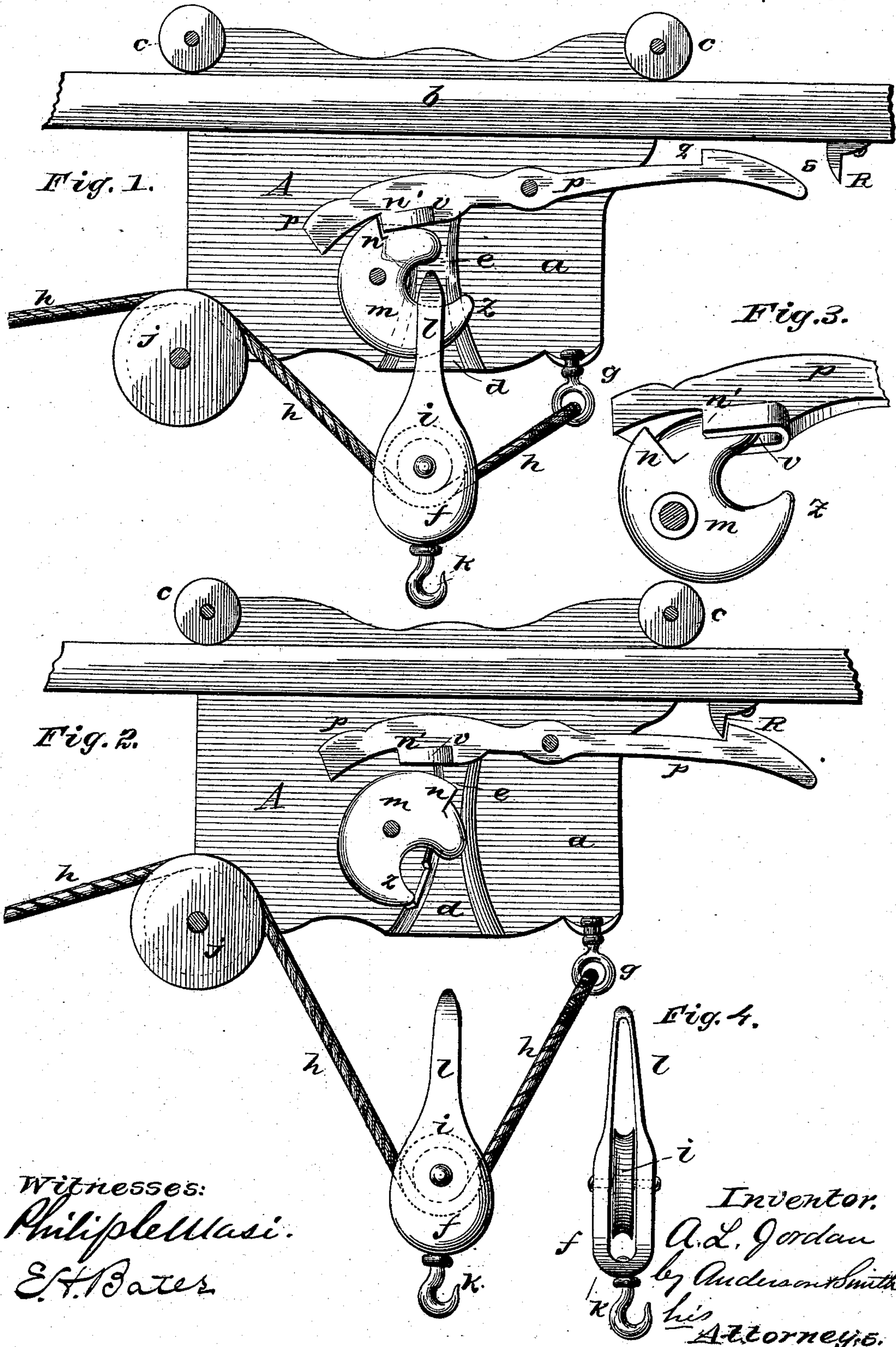


(No Model.)

A. L. JORDAN.  
HAY AND GRAIN UNLOADER.

No. 271,862.

Patented Feb. 6, 1883.





# UNITED STATES PATENT OFFICE.

AMBROSE L. JORDAN, OF OTTAWA, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
RICHARD C. JORDAN, OF SAME PLACE.

## HAY AND GRAIN UNLOADER.

SPECIFICATION forming part of Letters Patent No. 271,862, dated February 6, 1883.

Application filed September 2, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, AMBROSE L. JORDAN, a citizen of the United States, and a resident of Ottawa, in the county of La Salle and State of Illinois, have invented a new and valuable Improvement in Hay and Grain Conveyers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a side view of my conveyer. Fig. 2 is also a side view in a different position from Fig. 1. Figs. 3 and 4 are detail views.

This invention has relation to hay and grain conveyers; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings, the letter A designates the body of the carrier, which consists of two sides or sections, *a*, which are connected together by transverse rivets or bolts, which may, when used upon an iron, a wooden, or a cable track, serve as the pivots of the track-rollers *c* and of the sheave *j*. *b* represents the track, which is single, and may consist of wood, iron, or cable. The sides or sections *a*, when secured together, present an opening, *d*, from below, which is at its mouth of rectangular form, having rounded corners, the walls of this opening inclining inward and upward to a terminal channel or recess, *e*, which also extends upward. This opening and channel are designed to receive the looped upper end, *l*, of a pulley-block, *f*, which, when rising, enters therein and actuates the working parts. The loop of the pulley-block is rectangular, and rounded on the corners to fit the opening *d*.

Attached to a swivel, *g*, at the lower corner of that end of the carrier which is farthest from the power is the operating rope or chain *h*, which serves to raise the load and draw the same. This rope or chain passes from the fastening *g*, through the forked pulley-block *f*, and under a sheave, *i*, therein; thence over a sheave, *j*, in the lower corner of the carrier nearest the power, and along the under side of the track,

over a pulley beyond where the load is to be dropped to the point where the power is applied for hoisting and carrying the load. The looped pulley *f* is therefore suspended on the rope *h*, and is provided at its lower end with a swivel-hook, *k*, for the attachment of the hay-fork or other load.

Near the middle of the carrier, at one side of its channel or recess *e*, and between the sides of the carrier, is pivoted a crescent-shaped carrying-hook, *m*, which is made heaviest at its upper end, which extends toward the channel or recess, and tends, when the hook is free, to withdraw its hooked lower end or beak from said channel or recess. The carrier-hook is therefore arranged with its concave side toward said channel or recess. Upon its upper portion, somewhat set back from its upper end, is a projection or shoulder, *n*, which, when a load is being carried on the hooked end *z*, is designed to engage a shoulder or projection, *n'*, on the under side of a latch-bar, *p*, which is also pivoted between the sides of the carrier. When not engaged by this latch-bar the lower end or beak of the carrying-hook recedes from the recess or channel *e* in the carrier, its upper end at the same time dropping into said recess or channel, in position to be lifted by the upper end of the looped pulley *f* when the latter is drawn up. In this action the pulley, in raising the upper end of the carrying-hook, also forces its lower end or beak, *z*, through the loop of the pulley, in position to sustain the same, with its load, independently of the operating-rope. The carrier is held while the load is being elevated by the latch-lever *p*, one end of which projects beyond the carrier under the track in the direction farthest from the power. This end of the lever is beveled on its upper surface, as at *s*, and is formed with a projection, hook, or shoulder, *q*, which is designed to engage a latch-block, *R*, secured to the under side of the track. The latch-lever *p* is made heaviest at its inner end, which is formed with a longitudinal under recess or groove, *v*, and back of the same a shoulder or projection, *n'*, on the under side of said latch-lever, designed to engage respectively the upper end of the carrier-hook and the shoulder thereof. When



the looped pulley rises, being drawn upward with its load, its upper end pushes upward the inner end of the latch-lever and disengages the other end of the latter from the catch R, 5 so that the inner end of the lever drops with the pulley, in its receding movement, to engage and firmly lock the carrying-hook in its engaged position, supporting the looped pulley and its load. By means of the operating-rope 10 the carrier and its load are then drawn to the point of discharge, when the fork is tripped in the usual manner and its load is let fall. Then the carrier is drawn back on the track until the beveled end of the latch-lever strikes the 15 catch-block, whereby the inner end of said lever is raised, unlocking the carrier-hook, which automatically drops and releases the looped pulley, which is then allowed to descend for another load.

20 Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The sectional carrier having the rectangular channel or recessed opening extending upward from its bottom, the crescent-shaped 25 and top-heavy carrier-hook *m*, having the shoulder *n*, the latch-lever *p*, having the shoulder *n*, and the longitudinal under recess or groove *v'*, the looped pulley-block *f*, and catch R, substantially as specified. 30

2. The combination, with the under grooved latch-bar having the shoulder *n'* and the beveled catch end projecting from the carrier-body, of the top-heavy carrier-hook having the forwardly-projecting upper end and the shoulder 35 *n*, and the catch-block R, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

AMBROSE L. JORDAN.

Witnesses:

GEO. B. FYFE,  
ED. H. CLARK.