(No Model.)

D. C. NIBLICK.

DUMPING CAR.

No. 305,954. Patented Sept. 30, 1884.

Fig. 1.

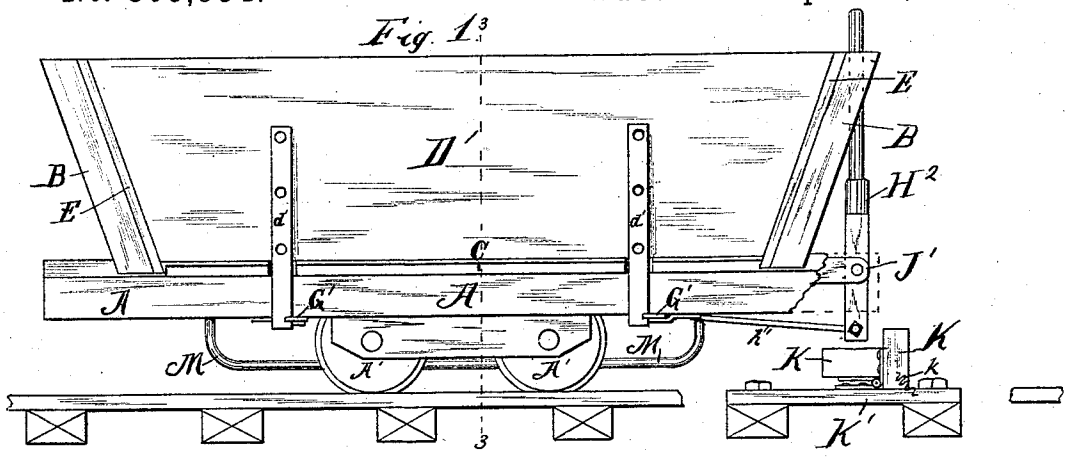


Fig. 2.

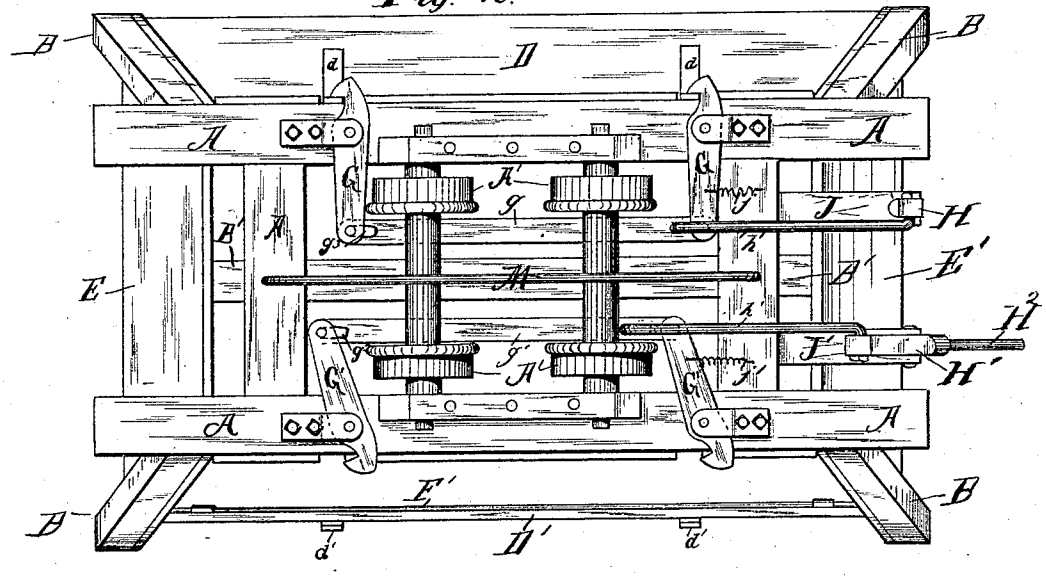
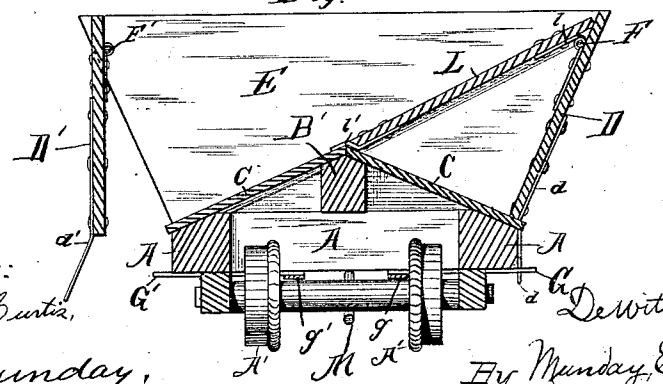


Fig. 3.



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UNITED STATES PATENT OFFICE.

DEWITT C. NIBLICK, OF CHICAGO, ILLINOIS.

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 305,954, dated September 30, 1884.

Application filed July 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, DEWITT C. NIBLICK, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Dump-Cars, of which the following is a specification.

This invention relates to dump-cars used for unloading coal.

The object of the invention is to provide a durable and efficient dump-car of simple construction, and one by means of which the coal may be automatically dumped either upon both sides at once or at different points, or upon only one side, as may be desired.

The invention consists in the novel devices and novel combinations of devices herein shown and described.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a side elevation of a dump-car embodying my invention. Fig. 2 is a bottom view of the same, and Fig. 3 is a transverse section on line 3 3 of Fig. 1.

In said drawings, A represents the truck-frame, and A′ the wheels of the truck.

B are the corner-posts, which are set flaring in the usual manner; and B′, the raised central longitudinal beam, which supports the raised V-shaped bottom C of the car.

D and D′ are the flaring hinged sides of the car body or box, and E E′ are the ends of the same. The ends E are nailed or secured to the posts B. The swinging sides D and D′ are hinged to the brace-rods F F′, which extend between the posts B on each side. The swinging sides D D′ are each provided with locking straps or bars *d d′*—one near each end—which engage the hook or catch levers G G′, pivoted to the bottom of the truck-frame. The catch-levers G G and G′ G′ on each side are connected together by a rod or bar, *g g′*, to which the ends of said catch-levers are pivoted, so that they may both be operated together. The levers G G and G′ G′ are operated automatically by means of levers H H′, which are pivoted to arms or projections J J′, secured to the frame of the car, and which levers are connected to the connecting-bars *g g′* by the rods *h h′*. Springs *j j′* are also connected to the levers G G′, so as to automatically return the same into position for locking or closing the swinging sides of the car. The levers G G′ fit in slots g^2 g^3 in the connecting-bars *g g′*, so that the springs may operate the levers G G′ without moving the connecting-bars. The levers H H′ are operated automatically as the car moves along its track by striking against projections or posts K, which are hinged to a board, K′, removably secured to the ties or track. The hinge permits the post to incline or shut down out of the way of the levers H H′ as the car returns, while the hinge at the same time holds the post rigid when the lever of the car strikes against it, moving in the opposite direction. One of these posts K is set in position for each of the levers H H′ to strike against when it is desired to dump the coal on both sides of the car at once, or at the same point. If, however, it is desired to dump the coal only upon one side, the post K for the opposite side is removed or permanently closed down out of the way. By setting the posts K K at different points along the line, the coal will be dumped on both sides, but at different points. The slots g^2 g^3 in the connecting-bars *g g′* prevent the unlatching of the sides D D′ on the return movement of the car when the tripping-levers H H′ strike against the hinged posts. But for these slots, though the posts are pivoted, their inertia, if the car were moving with much rapidity, might cause the unlatching of the hinged sides when the levers H H′ strike against said posts. Light springs *k* serve to return the posts to an upright position after the return movement of the car. The latch-levers G G G′ G′ are made curved or pointed at their ends, so that the locking straps or bars *d d′* will automatically latch themselves as the hinged sides D D′ close or are swung shut.

In order to enable me to dump all the coal upon one or the other side, I provide the car with a removable bottom piece, L, which serves to extend the inclined bottom to the top edge of the car on either side, according as it may be placed, so that the coal will all run out on one side. This removable inclined bottom piece, L, is provided with hooks *l l*, which fit over tie-rods F or F′, in order to support the same and hold it in position. Lips or hooks *l′* are also provided at the bottom edge of this removable inclined bottom piece,

L. The trip-levers H H′ are furnished with removable handles H², so that the car may be dumped by hand when desired.

M is a curved rod secured to the cross-piece of the frame, for the purpose of attaching the propelling-rope of the car.

I claim—

1. The combination, with a dump-car having a raised V-shaped bottom, C, and hinged sides or doors D D′, of removable inclined bottom piece, L, extending from the apex of the raised bottom to near the top of the car, for the purpose of dumping the load upon either side, as may be desired, substantially as specified.

2. The combination, with the dump-car having hinged sides D D′ and raised bottom C, of removable inclined bottom piece, L, provided with hooks *l l*, substantially as specified.

3. The combination, in a dump-car, of the raised bottom C, with the hinged sides D D′, tie-rods F F′, to which said sides are hinged, and removable inclined bottom piece, L, provided with hooks *l l*, attached to said tie-rod, and lips or shoulders *l′ l′*, substantially as specified.

4. The combination, in a dump-car, of the hinged sides D D′, provided with latch-bars *d d′*, with latch-levers G G′, connecting-bars *g g′*, trip-levers H H′, connecting-rods *h h′*, and hinged dumping-posts K, secured to the track, substantially as specified.

5. The combination, in a dump-car, of the hinged sides D D′, provided with latch-bars *d d′*, with latch-levers G G′, connecting-bars *g g′*, trip-levers H H′, and connecting-rods *h h′*, substantially as specified.

6. The combination, in a dump-car, of the hinged side or door D, provided with latching-bars *d*, latching-levers G, pivoted to the frame of the car, connecting-bar *g*, tripping-lever H, and connecting-rod *h*, substantially as specified.

7. The combination, in a dump-car, of a hinged door and a spring latching-lever with a tripping-lever and its connecting mechanism, and a hinged dumping-post secured to the track, substantially as specified.

8. The combination, in a dump-car, of the hinged side or door D, provided with latching bar or strap *d*, latching-lever G, provided with spring *j*, tripping-lever H, and connecting-bar *h* and hinged dumping-post, substantially as specified.

9. The combination, in a dump-car, of the hinged sides D D′, provided with latching-bars *d d′*, with latching-levers G G′, connecting-bars *g g′*, having a slotted connection with said latching-levers, springs *j j′*, tripping-levers H H′, and connecting-rods *h h′*, substantially as specified.

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