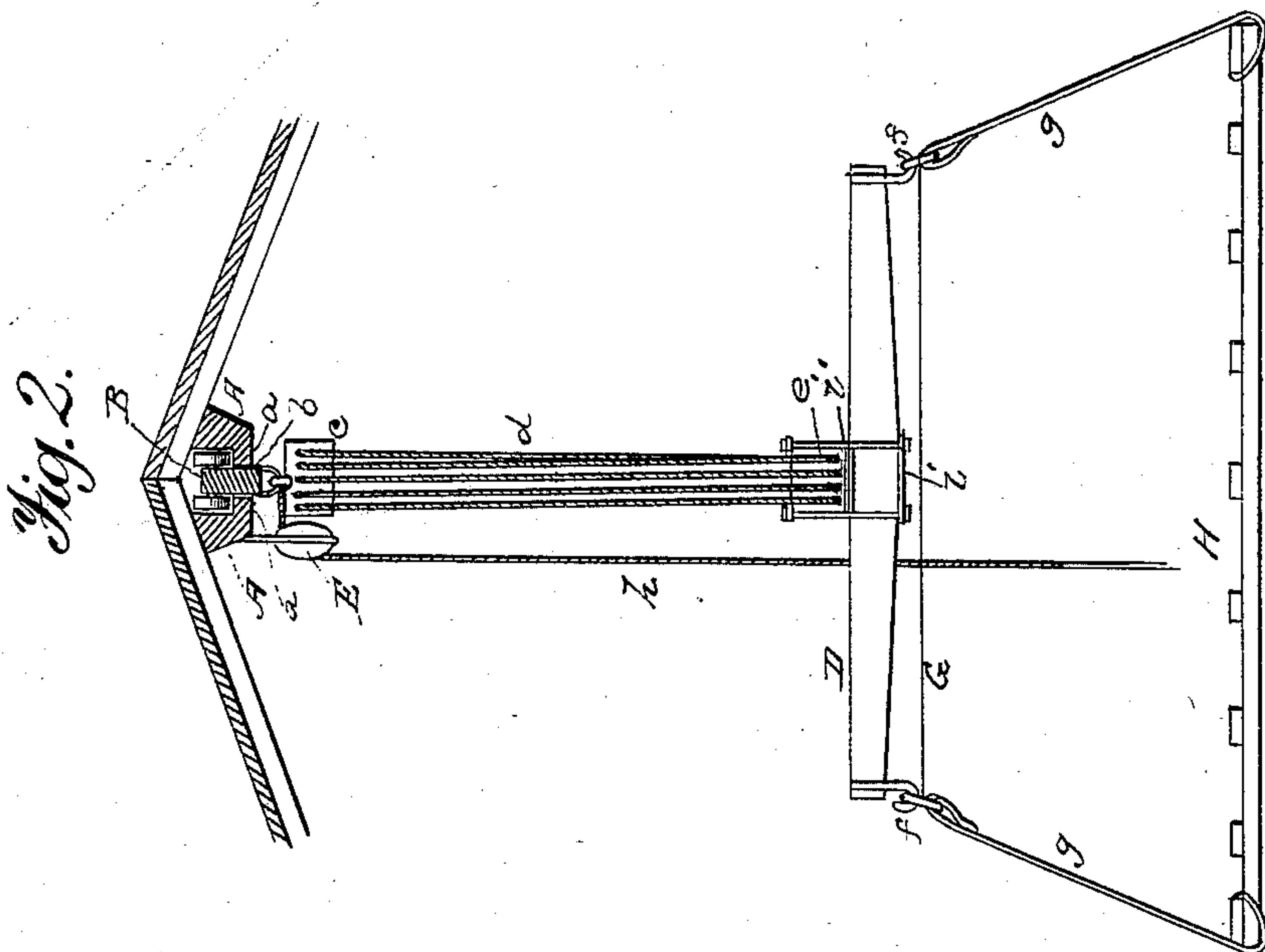


(No Model.)

L. ACKERMAN.
HAY AND GRAIN UNLOADER.

No. 273,422.

Patented Mar. 6, 1883.



Witnesses.
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UNITED STATES PATENT OFFICE.

LYMAN ACKERMAN, OF DEXTER, NEW YORK.

HAY AND GRAIN UNLOADER.

SPECIFICATION forming part of Letters Patent No. 273,422, dated March 6, 1883.

Application filed November 20, 1882. (No model.)

To all whom it may concern:

Be it known that I, LYMAN ACKERMAN, a citizen of the United States, residing at Dexter, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Hay and Grain Unloaders; 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.

This invention has relation to improvements in apparatus for hoisting and conveying hay and grain from a wagon or the like to any suitable floor and location thereof in a grain-house or barn, and is an improvement on Letters Patent granted to me October 31, 1882, No. 266,597, for hay or grain unloaders.

The invention consists of suitable ways or tracks, peculiarly constructed, secured to and which serve to support the rafters of the roof of a barn, and at the same time take the place of the ordinary ridge pole or plate, and also of sectional carriages connected together at their abutting ends by eyebolts or other suitable fastening devices and mounted upon friction-rollers, said carriages running upon said ways; in the power-pulleys suspended from the bottom of the carriage-bodies, the pulleys mounted upon the upper face of the platform-beams, the pulley or swivel hung in the side of one of the track-timbers, and in the transverse beams carrying yokes, hooks, and arms suspending the platform, all as will be hereinafter more fully set forth.

In the annexed drawings, Figure 1 is a representation of a section of a barn, showing my device applied transversely; and Fig. 2 is a sectional view of a barn, showing my device applied in end elevation, with the carriage and track timbers sectioned.

The same letters of reference are used in the figures in the designation of identical parts.

The letter A represents the track-timbers, secured to the rafters or ceiling of a barn, provided in the ordinary manner with shoulders or ways *a*, for the rollers secured to the sides of the carriages to rest upon, and a longitudinal slot, *b*, for the passage of the carriages.

Suspended midway from the bottom of the carriages B B are power-pulleys *c c*, which receive ropes *d*, said ropes extending downward and passing through pulleys *e e*, which are mounted upon the upper face of horizontal beams D D, arranged, respectively, one above each platform, and are provided at their ends with hooks *f*, for connecting with the upper ends of the rods or arms *g*, as shown, which are secured at their opposite ends to the platforms. These rods or bridle-ropes may be provided at their ends with screw-threads and secured through perforations to the platforms by means of nuts; or the platforms may be secured upon hooked arms, as shown in Fig. 2 of the drawings.

E represents a pulley, hung in a swivel to the side of one of the track-timbers, through which passes a rope, *h*, the upper end of which is secured in an eyebolt or ring, *h'*, secured to the under side of one of the carriages, and its opposite end extended down within reach of the operator.

The yoke of the beams D consists of horizontal and vertical bolts or rods *i* and *i'*, secured together by nuts or other suitable fastening devices.

F represents a rope secured to one of the platforms for operating the same, and G a rod for holding the platforms at suitable distances apart. At or near the opposite end of the carriage to which the rope *h* is attached is secured a rope, *l*, for moving the carriages in one direction after the hay or grain has been elevated.

The operation is as follows: When it is desired to unload a vehicle containing hay or grain, the platforms are lowered by letting slack upon the ropes *o o*. When a suitable quantity has been placed upon the said platforms, power is exerted upon the said ropes, when the said platforms and grain will rise and be carried by means of the carriages, with the rope *l*, to the desired place in the barn. After the load has been removed the carriages and platforms are returned and lowered by the rope *h*. This operation is repeated until the load of the wagon has been removed. A whole load is taken at one operation.

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

1. A double carrying-truck having eyebolt-

connection at the abutting ends of the same, and adapted to travel by means of rollers on a double track secured to the rafters in the roof of a barn, substantially as shown.

- 5 2. In the roof of a barn, the ways or tracks A A, upon which the carriages B B run for elevating and conveying hay and grain, the carriages connected together at their abutting ends, and provided with friction-rollers work-
10 ing in ways in the track-timbers, in combination with the power-pulleys *e*, eyebolt *h'*, swiveled pulley, cord *h*, and the platform, all adapted to operate substantially as and for the purposes specified.

3. The hay elevator and conveyer herein de- 15 scribed, consisting of the timbers A A, carriages B B, connected as described, the bolt *h'*, swivel-pulley E, power-pulleys *e*, pulleys *e*, parallel beams D D, ropes *d*, brace-rods G, arms *g*, and the platforms, all combined and 20 adapted to operate substantially as and for the purposes specified.

LYMAN ACKERMAN.

Witnesses:

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