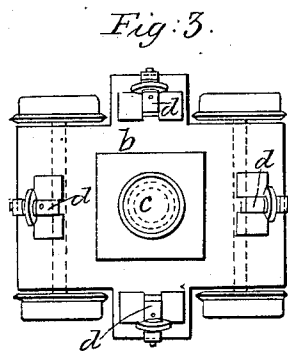
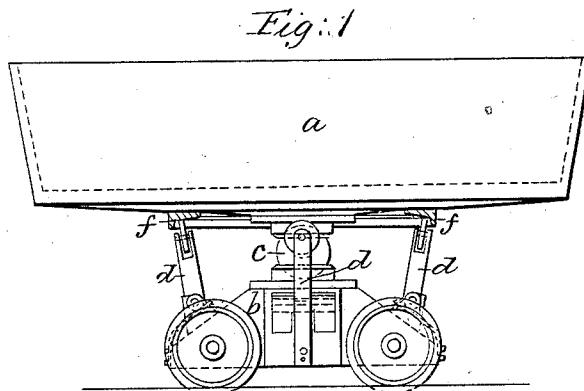
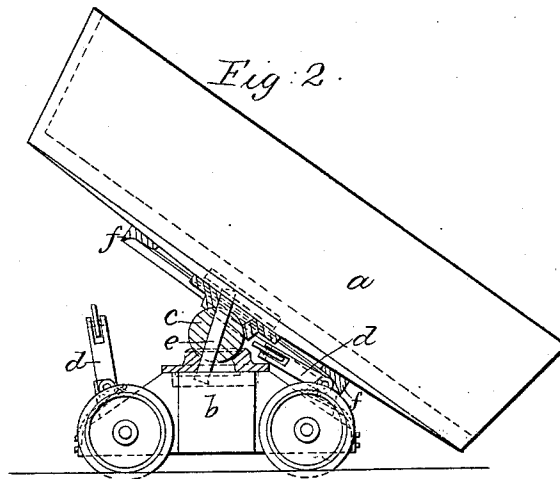


HARDING & MORSE.

Dumping Car.

No. 113,655.

Patented April 11, 1871.



Witnesses

George E. Bird

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Inventors

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United States Patent Office.

WILLIAM HENRY HARDING AND GEORGE FREDERIC MORSE, OF
PORTLAND, MAINE.

Letters Patent No. 113,655, dated April 11, 1871.

IMPROVEMENT IN DUMPING-CARS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that we, WILLIAM HENRY HARDING and GEORGE FREDERIC MORSE, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Dumping-Car; and we hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side elevation of the car in horizontal position.

Figure 2, same in a tipped position.

Figure 3 shows a plan of the truck.

The object of the invention is to provide a rotary and tipping-car simply constructed, and capable of tipping to any side.

The following is the description of its construction:

The car-body is constructed as common with cars for transporting and carrying dirt, gravel, and such other substances, having one side hinged or removable to allow the contents to slide out when the body is inclined.

The body in this case rests upon a ball, *c*, placed in the center of the top of the truck *b*, and on this ball or globe the car-body both rotates and tips.

When in a horizontal position the body is prevented from tipping by certain supports, *d d d*, which are constructed as follows: They have on their upper ends small rollers, so that the body of the car (upon the under side of which they impinge) can rotate easily on the ring *f*. These supports are also hinged

at their lower ends so that they can be laid down under the car-body, so as to permit the car-body to become tipped and inclined when desired.

Under the ends of these supports, which are attached to the truck, are the springs *h*, so arranged as to hold the supports when in either the upright or inclined position.

The process of dumping the car is as follows:

The car being loaded, the body is swiveled so that the hinged or removable end is turned to point where it is desirable to deposit the load. The support *d* on that side is then pushed down, (see fig. 2,) and the body being without support on that side is then easily tipped.

A pin, *e*, passing through the ball prevents the body from being thrown from the truck, the weight, however, being mostly received on the truck-frame.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The ball *c* in combination with the car-body, and for the purposes herein set forth.

2. The supports *d*, having the rollers at the tops, the joints and springs at the bottoms, as herein set forth, to operate as described.

Portland, February 28, 1871.

WILLIAM HENRY HARDING.
GEORGE FREDERIC MORSE.

Witnesses:

WILLIAM HENRY CLIFFORD,
GEORGE E. BIRD.