

UNITED STATES PATENT OFFICE.

JAMES WILLIAMS, OF BELL'S DEPOT, TENNESSEE.

IMPROVEMENT IN CAR AND TENDER LOADING APPARATUS.

Specification forming part of Letters Patent No. 122,207, dated December 26, 1871.

Specification describing a certain Improved Car and Tender Loading Apparatus, invented by JAMES WILLIAMS, of Bell's Depot, in the county of Haywood and State of Tennessee.

My invention consists in a box holding a sufficient quantity to load the tender with fuel or the car with freight, which box is pivoted on a frame higher than the tender and car, so as to tilt toward the said tender or car, and the side of the box which swings down is hinged so as to be let fall upon the top of the tender or car and form a chute for conducting the contents into the thing to be loaded. The ends of this hinged side have pieces similar to the end boards of the box, which assume a vertical position when the side falls down, and form sides to the chute, preventing the escape of the contents of the box over the ends. For loading tenders, the box, which is much smaller than will be required for discharging a car-load at once into a car, is arranged in vertical ways and has a hoisting-drum and other necessary apparatus for lifting the box from the ground to the proper elevation for discharging; but for loading cars the freight should be as high as the box to be put into it, or it may be carried up by elevators. The frame supporting this loading apparatus is mounted on car-wheels to be run along a temporary track, to facilitate the taking of the wood or coal from different positions and conveying the load to the proper place for discharging.

Figure 1 is a side elevation of my improved tender or car-loading apparatus. Fig. 2 is a transverse section on the line *x x* of Fig. 1. Fig. 3 is a horizontal section on the line *y y* of Fig. 1.

A is a frame of any suitable kind mounted on car-wheels B and made considerably higher than the top of the tender or car to be loaded. C is the box or charger for receiving the fuel or freight, as the case may be, to be loaded. It is pivoted

lengthwise at the center of the bottom, by a shaft or axle, D, to cross-pieces E of the frame and arranged to tilt over to the left, as seen in Fig. 2, but is prevented from tilting the other way by the beam F. The bar G arrests the box when tilted down far enough. The cross-pieces E are in this instance fitted to slide up and down in grooves in the ends of the frame for raising and lowering the box, and they are suspended on chains H connected to a bar, I, which is suspended from the drum L by a rope, K, and the chain is geared with suitable driving apparatus for winding up the rope and raising the box or unwinding it and letting the box down. The side M of the box is hinged to the bottom, as shown at N, and it is provided with end pieces O which close down by the ends of the box when the side M is turned up to receive the substance to be loaded. The said sides and its ends are held in this closed position by the chain P hooking on to the pin Q on the bar F, and the box is held against tilting down by chain R in like manner. Both of these chains are disconnected when the box is to be discharged, and it tilts over at once by the gravity of the contents, the center of which is slightly on that side. The side M falls upon the top of one side of the tender or car, as the case may be, and chutes the contents into said car or tender.

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

The tilting box C, having hinged side M with end pieces O O, combined with sliding-blocks E E, supporting-beam F, and gauge-bar G, when all are applied to a frame movable on the track of a railroad, as and for the purpose described.

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Witnesses:

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