

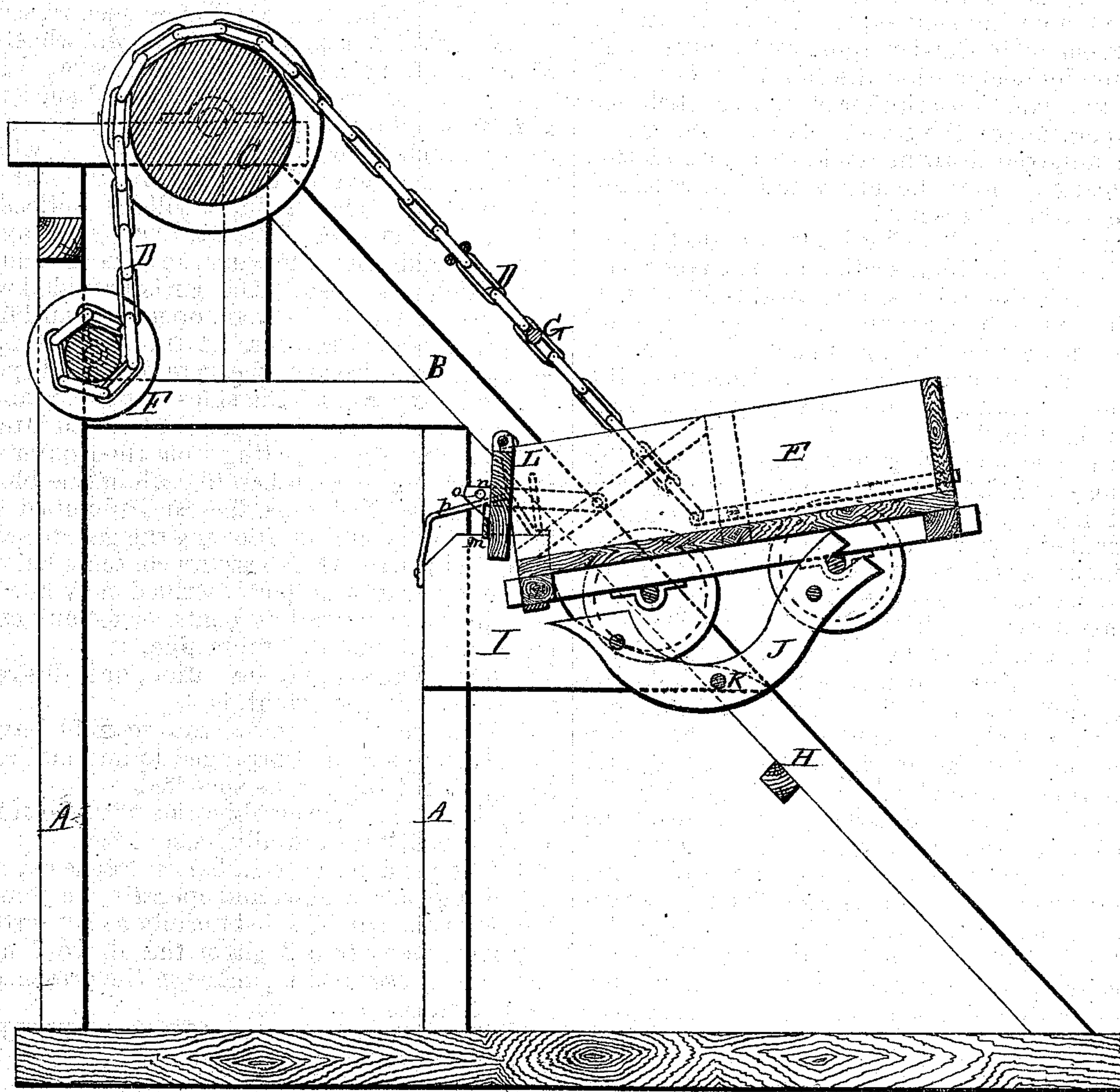
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EZRA COCKILL.

## Improvement in Car Dumping Apparatus.

No. 119,122.

Patented Sep. 19, 1871.



*Witnesses.*

E. A. Bates

Villette Anderson.

*Inventor.*

Ezra Cockill,  
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# UNITED STATES PATENT OFFICE.

EZRA COCKILL, OF LLEWELLYN, PENNSYLVANIA.

## IMPROVEMENT IN CAR-DUMPING APPARATUS.

Specification forming part of Letters Patent No. 119,122, dated September 19, 1871.

*To all whom it may concern:*

Be it known that I, EZRA COCKILL, of Llewellyn, in the county of Schuylkill and State of Pennsylvania, have invented a new and valuable Improvement in Car-Dumping Apparatus; 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 drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical longitudinal section of my invention.

This invention relates to apparatus for elevating and dumping cars; and the novelty consists in the construction and arrangement of the car, hoisting-machine, and devices for upsetting the car and unlocking its hinged end gate, as hereinafter described.

In the accompanying drawing is shown the hoisting-scaffold, having the upright supports A and inclined ways B. On top of said scaffold is journaled a chain pulley, C, over which passes a chain, D, which is coupled to a dumping-car, E, at one end, and adapted to being wound on a windlass-drum, F. The chain is made in two parts where it is coupled to the car, and holds a spreader, G, which steadies the car on its course up the scaffold-ways. The ways are constructed with inside tracks H extending from the lower part about half the height of the scaffold, and terminating in two blocks, I, cut out in front to correspond to the peripheries of the front wheels of the car, or otherwise constructed so as to act as stops to arrest the progress of the car. At the point where said tracks and blocks come together is placed a cradle, J, having double inclined sides, and movably hung to the scaffold by means of a transverse shaft, K. The lower ends of the sides of the cradle are notched, and hang down in such a position that when the car is raised the hind axle shall enter the notches and lift the cradle to a horizontal position. The upper ends of the sides of the cradle are beveled

off and project so that the front of the car as it runs up the ways shall depress them, and thus elevate the lower ends sufficiently to receive the hind axle. When the cradle has been raised to a horizontal position the car (the hind wheels of which rise from the tracks) is also elevated to a horizontal position, or slightly beyond such, and runs forward over the blocks I until the front wheels touch the curved surfaces thereof, whereupon the rear end of the car is raised and the car dumped. The chain, it will be noticed, is hitched to the sides of the car about midway between its ends, thus allowing the various changes of position described. The car is provided with a hinged end gate, L, which opens outward from the lower part of the car. A transverse bar, m, secured to the front of the gate projects beyond the side crevices and the sides of the car, and is secured at each end by means of beveled latches n, having pins o projecting from their outer surfaces. A lug, p, attached to each of the blocks I receives said pins as the car is dumped and throws up the latches, allowing the gate to swing open and the car to deposit its contents below.

The apparatus herein described may be used as a means of unloading boats, or for any other purpose to which it is applicable.

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

1. The cradle J, pivoted to a scaffold having inclined ways B, and arranged to automatically raise and tilt the car, as specified.

2. The blocks I, in combination with the cradle J and car E, substantially as specified.

3. The pendent gate L, bar m, latches n, pins o, and lugs h, arranged and operating in connection with the car E, substantially as set forth.

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

EZRA COCKILL.

Witnesses:

CYRUS MOORE,

PATRICK CHRISTOPHER.

(20.)