

E. B. Coffin,
Stump Elevator.
N^o 43,291. Patented June 28, 1864.

Fig. 1.

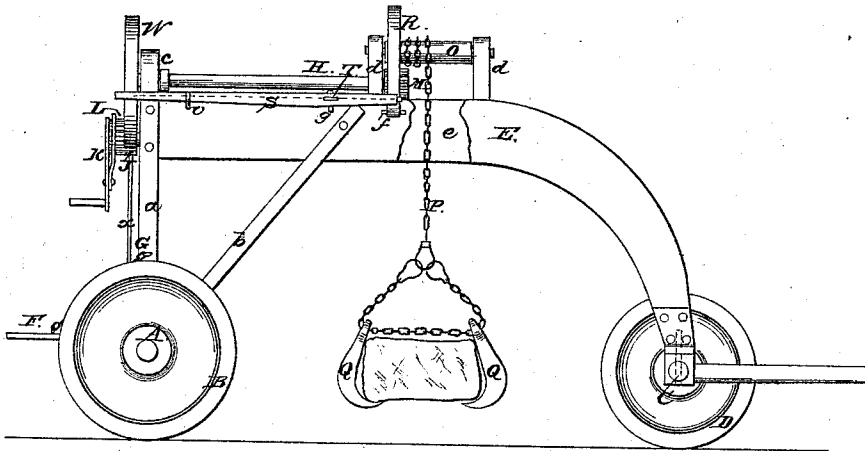
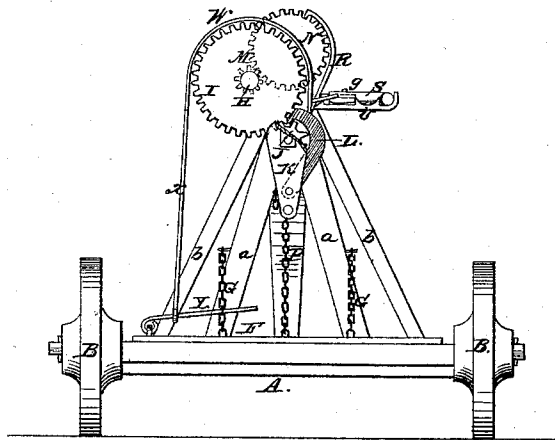


Fig. 2.



Witnesses:
Henry Morris.
Geo. B. Reed

Inventor:
E. B. Coffin
per Munroe & Co.
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UNITED STATES PATENT OFFICE.

E. B. COFFIN, OF OLNEYSVILLE, RHODE ISLAND.

IMPROVEMENT IN ELEVATING AND TRANSPORTING DEVICES.

Specification forming part of Letters Patent No. 12,291, dated June 28, 1864.

To all whom it may concern:

Be it known that I, E. B. COFFIN, of Olneysville, in the county of Providence and State of Rhode Island, have invented a new and Improved Implement or Device for Elevating and Transporting Articles from Place to Place; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, an end view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to a new and improved implement or device for elevating and transporting articles from place to place, and is more especially designed for building stone walls in which large stones are employed, the stones being elevated by the device from the ground and carried in a suspended state to the wall in course of construction and deposited thereon, as hereinafter set forth.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the back axle of the device, and B B the wheels fitted thereto. C is the front axle, and D D its wheels.

E is a curved bar or beam, the back and main portion of which is horizontal and its front part curved downward, with a bolt in its end to fit centrally in the front axle, C, the latter being allowed to turn freely on the bolt. The back part of the beam E is supported from the back axle, A, by means of inclined bars *a* and braces *b*. This bar or beam E comprises the whole of the framing of the machine.

To the back axle, A, there is attached by joints or hinges a platform, F, which is sustained in a horizontal position by chains G. This platform is for the operator to stand upon, and it may be turned up out of the way when not required for use.

H is a shaft, which is fitted in suitable bearings, *c*, on the beam E, said shaft being at one side of the beam and having a toothed wheel, I, on its back end, which gears into a pinion, J, the latter having a crank, K, fitted loosely

on its axle, and a pawl, L, attached to the crank to engage with the pinion J and connect the crank with the pinion when the latter is to be turned.

On the front end of the shaft H there is fitted a pinion, M, which gears into a toothed wheel, N, on a shaft, O, the latter being fitted in suitable bearings, *d*, on the beam E, and having a chain, P, attached to it, with grappling-hooks Q at its lower end, the chain P passing down through a mortise, *e*, in the beam.

R is a pawl, the lower end of which is attached by a hinge, *f*, to the beam E; and S is a lever which has its fulcrum *g* at the outer end of a horizontal arm, T, the latter projecting from the beam E. The back part of the lever S works over a notched bar, U, and the former may be fitted in any one of the notches of said bar.

The operation is as follows: The implement or device is drawn over the stone to be raised, and the lower end of the chain P secured to it with the aid of the hooks Q. The shaft H is then turned through the medium of the crank K and gearing I J, and the shaft O is turned from the shaft H through the medium of the gearing M N, the shaft O winding up the chain P and elevating the stone, which is retained in a suspended state at the desired height in consequence of the pawl R being thrown in gear with the wheel N through the medium of lever S, the front end of the lever S having a spring, V, attached to it, which bears against the pawl R. The stone is drawn in this suspended state to the wall in which it is to be laid, the beam E being brought over the unfinished end of the wall, so that the stone may be lowered into the place designed for it. In lowering the stone the pawl R is disengaged from the wheel N, the crank K being released and the descent of the stone regulated by a brake composed of a metal strap, W, which passes over the wheel I and is connected by a rod, X, with a foot-lever, Y. Thus by this simple arrangement stones and other articles or substances may be elevated and transported from place to place and lowered properly and with facility in the spot designed for it.

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

The curved bar or beam E, mounted on wheels and provided with a windlass composed of the shafts O H, connected by the gearing M N and operated through the medium of the gearing I J, crank K, and pawl L, in connection with the brake or strap W, at-

tached to the foot-lever Y, and the pawl R and lever S, or their equivalents, all arranged to operate substantially as and for the purpose specified.

E. B. COFFIN.

Witnesses:

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