

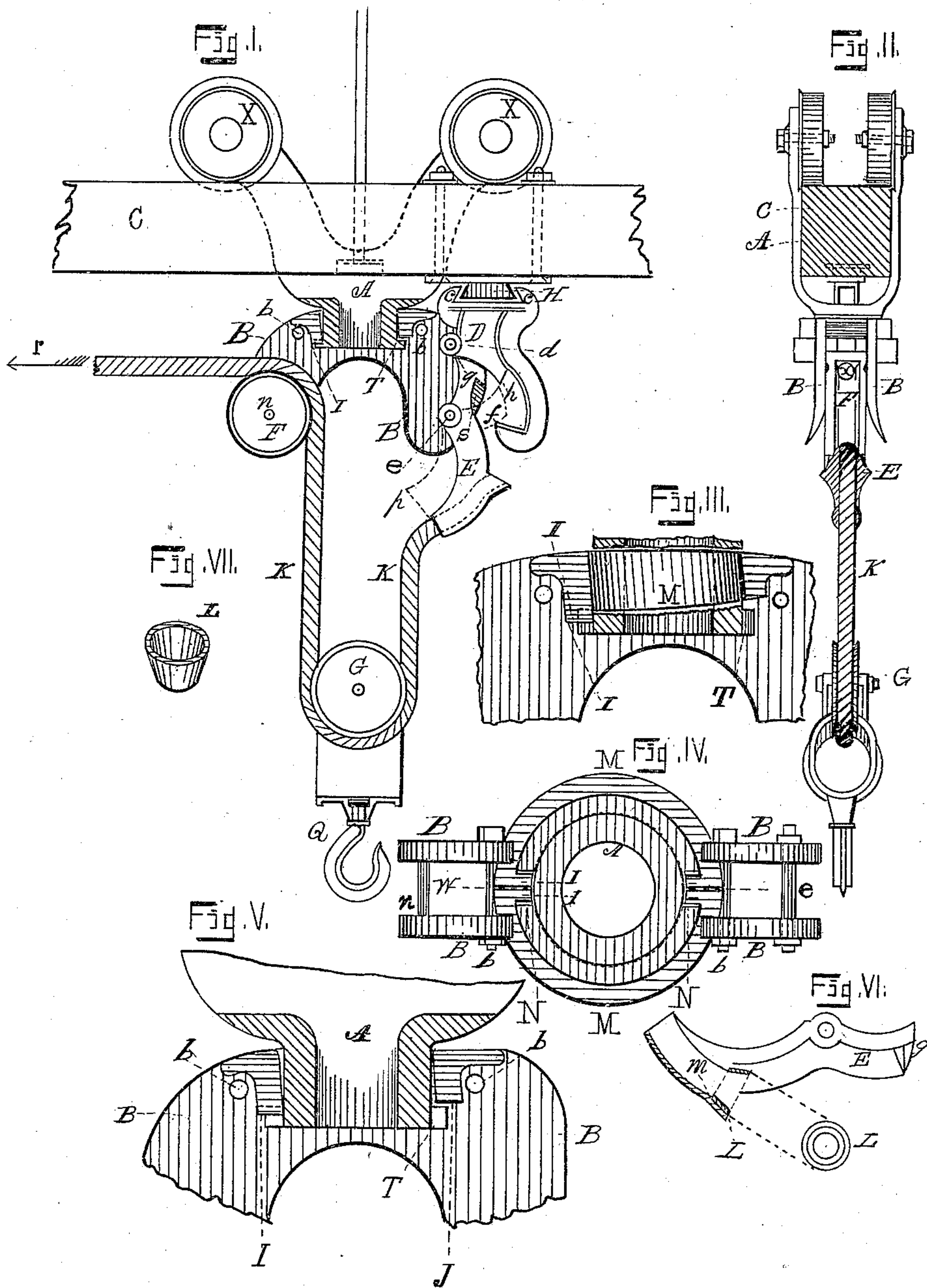
(No Model.)

W. H. BURNHAM & J. H. MILLER.

HAY CARRIER.

No. 368,511.

Patented Aug. 16, 1887.



WITNESSES
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UNITED STATES PATENT OFFICE

WILLIAM H. BURNHAM AND JOHN H. MILLER, OF BATAVIA, ILLINOIS,
ASSIGNORS TO THE UNITED STATES WIND ENGINE AND PUMP COM-
PANY, OF SAME PLACE.

HAY-CARRIER.

SPECIFICATION forming part of Letters Patent No. 368,511, dated August 16, 1887.

Application filed June 13, 1887. Serial No. 241,175. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. BURNHAM and JOHN H. MILLER, citizens of the United States, and residents of Batavia, in the county of Kane and State of Illinois, have jointly in-
5 of Kane and State of Illinois, have jointly in-
vented new and useful Improvements in Hay Elevators and Carriers, of which the follow-
ing is a specification, reference being had to the accompanying drawings, illustrating the
10 invention, in which—

Figure 1 is a vertical sectional elevation taken on line W, Fig. 4, in which is embodied our invention. Fig. 2 is an end view and section of Fig. 1; Fig. 3, an enlarged broken sectional elevation of the connecting ends of the
15 two-part carrying-frame; Fig. 4, an enlarged inverted view of the two-part carrying-frame with the other parts removed therefrom; Fig. 5, an enlarged broken view of one-half of the
20 connecting parts shown in Fig. 1, taken on line W, Fig. 4; Fig. 6, a perspective representation of the trip-lever connection removed from the other parts; Fig. 7, an enlarged perspective representation of the truncated conical
25 swivel-socket for connecting the operating-rope with said lever.

This invention relates to an improvement in that class of hay elevators and carriers which
30 lock automatically to the track during the elevation of the hay and automatically unlock from the track when the hay is to be carried thereon.

The special improvements consist in the novel construction of the two-part carrying-
35 frame, whereby it is at all times kept in line with the track, and in a truncated conical swivel-connection with the trip-lever, whereby the operating-rope is kept from being kinked, as hereinafter fully described and shown.

C represents the carrier-track, and X are the
40 traveling rollers by which the upper carrier-frame, A, is supported in the ordinary manner. The lower end of the frame A terminates in an annular bearing and a notched flange, N
45 T, for the support of the lower carrier-frame, which is formed in two parts, M B B, which are held to the bearing of frame A by bolts and screws b b put through the wings B B B B. Between the right-hand wings B B is placed
50 the trip-lever E, the pivot-bolt of the same be-

ing shown at e, and above the lever E and between the same wings, B B, is placed the tilting clutch D, the pivot-bearing to which is shown at d, Fig. 1. Between the opposite wings B B is secured a roller, F, by means of a suitable
55 pivot, n. On the opposite sides of the flange T and parallel with the track C are formed notches N, and projecting inward from each part M is a catch, I, the two catches lying together to operate in either notch N, depend-
60 ing in which direction on the track the hay is to be moved. The lower bearing of M M is formed convex, so that it may have a rocking movement in a line with the track C, that said catches I I may engage either notch, as stated. 65

The lower part of the trip-lever E is formed hollow, and in the upper portion thereof is fitted to rotate a socket-swivel, L, the bearing for which is shown at m. The rope K passes
70 through this hollow part, and also through the socket-swivel, and is fastened by a knot, whereby the turning of the swivel will prevent the rope K from being kinked, as is the case where the rope is simply tied to the trip-lever
75 E. H represents the dovetail stop secured to the track C.

The tilting clutch D is provided with jaws c c, which may engage the stop H or be made to disengage it by the manipulation of the parts, as follows: The hook Q is to be connected with
80 a hay-fork, and by drawing on the rope K in the direction indicated by dart r the pulley G will be brought up so that the trip-lever E will occupy the position shown by dotted lines p, the top end, g, being brought below the
85 notch h on the clutch D. This will throw the weight of the load on the pivot e, bring the point f into notch s, and release the right-hand jaw c of the clutch from the stop H. At the
90 same time the weight of the load on pulley F will bring the catches I I, by the rocking movement of the parts M, into the left-hand notch N and hold the frame B M in line as
95 the load is moved to the left on track C to the dumping-place. When the hay is dumped, the carrier-frame is brought back, the left-hand jaw c strikes the stop H, and both jaws
100 fasten to it, as shown, preparatory to elevating another load. Inasmuch as the frame M B is required to be swiveled to the frame A for

moving hay in opposite directions on the track C, some means must be employed to keep the two frames in line, that they may be locked to the stop H. We find that the means herein detailed are simpler and more certain in their action than older methods for locking the carrier-frames to the track.

We claim as new and desire to secure by Letters Patent of the United States—

- 10 1. An improvement in hay elevators and carriers, consisting of the lower carrier-frame, M B, made in two parts and provided on its internal opposite portions with catches I I, and the parts M M, having rocker convex lower
15 bearing-surfaces, in combination with the up-

per carrier-frame, A, having an annular bearing at its lower end, and a flange, T, for the support of the parts M, and the flange provided with notches N, which engage the catches I I, as specified. 20

2. The trip-lever E, provided with a hollow lower portion, and the hollow swivel L, having a seat, m, in the top part of the hollow portion, in combination with the rope K, secured to the swivel, as specified.

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Witnesses:

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