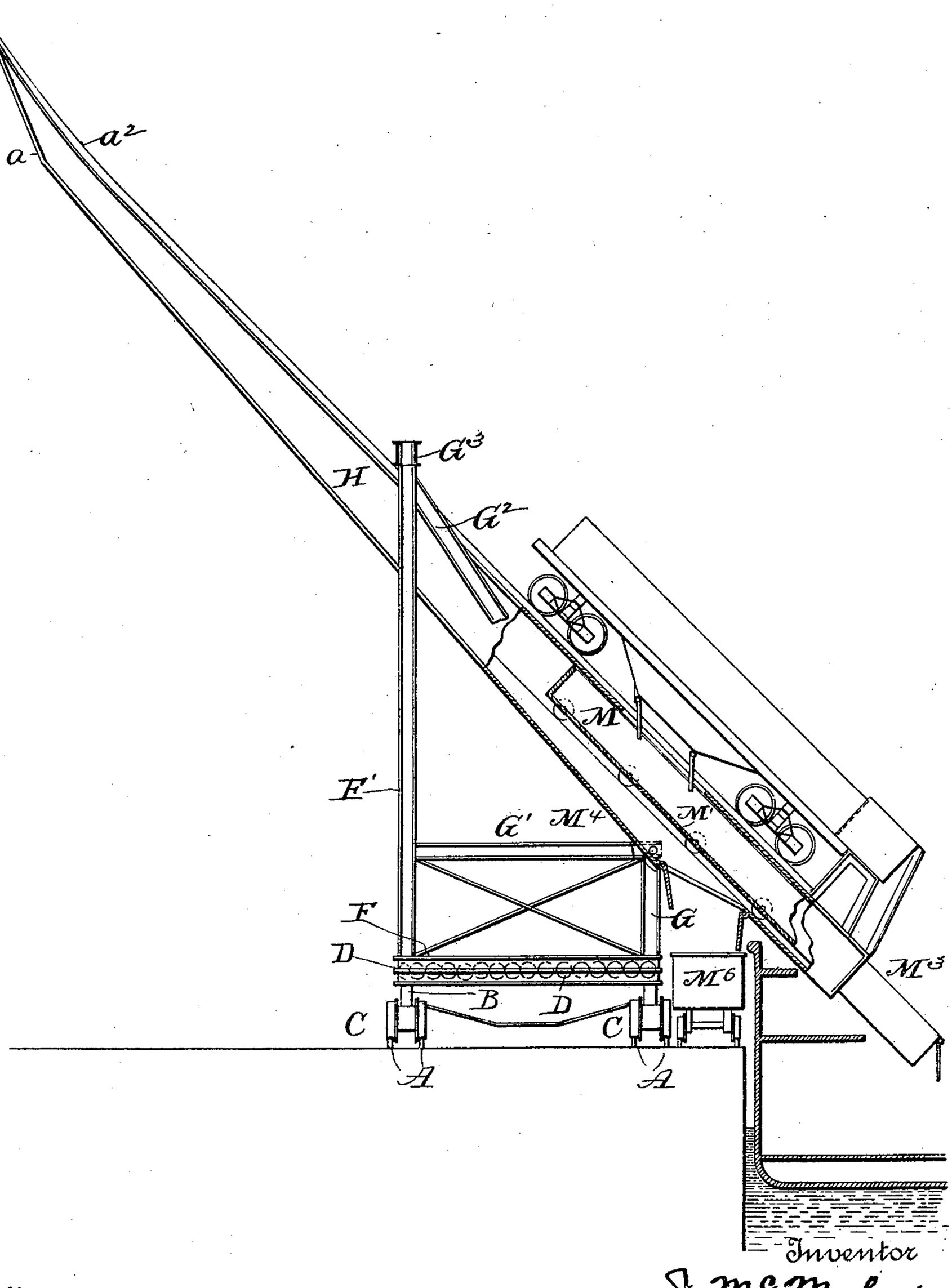
(No Model.)

J. McMYLER.

DEVICE FOR UNLOADING CARS.

No. 538,340. Patented Apr. 30, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN McMYLER, OF CLEVELAND, OHIO.

DEVICE FOR UNLOADING CARS.

SPECIFICATION forming part of Letters Patent No. 538,340, dated April 30, 1895.

Application filed October 31, 1894. Serial No. 527,570. (No model.)

To all whom it may concern:

Be it known that I, JOHN MCMYLER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Devices for Unloading Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in devices for unloading cars, and is designed more particularly as an improvement on the construction disclosed in United States Patent No. 516,053, granted to George H. Hulett, March 6, 1894.

The accompanying drawing represents my device in side elevation partly in section.

The Hulett device above referred to consists essentially of a truck carrying a rotary platform, a lengthwise tilting platform carried by the rotary platform and means for drawing a car up the platform and means for tilting the platform. The Hulett patent also discloses a hopper, a chute located adjacent to the buffer, and a sliding trough adapted to receive the coal as it falls from the hopper or chute.

My invention is designed more particularly for unloading hopper bottom cars, and it consists in a tilting platform having an opening therein, at a point between its ends and a trough below the opening in the platform and leading to the discharging end of the tilting platform and means for tilting the platform.

My invention further consists in a tilting platform having an opening therein, at a point between its ends, a screen below the opening and a trough leading from the lower end of the screen.

My invention further consists in the parts and combinations of parts as will be more fully described and pointed out in the claims.

A represents a railway constructed to receive the truck B, which latter is mounted on wheels C and is adapted to travel back and forth parallel to the pier or water front, as shown. This truck B is provided on its upper face with a bearing or way for the rollers D. Resting on the rollers D, and secured to the truck by a suitable king bolt or equivalent device is the rotary platform F, which latter carries a suitable engine and boiler, or electric or other motors for actuating the drums and other movable parts. The platform is rotated by means of a rack and pinion ordinarily employed for that purpose, and is provided with the uprights F′ and G, the former being considerably longer or higher than the latter and connected thereto by the braces G′, G². The two shorter uprights G are connected together at the tops and at intermediate points if desired, while the uprights F′ are also connected at their tops by braces G³. Pivotally mounted on the upper ends of the shorter uprights G is the inclined platform H, which latter consists of preferably two parallel girders located a proper distance apart and connected at intervals throughout their length forming in effect a platform. The platform thus formed is provided with rails and is curved as at a^2 and beveled at a so that when in position the beveled ends of the rails will rest against or on the rails of a surface track and form a continuation thereof, so that a car on the surface track can, by suitable mechanism, be drawn up the inclined platform, discharged of its contents, and lowered onto the same or onto another track.

By curving the lower ends of the girders as shown, all angles are avoided at the juncture of the rails on the platform H, and the surface tracks, and the ascent rendered more gradual.

The tilting platform is provided at its outer end with a buffer, and at a point nearer the center with an opening which latter is designed to come under the hopper ordinarily formed in the bottom of coal cars. This opening m can be of sufficient size to accommodate hoppers of various sizes.

Located between the girders is a trough M, which latter is provided with a screw M′ over which all the coal passes as it falls from the car. This trough can be stationary or movable lengthwise so as to enter more or less in the hold of a vessel, and if stationary, a movable trough can be employed at the point marked M³ for accomplishing the same end.

In the drawing I have shown the trough carrying the screen movable, whereby the lower end thereof can be projected through the hatchway. The screen however can be

stationary and the trough movable and accomplish the same end.

Under the screen M′ is an apron M^4 upon which screenings fall, and pass from thence through an opening formed in the apron M^4 to a car or other receptacle M^6 located to receive the same.

The platform is shown in the drawing in position for discharging the contents of a car into the hold of a vessel. In operating the device, the platform would be lowered until the beveled end thereof aligned with a surface or elevated track. A loaded car would then be drawn onto and up the inclined platform until it rested in contact with the buffer. While in this position the hopper doors in the bottom of the car are dropped thus permitting the coal in the forward end of the car, which is then elevated, to fall rearwardly through the hopper and into the trough. After all the coal in the forward end of the car has passed into the trough, the platform is then tilted until it and the car are in the position shown in the drawing. The tilting of the platform causes the coal previously deposited in the trough to pass downwardly and out into the hold of the vessel and also causes the coal in the rear end of the car to be discharged through the hopper bottom into the trough and out into the hold of the vessel.

All the coal in its passage from the car to the vessel passes over the screen, thus separating the coal from the screening and depositing nothing but clean coal in the hold of the vessel.

It is evident that numerous slight changes might be resorted to in the general arrangement and combinations of parts without departing from the spirit and scope of my invention. Hence I would have it understood that I do not limit myself to the exact construction set forth, but,

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

1. In a device for unloading cars the combination with a tilting platform having an opening therein at a point between its ends through which coal is discharged from a hopper bottom car, of a trough located below the opening and leading to the discharging end of the tilting platform and means for tilting the platform.

2. In a device for unloading cars, the combination with a tilting platform having an opening therein through which coal is discharged from hopper bottom cars of a trough located below said opening, a screen in the bottom of the trough, and a chute beyond the screen for discharging the screenings, substantially as set forth.

3. In a device for unloading cars the combination with a truck, a rotary platform thereon and a tilting platform carried by the rotary platform, the said tilting platform having a discharge opening therein at a point between its ends through which coal is discharged from hopper bottom cars, of a trough located under said opening and leading to the discharging end of the tilting platform.

4. In a device for unloading cars, the combination with a tilting platform having an opening therein at a point between its ends through which coal is discharged from a hopper bottom car of a sliding trough for discharging the coal into the hold of a vessel, substantially as set forth.

5. In a device for unloading cars, the combination of a normally inclined platform having an opening therein at a point between its ends, a discharging trough below said opening and means for tilting said platform, the said parts being arranged whereby the coal in the forward end of the car will be discharged while the platform is in its normal position and the coal in the rear end discharged by the tilting of the platform.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN McMYLER.

Witnesses:
S. G. NOTTINGHAM,
A. W. BRIGHT.