

JOHN H. WHITE.

Improvement in Hay-Elevator and Carrier.

No. 127,003.

Patented May 21, 1872.

Fig. 1.

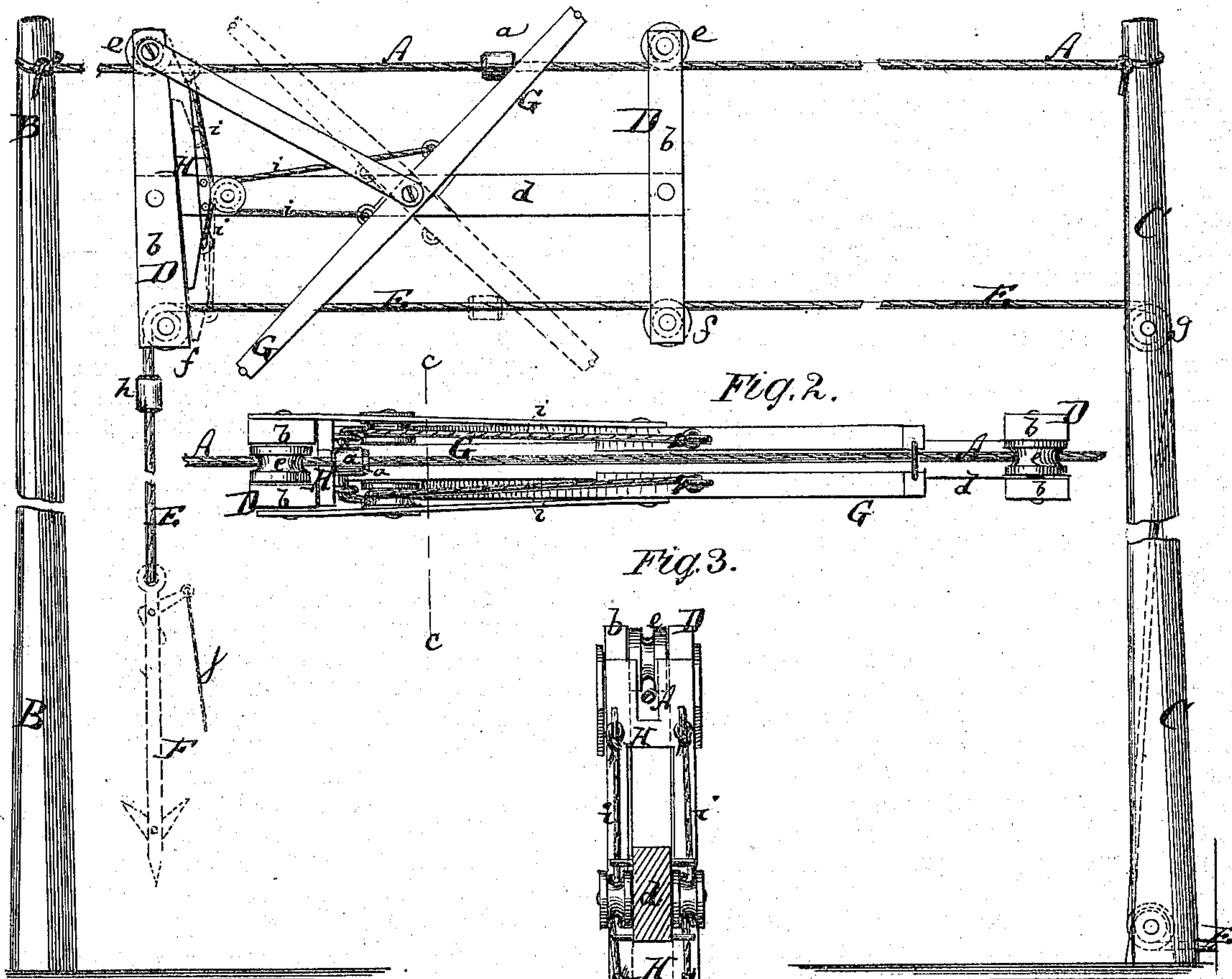


Fig. 2.

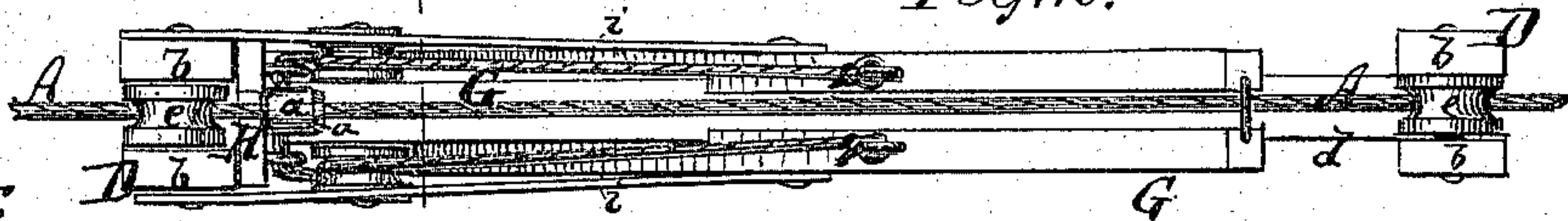
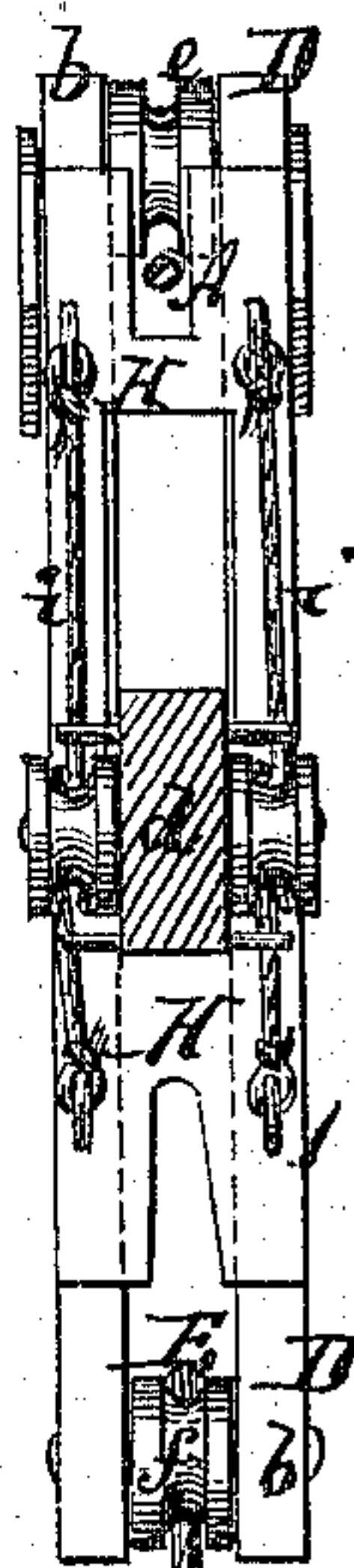


Fig. 3.



Witnesses:

John Becker,
Geo W. Mabey

Inventor:

J. H. White
Munnell
Attorneys.

PER

UNITED STATES PATENT OFFICE.

JOHN H. WHITE, OF COLUMBUS CITY, IOWA.

IMPROVEMENT IN HAY ELEVATORS AND CARRIERS.

Specification forming part of Letters Patent No. 127,003, dated May 21, 1872.

Specification describing a new and Improved Hay Elevator and Carrier, invented by JOHN H. WHITE, of Columbus City, in the county of Louisa and State of Iowa.

Figure 1 represents a side elevation of my improved hay elevator and carrier. Fig. 2 is a top view of the same. Fig. 3 is a vertical transverse section of the same on the line C C, Fig. 2.

Similar letters of reference indicate corresponding parts.

This invention relates to a new arrangement of carriage for elevating and conveying hay, straw, and other material for stacking or other purposes; and consists in a peculiar arrangement of said carriage, and in its combination with a lever and forked slide, and with knobs or buttons on the track-rope and elevating-rope, as hereinafter more fully described.

A in the drawing represents a rope stretched between two posts, B C, or other equivalent supports. Near the post B, which is at the place whence the material is to be removed, the rope A has a knob or button, *a*. D is the carriage, composed principally of two upright bars, *b b*, which are connected by a horizontal beam, *d*, and properly braced, if required. The uprights *b b* are slotted or forked at the ends, and carry pulleys *e e* at the upper ends and pulleys *f f* at their lower ends, as shown. By means of the pulleys *e* the carriage is suspended from the rope A, which passes through the slots in the upper parts of the uprights *b*. A rope, E, whose one end carries the fork F, or other tool or receptacle, whereon or wherein the material to be elevated or conveyed is to be held or contained, passes through the slots in the lower parts of the uprights *b* and over the pulleys *f f*, as shown. Its free end is placed over a friction-roller, *g*, on the post C, and carried down to where it is to be connected with horse-power or suitable mechanism to be pulled. The rope E also has a projecting knob or button, *h*, near where the fork F is fastened to it. G is a lever, pivoted at its middle to the beam *d*. It is by strings *i i*, or equivalent devices, so connected with a slide, H, that is arranged

close to the back upright *b*, that the vibrations on its pivot of the lever G will cause the said slide to move up and down. The ends of the slide H are forked, to straddle the ropes A and E when it (the slide) is moved up or down.

When the carriage D is moved back—*i. e.*, toward the post B, the upper end of the lever G is finally struck by the button *a* and swung from the position shown by dotted lines in Fig. 1 to that shown by full lines in the same figure. This motion of the lever causes the slide H to ascend and embrace the rope A in such manner as to prevent the forward motion toward C of the carriage. The latter is then so locked that it can only move as far as the button *a* will let it between G and H. The rope E is now let slack to let the fork, or other equivalent, down for a load. When the fork is charged the rope E is pulled at the other end, elevating the fork until the button *h* strikes the lower end of the lever G, which will carry the same into the position shown by dotted lines in Fig. 1, and lower the slide H. The button *h* is then confined between G and H, and holds the load suspended, even if the rope E should be slackened. The last-named motion of the lever G in lowering the slide H liberates the carriage from the button *a*, and allows it to be drawn forward toward C by the knob *h* being pulled against the lever G, or by weight of load. When the fork has arrived above the spot where the load is to be deposited its trip-line *i* is pulled, and its load thereby dropped. By means of the trip-line the fork and carriage is next drawn back toward B, the button *h* bearing against the lower end of the slide H to draw the carriage along. As soon, however, as the lever strikes the button *a* the carriage is arrested in position for receiving a fresh load, and the fork let down by the elevation of the slide, and consequent liberation of the button *h* from the same.

I prefer the rope A to a rigid rail, not only because it is more conveniently applied at various places and lengths, but also because it enables the use of a smaller carriage without taking at all from the strength of parts.

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

1. The carriage D, provided with the lever G and forked slide H, to operate substantially as herein shown and described.

2. The combination of the rope E having the button *h* with the carriage D, lever G, and

slide H, and with the rope A and button *a*, all arranged to operate substantially as herein shown and described.

JOHN H. WHITE.

Witnesses:

HENRY FULTON,
DAVID A. ROBBINS.