

A. J. BALLARD.

Dumping Car.

No. 108,313.

Patented Oct. 18, 1870.

Fig. 1.

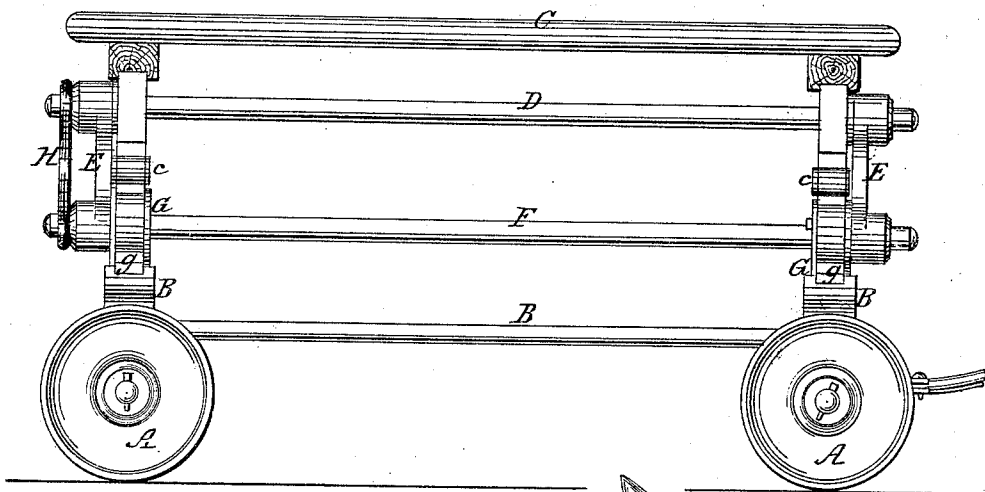


Fig. 2.

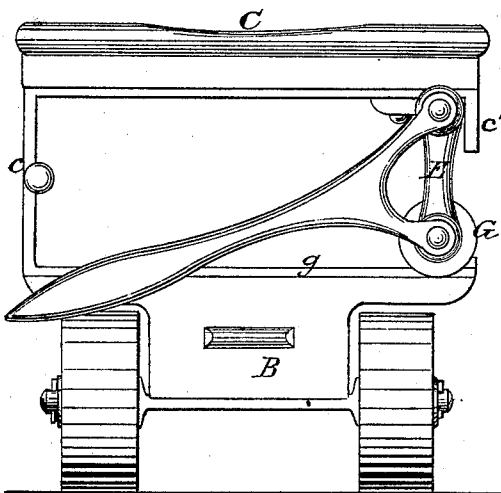
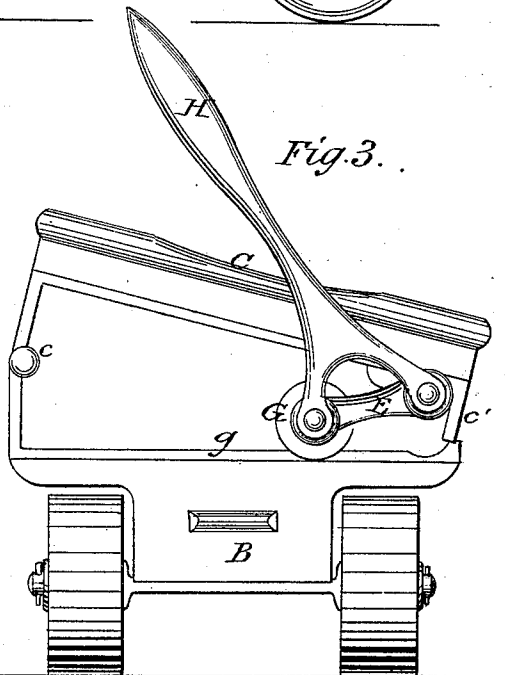


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

ANDREW J. BALLARD, OF COHOES, NEW YORK.

IMPROVEMENT IN DUMPING-CARS.

Specification forming part of Letters Patent No. **108,313**, dated October 18, 1870.

To all whom it may concern:

Be it known that I, ANDREW J. BALLARD, of Cohoes, in the county of Albany and State of New York, have invented a new and useful Improvement in Beam-Doffers or Dumping-Cars, of which the following is a specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a side elevation of my improved truck. Fig. 2 represents an end view of the same. Fig. 3 represents a similar view of the same with the top lowered.

My invention is more especially adapted to the loading, transportation, and unloading of beams from warping-frames in factories for weaving and spinning textile fabrics; and my improvement consists in constructing the truck with a top or platform so hinged that one of its sides or ends may be raised or lowered by means of a lever, to facilitate the loading and unloading of the truck.

In the accompanying drawing the truck is shown as composed of four wheels, A, mounted on suitable axles, and connected by a proper frame, B. One pair of wheels is made to turn on a king-bolt in the usual way, to guide it properly.

A bed, table, or platform, C, is mounted at one side or end upon hinged standards *c*. The other side or end rests upon a hinged frame, composed of a rock-shaft, D, mounted in bearings in the bed, arms E, vibrating on the rock-shaft, a connecting-bar, F, and friction-rollers G. These latter are flanged, and run on rails *g* on the truck.

A hand-lever, H, is pivoted on the rock-shaft D, and raises or lowers one side of the bed by moving the rollers in or out, as shown by the drawing.

A notch, *g'*, in the rails *g*, serves to hold the rollers G in place, and thus keep the table locked

in position when elevated, while a stop, *c'*, prevents its descending too far.

In operation the bed is lowered from the position shown in Fig. 2 to that shown in Fig. 3 by lifting the hand-lever. The beam or other article is then rolled on the table, the lever depressed, and the table raised to a horizontal position. The load is discharged by reversing this operation.

Arms or levers might be hinged to the side of the bed to form an inclined plane, up which the article to be loaded might be rolled. These arms would, if short, be lifted out of the way by the rising of the table; or they might be folded over upon the load, to hold it in position.

The fulcrum of the shaft F might be fixed either at the point occupied by the axis of the roller in Figs. 2 or 3, and the friction-rollers G be mounted on the upper shaft, D, which latter would then vibrate around the axis of the other shaft; but I prefer the mode shown.

I do not broadly claim a dumping or tilting bed mounted on a truck, as that is common in railway-cars.

I claim as my invention—

The combination of the bed, hinged to the carrying-frame at one side, the rock-shaft, mounted in bearings on the other side of the bed, the frame vibrating around said shaft, the friction-rollers, and the vibrating hand-lever, all these parts being constructed to operate in combination, substantially as hereinbefore set forth.

In testimony whereof I have hereunto subscribed my name.

ANDREW J. BALLARD.

Witnesses:

JOHN CLUTE,
PETER BLACKWOOD.