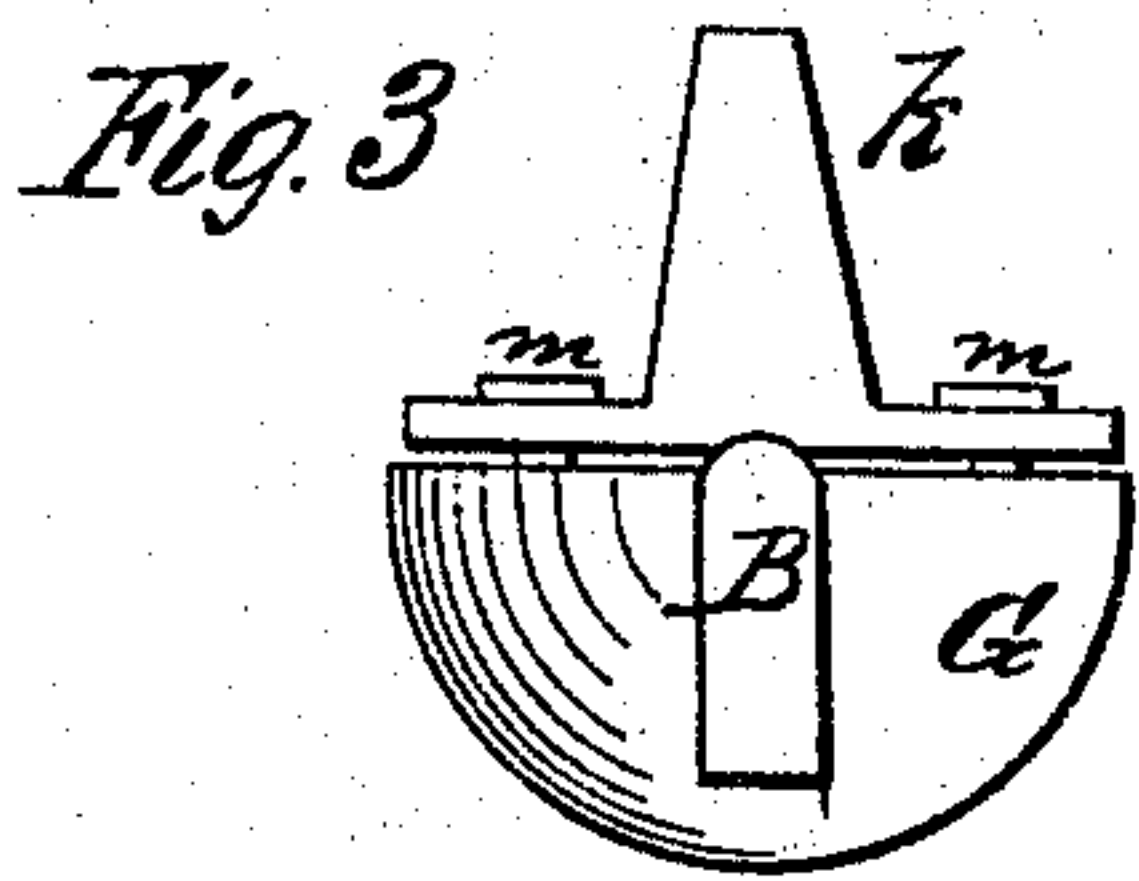
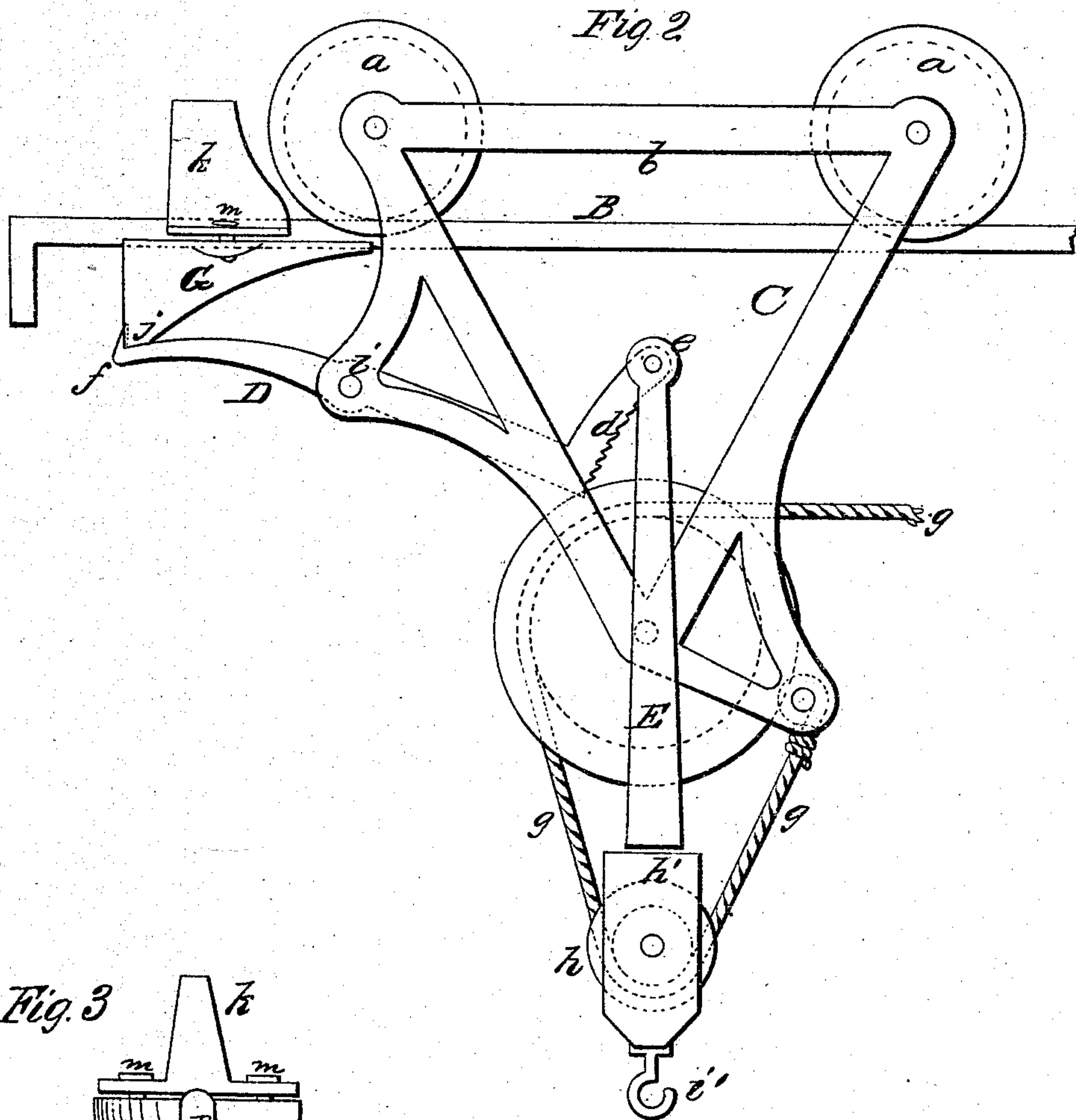


J. R. FEITZHOU.
Hay-Elevators.

No. 154,598.

Patented Sept. 1, 1874.



WITNESSES
E. A. Bates
Geo. C. Upham. By

J. R. Feitzhou INVENTOR
Chipman & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

JACOB R. FEITZHOUS, OF INDIANA, PENNSYLVANIA.

IMPROVEMENT IN HAY-ELEVATORS.

Specification forming part of Letters Patent No. 154,598, dated September 1, 1874; application filed March 21, 1874.

To all whom it may concern:

Be it known that I, JACOB R. FEITZHOUS, of Indiana, in the county of Indiana and State of Pennsylvania, have invented a new and valuable Improvement in Hay-Elevators; 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 representation of a sectional view of my hay-elevator, and Fig. 2 is a side view of the same. Fig. 3 is a detail view.

This invention has relation to devices which are designed for elevating hay from wagons, and delivering the loads upon mows in barns, wherein the elevating-fork is attached to a pulley suspended from a carriage which is movable on a bar or beam located at or near the top of the barn, so that when a load is raised to the proper height it can be easily moved to a place for discharging it. The nature of my invention consists in the novel construction and arrangement of the parts, as hereinafter more fully described and claimed.

In the annexed drawing, A A' designate the roof-timbers of a barn, to which are secured the ends of a round bar, B, which I denominate the supporting-bar, as it is upon this bar that the carriage of the elevator travels. C designates the carriage, which is of triangular form, the upper angles of the triangle being connected together by means of two rods, which serve as axles for two deeply-grooved wheels, *a a*. These wheels *a a* roll upon the bar B, and allow the carriage-frame *b* to be swung laterally without any liability of the said wheels being detached from their bar. The lower part of the carriage C carries a grooved pulley, *c*, around which an elevating-rope, *g*, passes. One end of this rope *g* is secured to the frame *b* of the carriage C, and the other end of the rope may be passed over a pulley, *p*, located at or near the roof-timber A'. From this rope is suspended a pulley-block, *h'*, carrying a pulley, *p*, and having secured to its lower end a hook, *i'*, to which

is attached a fork of suitable description, with a tripping device for it. E designates a stirrup, which is pivoted at *e* to one end of a lever, D, and which hangs freely from this lever, so as to always assume such a position that, when the load is raised to its full height, the said pulley-block *h'* will raise the stirrup E, and with it one end of the lever D. This lever D is pivoted at *i* to an offset of the frame *b* of carriage C beneath the bar B. One extremity of lever D has a hook, *f*, formed on it, which is directed upwardly. The other end of this lever has a narrow serrated portion, *d*, formed on it, which is adapted to enter between the flanges forming the grooves in the periphery of the pulley *c*, and to bite the rope *g* where it passes over this pulley, as shown in Fig. 1. The hooked end of lever D, which is the shortest end of this lever, is adapted to engage with a catch, G, which is adjustably secured to that end of the bar B from which the load is elevated from a wagon. This catch G is the half of a concave cone—that is to say, it is tapering from a concave base, and laterally convex—and presents a semicircular catching-lip, *j*. The catch thus described is secured to a teat or stop, *k*, by means of nuts and bolts, or bolts alone, which are lettered *m m* in Figs. 2 and 3. The stop *k* presents a concave edge, *j*, toward the carriage C, and this stop is so arranged, with reference to the catch G, that the carriage will be arrested by said stop *k* at the same time the hook *f* engages with this catch.

It will be seen from the above description that the catch G, being laterally rounded, will allow the hook *f* of lever D to engage with it whatever may be the angle of inclination given to the carriage C. Also, that the carriage is arrested by a stop, *k*, when the hook *f* engages with the catch G.

The catch and stop, thus made separately, and connected together, can be easily adjusted on the supporting-bar to any point or position by simply loosening the bolts.

It will be furthermore seen that the lever D serves not only to hold the carriage in its proper position while the load is being elevated, but that when the load is elevated to its highest point, and the pulley-block *h'* trips

said lever, it (the lever D) will drop upon the rope *g*, and, by its toothed portion *d*, gripe the rope and prevent the descent of the load.

Heretofore it has been customary to permanently secure the catch and stop to the barn-beam, for engagement with the hooked lever of the movable carriage; but my improvement consists in constructing the catch and stop in two separate and movable pieces, bolted together around the beam, whereby they can be easily adjusted and removed without interfering with the barn-beams or the operation of the carriage.

What I claim as new, and desire to secure by Letters Patent, is—

The adjustable and removable catch G, tapering and laterally rounded, and having a lipped base, and which is separately constructed from the wheel-stop *k*, and applied to bar B, and secured thereto by means of bolts and nuts passing through the stop *k* and catch G, in combination with a hooked clutching-lever D, substantially as described.

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

J. R. FEITZHOUS.

Witnesses:

GEORGE ROW,
JOHN FERGUSON.