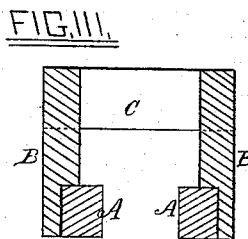
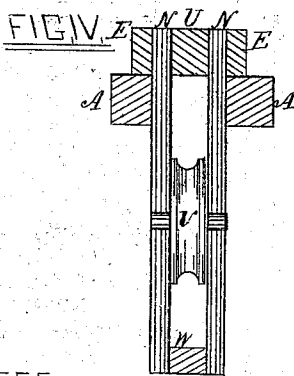
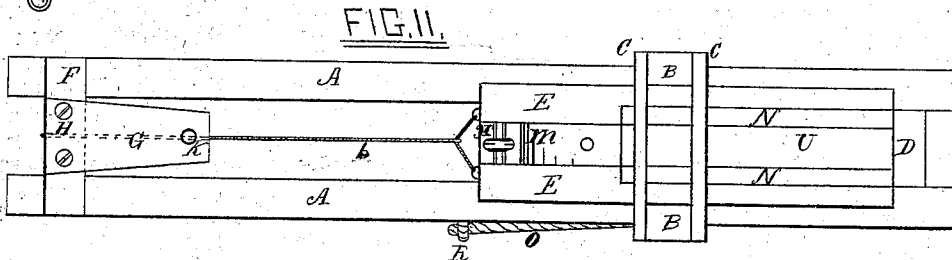
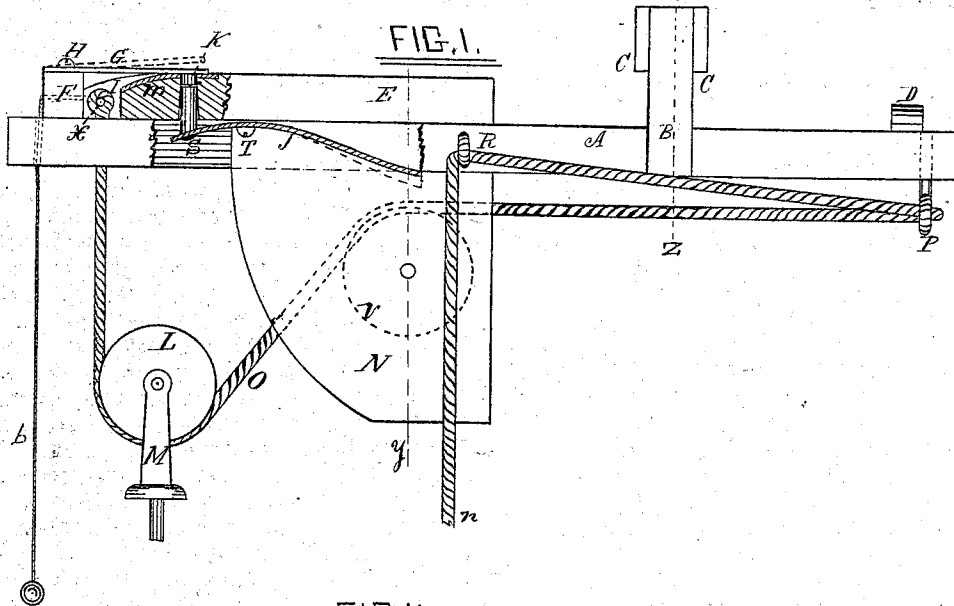


H. BUCK,

Apparatus for Elevating and Unloading Hay.

No. 136,029.

Patented Feb. 18, 1873.



WITNESSES

G. D. Chapin
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HENRY BUCK, OF POLO, ILLINOIS.

IMPROVEMENT IN APPARATUS FOR ELEVATING AND UNLOADING HAY.

Specification forming part of Letters Patent No. 136,029, dated February 18, 1873.

To all whom it may concern:

Be it known that I, HENRY BUCK, of Polo, in the county of Ogle and State of Illinois, have invented a new and Improved Apparatus for Unloading and Delivering Hay, of which the following is a specification:

The present invention relates to the novel arrangement of certain details of construction in apparatus for unloading and delivering hay; and its nature consists in making the carriage in several pieces of material combined with a downwardly-projecting sheave-block, a spring-lock, and a pin, for releasing the lock automatically, the outer timbers of the carriage at the locking-end being longer than the central part of the carriage to act as buffers to stop the carriage without marring the locking parts thereof. My object is to provide an apparatus which shall not only answer the purpose of handling hay, but be so simple of construction that any ordinary country mechanic can construct one.

In the drawing, Figure 1 is a longitudinal elevation of my invention with a part of the track and carriage broken away to show the locking devices; Fig. 2, a top or plan view of the same; Fig. 3, a section on line Z; and Fig. 4, a section on line Y.

A A represent the track, which consists of two pieces of suitable timber, held together at their opposite ends by short frame-pieces, D F, and kept from spreading apart by means of a truss-tie, B C, which consists of two elevated standards, B, fastened to the outsides of the track A A, and secured at their top ends by means of cross-pieces C C. The object of constructing the tie in this elevated form is to allow the carriage E U to pass the entire length of the track, as shown in Fig. 2. The carriage proper consists of the timbers E and U; but to combine it with a sheave-block the sides N of the latter are put through the carriage between the pieces E U, as shown in Figs. 2 and 4, and secured by bolts or other suitable fastenings. By this means the carriage E runs on the top of the track A and the sheave-block N between the two pieces A and forms a guide for the carriage. The side pieces E of the track are made longer than the central piece U in order that a bolt, X, may be inserted to support a rope, O, as

shown in Figs. 1 and 2, and the end of the central part U is curved downward and plated with metal at *m*, so that it may readily pass under a spring-catch, G K. This catch is fastened to the frame-piece F at H, and on its opposite end and on the under side is rigidly fastened a spur, K, which enters a hole in the plate *m* and holds the carriage E in a fixed position. The means for unlocking the catch G K consist of a curved lever, J, which is loosely pivoted to the track at T that it may have a vertical oscillating movement. The shorter end of this lever is provided with a spur, S, which enters the same hole as the spur K does, but from the opposite side of the carriage, and the arrangement is such that when the sheave L comes in contact with the shorter end of the lever J the spur S will raise spur K out of its hole and allow the carriage E to move to the opposite end of the track. The rope O, attached to the bolt X, passes under a sheave, L, over a sheave, V, and through loops P R; said loops, however, may be substituted by pulleys or sheaves to prevent friction, and instead of their being attached to the track they can be suspended from the beams or rafters of the barn.

The operation is as follows: Any suitable horse hay-fork is to be attached to the frame M of the sheave L. The end *n* of rope O is then brought under some suitable pulley to enable the horse to draw in the proper direction. The fork is then made fast to the hay and elevated until the sheave L strikes the lever J when the carriage E will, by a continuous draft on the rope O, move to the other end of the track, and, consequently, move the sheave L and fork supporting the hay in the same direction. By changing the position of the track A hay can be carried to any part of a mow. By loosening the end *n* of rope O the sheave L will run down to the load preparatory to taking another fork full, and the spring-catch G K will automatically lock the carriage. The frame-pieces F D govern the distance which the carriage is to move, and serve as buffers. The weighted cord *b* moves the carriage back, as in Fig. 1.

I do not claim moving hay laterally on a track or carriage after it has been elevated by a fork, as that has been done by several par-

ties before; neither do I claim automatically locking and unlocking the carriage; but I have been thus particular in describing the construction that it might be readily understood.

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

The conveyer, constructed of the timbers E E U and the sheave-block N N, in combi-

nation with buffers and springs arranged upon the tracks A A, substantially as and for the purpose set forth.

HENRY BUCK.

Witnesses:

G. L. CHAPIN,

D. HARRY HAMMER.