

L. W. & W. G. MILLER.
HAY-ELEVATOR.

No. 177,348.

Patented May 16, 1876.

Fig: 1

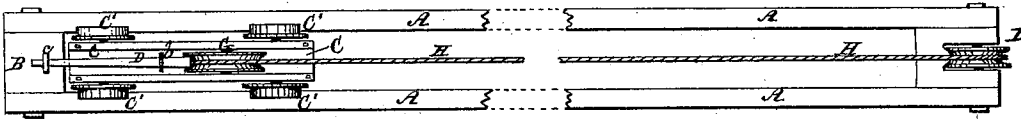
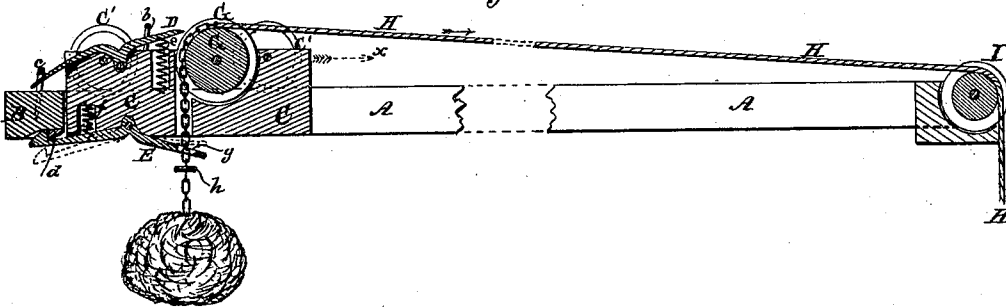


Fig: 2.



WITNESSES
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By

INVENTOR
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UNITED STATES PATENT OFFICE.

LEONARD W. MILLER AND WILLIAM G. MILLER, OF ELK RIVER TOWNSHIP,
CLINTON COUNTY, IOWA.

IMPROVEMENT IN HAY-ELEVATORS.

Specification forming part of Letters Patent No. **177,348**, dated May 16, 1876; application filed
April 21, 1876.

To all whom it may concern:

Be it known that we, LEONARD W. MILLER and WILLIAM G. MILLER, of Elk River township, in the county of Clinton and State of Iowa, have invented certain new and useful Improvements in a Device for Elevating and Carrying Hay; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view. Fig. 2 is a central longitudinal vertical section.

The object of our invention is to facilitate the hoisting of hay, grain, or other material into a barn or store-house; and our invention consists of a car arranged on wheels adjusted to run on ways, and provided with hoisting devices, as hereinafter described.

A represents the ways, adjusted and securely held, by any proper means, in the gable of the barn or store-house, with the end B inclining toward the material to be raised. C represents the car provided with wheels C', adjusted to run on the ways. D is a pivoted lever on the top of the car, the forward end of which lever extends under a catch, *c*, on the end B, and the inner end is a pawl to catch the hoisting-chain and hold it from running back on the pulley by means of a spiral spring, *e*, as shown in Fig. 2. E is a lever, pivoted on the under side of the car, the forward end of which lever is provided with a hook to catch over a stop, *d*, on the end B, and the inner end *g* of said lever is provided with a hole or ring to receive the hoisting-chain, which is provided with a stop, *h*, near the lower end. G is a pulley, having its bearings on the car, and I is a pulley having its

bearings at the back end of the ways, through which pulleys the hoisting-chain and rope H run.

The car being in position at the end B, as shown in the drawings, and the lower end of the chain properly attached to the material to be hoisted, the power is applied to the lower end of the rope H, raising the material till the stop *h* strikes the end *g* of the lever E, disengaging the hook from the catch *d*, and thus releasing the car, which immediately moves backward on the ways, in the direction of the arrow *x*, releasing the forward end of the lever D from stop *c*, and the spiral spring *e* forces the pawl D against the hoisting-chain in the pulley, holding the material in its elevated position while the car is moved to the position to be unloaded, and then, by the inclination of the ways, the car runs forward to the end B, the forward end of lever D entering under stop *c*, and by it being pressed downward, releasing the pawl from the chain, and the hook end of lever E springs over the catch *d*, where it is held by the spiral spring *f*, holding the car in position till released, as before described. The lever D is held in position laterally by a staple wire or rod, *b*.

What we claim as new, and desire to secure by Letters Patent in a hoisting-machine, is—

The pivoted levers D and E, as constructed, in combination with stop *c*, catch *d*, springs *e* *f*, and hoisting-chain having stop *h*, substantially as and for the purposes described.

In testimony that we claim the foregoing as our own invention we affix our signatures in presence of two witnesses.

LEONARD WESLEY MILLER.
WILLIAM GEORGE MILLER.

Witnesses:

WM. W. SANBORN,
ORSON HOGLE.