

W. F. GODDARD.  
Hay-Elevator and Carrier.

No. 206,104.

Patented July 16, 1878.

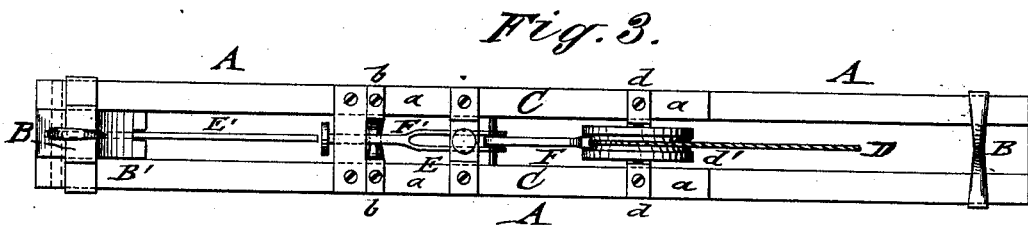
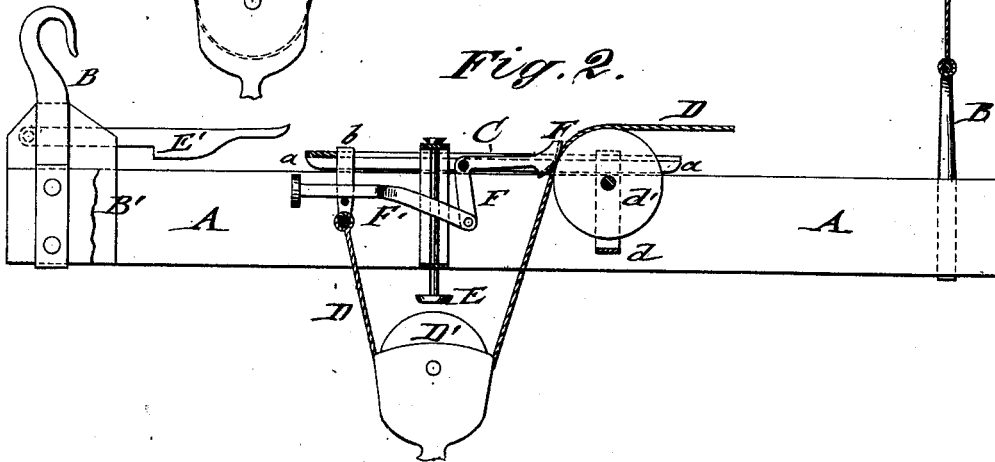
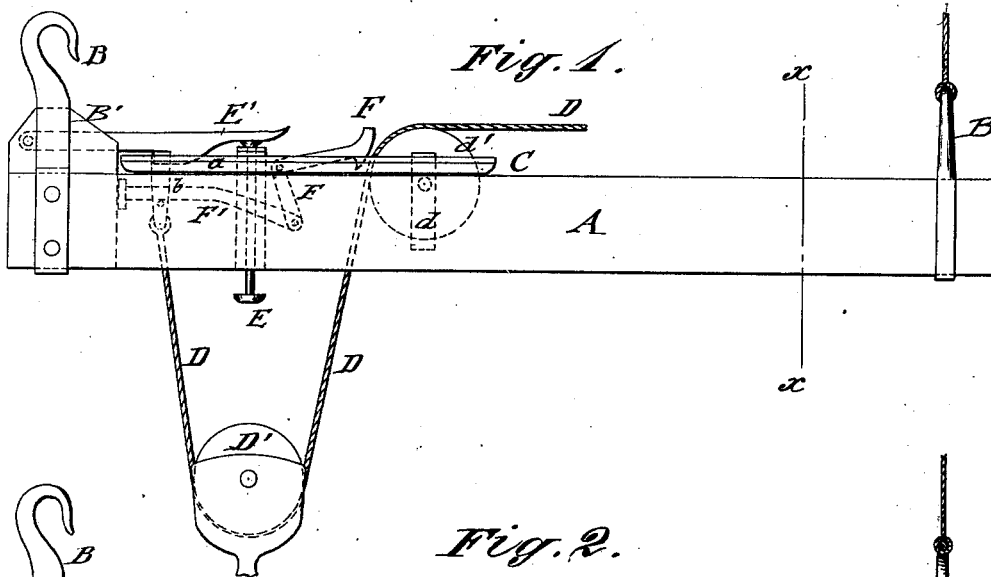
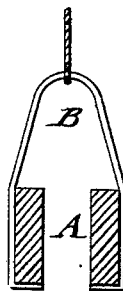


Fig. 4.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIE F. GODDARD, OF ORWELL, OHIO.

## IMPROVEMENT IN HAY ELEVATOR AND CARRIER.

Specification forming part of Letters Patent No. **206,104**, dated July 16, 1878; application filed February 14, 1878.

*To all whom it may concern:*

Be it known that I, WILLIE F. GODDARD, of Orwell, in the county of Ashtabula and State of Ohio, have invented a new and Improved Hay Elevator and Carrier, of which the following is a specification:

In the accompanying drawing, Figures 1 and 2 are side views of my improved hay elevator and carrier, shown respectively as locked to end of track during the hoisting of the load and as traveling forward. Fig. 3 is a top view of the same, and Fig. 4 a vertical transverse section of the track on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

The invention will first be described in connection with the drawing, and then pointed out in the claims.

In the drawings, A represents a track, constructed of two pieces or rails of timber at suitable distance from each other, and supported on iron bands or loops B, as shown in Fig. 4, that are supported, by ropes or otherwise, from the rafters of the barn, the track being preferably hung at a slight inclination for the return of the unloaded carriage C. The carriage C is made of two pieces, *a*, of wood, with suitable rollers, and with a loop, *b*, at the rear end, and a loop, *d*, at the front end, the latter carrying a pulley, *d'*, over which the hoisting-rope D passes.

The rope D is attached to loop *b*, passed below the pulley D', to which the hay-fork is hung, then over the pulley *d'* to a pulley at end of track, and then down to the ground-pulley, where the power is applied.

Intermediately between the end loops *b* and *d* of the carriage C is arranged a vertical slide-bolt, E, with enlarged top and bottom heads, that form contact, respectively, with the protracted end of a locking-hook, E', pivoted to the head or end block B' of the track and with the pulley of the hay-fork, so that when the carriage arrives at the end of the track the hook E' locks on the cross-piece of loop *a*, keeping the carriage in position thereon until the load is raised, and by the lifting of slide-bolt E the hook is released from the

carriage, the same being then ready for forward motion.

An elbow-lever, F, with concaved and eccentric clamp end is fulcrumed to the carriage C, and pivoted at the lower end to a forked and horizontally-guided rod, F', with enlarged buffer end or head, that forms contact with the head-block of the track when the carriage arrives thereon, and is locked by hook E', so as to raise the clamp-lever F and liberate the hoisting-rope D. The hay-fork may then freely descend to the wagon, to receive there the load of hay, when the hoisting-rope is pulled or wound up and the load raised until pulley D' forms contact with the slide-bolt E, releasing thereby hook E' from the carriage, and admitting the forward motion of the same simultaneously with the application of the clamp-lever F to the rope D, as shown in Figs. 2 and 3. The clamping-lever retains the load in raised position below the carriage, and admits of its being moved to the point of discharge, where the load is dropped from the fork. The carriage moves then back to the head-block, lowers the fork in automatic manner, and receives its load from the wagon, to be hoisted and conducted again to the place of storage, forming thus a simple and effective device for elevating and conveying loads of hay, straw, and other articles.

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

1. The combination, with carriage and hook E', of the elbow-lever F and rod F', the former concaved and provided with eccentric clamp end, and the latter having an enlarged head, as and for the purpose specified.
2. The combination, in a hay elevator and carrier, of carriage C, having fulcrumed clamp-lever F and horizontally-guided pivot-rod F', with hoisting and conveying rope D, locking-hook E', and head-block B', of track to release the clamp-lever from rope for descent of fork, substantially as specified.

WILLIE F. GODDARD.

Witnesses:

A. H. ROWLEY,  
B. F. FLOWER.