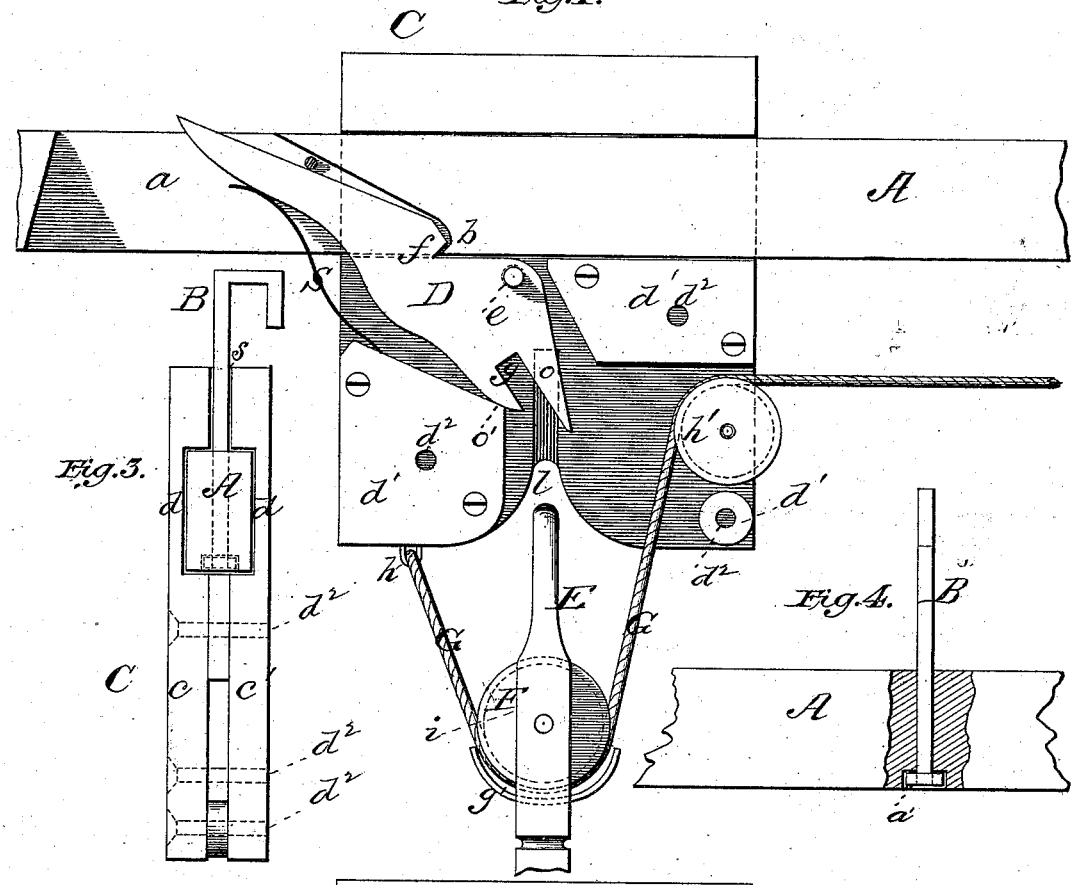
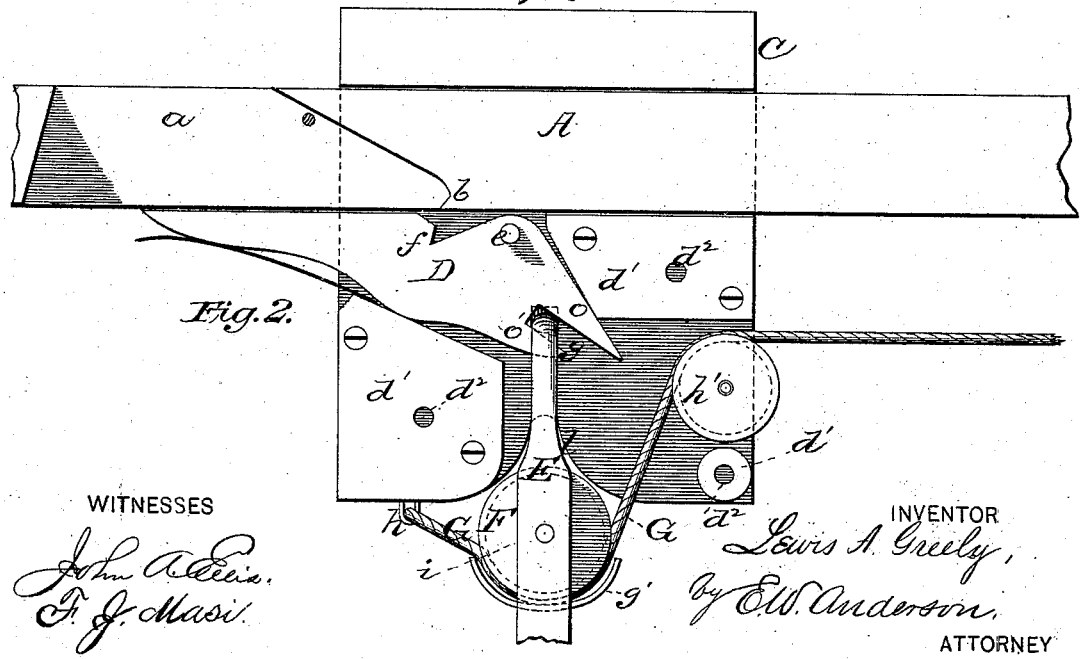
L. A. GREELY.
Hay-Conveyer.

No. 211,396. Patented Jan. 14, 1879.

Fig. 1.





WITNESSES

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LEWIS A. GREELY, OF ELMIRA, OHIO.

IMPROVEMENT IN HAY-CONVEYERS.

Specification forming part of Letters Patent No. **211,396**, dated January 14, 1879; application filed November 20, 1878.

To all whom it may concern:

Be it known that I, LEWIS A. GREELY, of Elmira, in the county of Fulton and State of Ohio, have invented a new and valuable Improvement in Hay-Conveyers; 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 side view of my improved conveyer, with one of the cheek-plates removed. Fig. 2 is a similar view of the same, showing the dog disengaged from the track-board. Fig. 3 is an end view, and Fig. 4 is a detail.

This invention has relation to improvements in hay-conveyers.

The object of the invention is to devise a conveyer of simple construction, wherein, the usual clinch-ring and brake being dispensed with, a great economy in rope is had, and to improve said devices generally.

The nature of the invention consists, mainly, in combining, with a track-board having a vertical slot near one end and a lip at the lower edge of said slot, a conveyer riding on said board, and a catch-dog having in its upper edge a notch adapted to engage with said lip, and provided upon its lower end, extending across the throat of the conveyer, with a deep recess, the dog being engaged with the lip of the track-board by a spring, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates a wooden or metallic track-board, suspended from the peak or highest point of a roof by means of strong hook-hangers B. These pass through the track-board, as shown in Figs. 3 and 4, and are prevented from being detached therefrom casually by the nuts a', screwed upon the ends thereof under the said board, the said nuts being countersunk into the same.

The track-board, where it extends outside of the barn or hay-shed, has a vertical slot, a, cut through it, terminating at its lower edge, adjacent to the barn, in a lip, b, the object of which will hereinafter appear.

C indicates the conveyer-carriage, formed of two cheek-plates, c c', having in their inner faces, on the same level, a traverse-groove, d, which form together a seat, in which the track-board is received. These plates have at their top a slot, s, which allows the carriage to slide upon the track-board from the outside of the barn to the mow and return without interference with the hangers that suspend the said board. They are connected together and maintained at a proper distance apart by means of spacing-blocks d^1 and suitable through-bolts d^2.

D indicates a vertically-vibrating holding-lever, swinging upon a pivot, e, and provided upon its upper edge with a notch, f, corresponding in form to the lip b of the track-board aforesaid. This lever has in its lower end a deep notch, g, the object of which will be hereinafter shown.

E indicates the hay-fork clevis, provided with a slot, i, having at its lower end a pulley, F, below which is a guard-plate, g', of convex form, that prevents the hoisting-rope from escaping from the said pulley. This rope G is secured to one end of the carriage at h, extends under pulley F, between it and its guard, extends thence to a second pulley, h', in the carriage, thence to a third pulley at the farther end of the track-board, passing over which it then reaches down to any convenient place for attaching the double-tree.

As shown in Fig. 1, the lever-dog D extends past the throat l of the carriage, and its upper prong or lip, o, bounding the notch therein, is longer than its lower one, o'; consequently, when the fork-clevis E is raised by drawing down upon its hoisting-rope G, its upper end enters the throat l, comes in contact with the upper prong of the dog D, and causes it to swing into the position shown in Fig. 2, when the notch in the dog clears the lip b of the track-board, and by drawing upon the said rope the carriage may be drawn into the mow and the load from the fork dropped into the same. The carriage is then run back outside the barn, usually by means of a cord and weight, when, as soon as the dog reaches the slot a, it is forced up into the same by the reaction of spring S, secured at one end to the carriage and bearing with the other against the said dog, and the lip b is re-engaged with

the notch *f*, thus locking the carriage to the track-board. As the carriage moves toward the mow, at the moment the dog clears the slot *a* of the track-board, the upper edge of the said dog bears against the under side of said board, and the lower prong, *o'*, of the dog being engaged in the upper end of the slot *i* of the fork-clevis, the weight of the hay upon the fork is transferred to the dog and sustained by its pivot. The rope is then wholly utilized in moving the carriage.

The dog and pulleys are usually of cast-iron, the spring of steel, the fork-clevis of wrought-iron, and the remainder of the carriage of wood.

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

1. The angular dog D, having notch *f* in its upper edge and recess *g* in its end, in combination with a conveyer, C, a track-board, A, having a slot, *a*, and a lip, *b*, and a spring secured at one end to the carriage, bearing with the other against the dog, and the fork-clevis adapted to shift the dog and be secured thereby, substantially as specified.

2. The combination, with a carriage having a throat, *l*, of a dog, D, vibrating in said carriage, extending with its lower notched end past said throat, and provided with a notch, *f*, on its upper edge, the track-board A, having a vertical slot, *a*, and lip *b*, and the spring S, the throat *l* serving as a guide for the fork-clevis, to throw the same into contact and gear with the dog, substantially as specified.

3. The combination, with a track-board suspended in the peak of a roof, of a carriage composed of cheek-plates *c c'*, having each a groove, *d*, forming a seat for the said board, the said plates being united by spacing-blocks and through-bolts, substantially as specified.

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

LEWIS ALLSTON GREELY.

Witnesses:
O. G. GREELY,
T. P. GREELY.