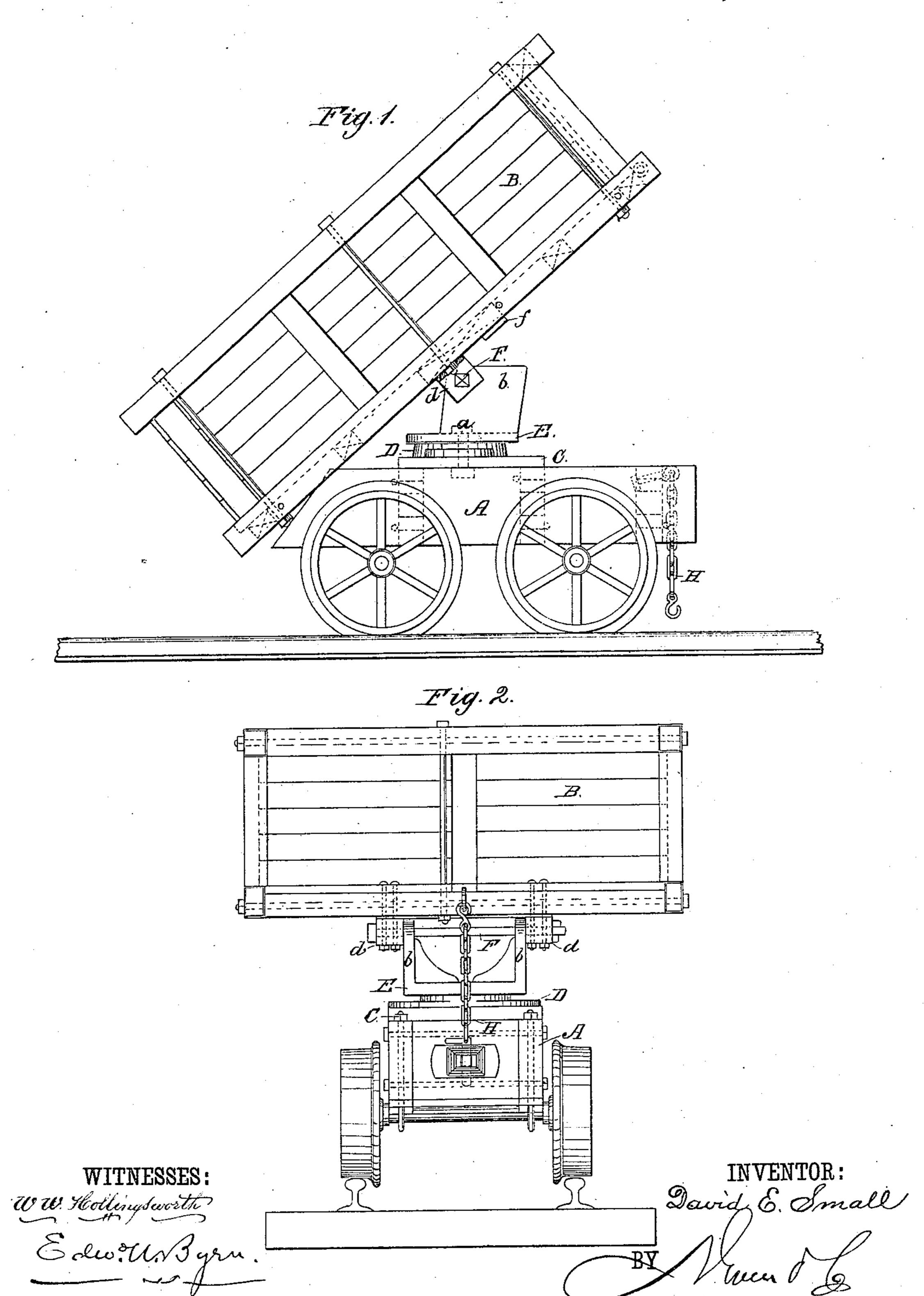
D. E. SMALL. Dumping Car.

No. 241,080.

Patented May 3, 1881.



## UNITED STATES PATENT OFFICE.

DAVID E. SMALL, OF YORK, PENNSYLVANIA.

## DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 241,080, dated May 3, 1881.

Application filed January 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, DAVID E. SMALL, of York, York county, and State of Pennsylvania, have invented a new and useful Improvement in Dumping-Cars; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation with the car-body tilted. Fig. 2 is an end elevation with the car-

body in a horizontal position.

My invention relates to an improvement in dumping-cars; and it consists in the peculiar construction of the plate for connecting the tilting body of the car to the truck, the said plate being made with elevated side supports, which raise the pivotal point of the car-body sufficiently high to enable it to be tilted without striking the truck too soon, and said supports having an offset at one side of its fulcrum, which catches and sustains the car-body when in a horizontal position, and holds it steady.

In the drawings, A represents a car-truck, 25 and B the car-body. This truck has upon its upper surface a piece of timber, C, upon the top of which is bolted a plate, D, whose upper face is preferably grooved in concentric circles. Upon the top of this plate, and bolted down to 30 it by a central vertical bolt, a, is a plate, E, which has preferably upon its lower side concentric grooves or corrugations, which fit the face of the plate D and exclude dust and dirt from the joint, as usual. The upper portion of 35 this plate I construct in a peculiar manner for a special purpose. Thus I form it with two or more upwardly-projecting walls or supports, b b, suitably braced inside by angle-brackets. In the top of these supports, and preferably in 40 a line with the vertical bolt a, I form bearings for the fulcrum-barF, upon which the car-body tilts, which fulcrum-bar passes through lugs d d on the bottom of the car-body.

My object in constructing the plate E with the high walls or supports b extending or off- 45 setting to one side of the fulcrum is to provide a single, simple, and strong connection between the car-body and truck, which permits the carbody both to tilt in dumping and to turn about a vertical axis. In dumping a car it is neces- 50 sary that it should tilt to a certain incline, and the difficulty has been to get this incline and still secure a strong and simple connection with the truck capable of the movement described. By placing the fulcrum of the car-body at the 55 top of these elevated walls I secure the necessary elevation which allows the car-body to tilt to the proper incline before striking the truck, while the offset of the walls to one side of the fulcrum gives a firmer bearing for the piece 60 f on the bottom of the car when the latter is in a horizontal position. H is a chain, which hooks onto the body of the car to keep it from accidentally tilting.

I am aware of the Patent No. 160,122; but 55 this has a complication of parts and joints about the center of the truck, which involves a corresponding liability to become jammed, which is the very result that my construction is designed to avoid, it being very necessary 70 that as simple and strong a connection as possible be preserved here on account of the peculiar requirements of this connection.

Having thus described my invention, what I claim as new is—

The combination, with the truck and body portion of a car, of a plate connected to the truck by a vertical bolt, so as to turn horizontally, said plate having upwardly-extending walls or supports carrying the fulcrum-bar of 80 the car at the top, and offsetting laterally therefrom, substantially as shown and described.

D. E. SMALL.

Witnesses:

SOLON C. KEMON, CHAS. A. PETTIT.