

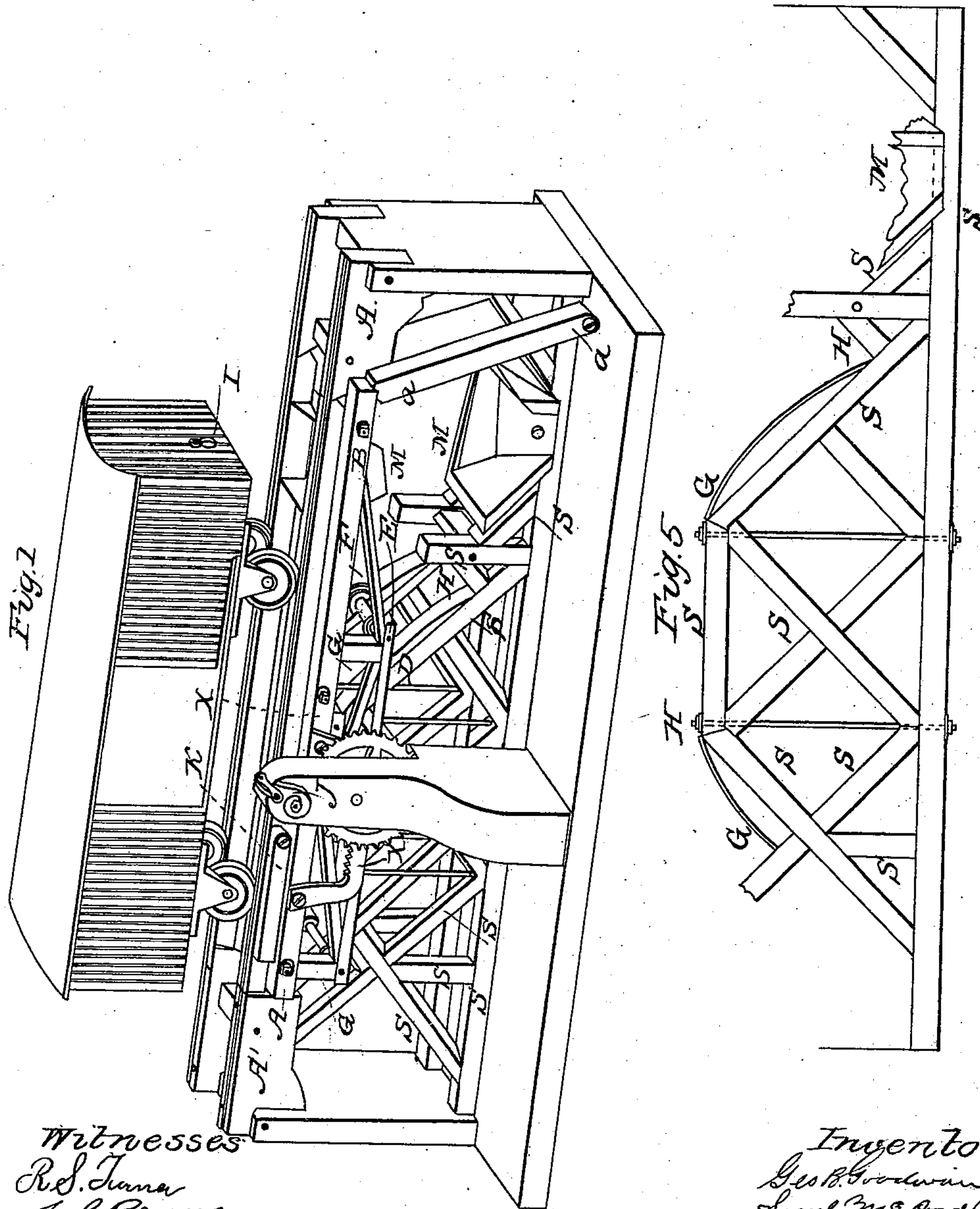
GOODWIN & McCORD.

Dumping Car.

2 Sheets—Sheet 1.

No. 85,086.

Patented Dec. 22, 1868.



Witnesses
R. S. Tamm
J. S. Brown

Inventor
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By Arthur A. R. Smith

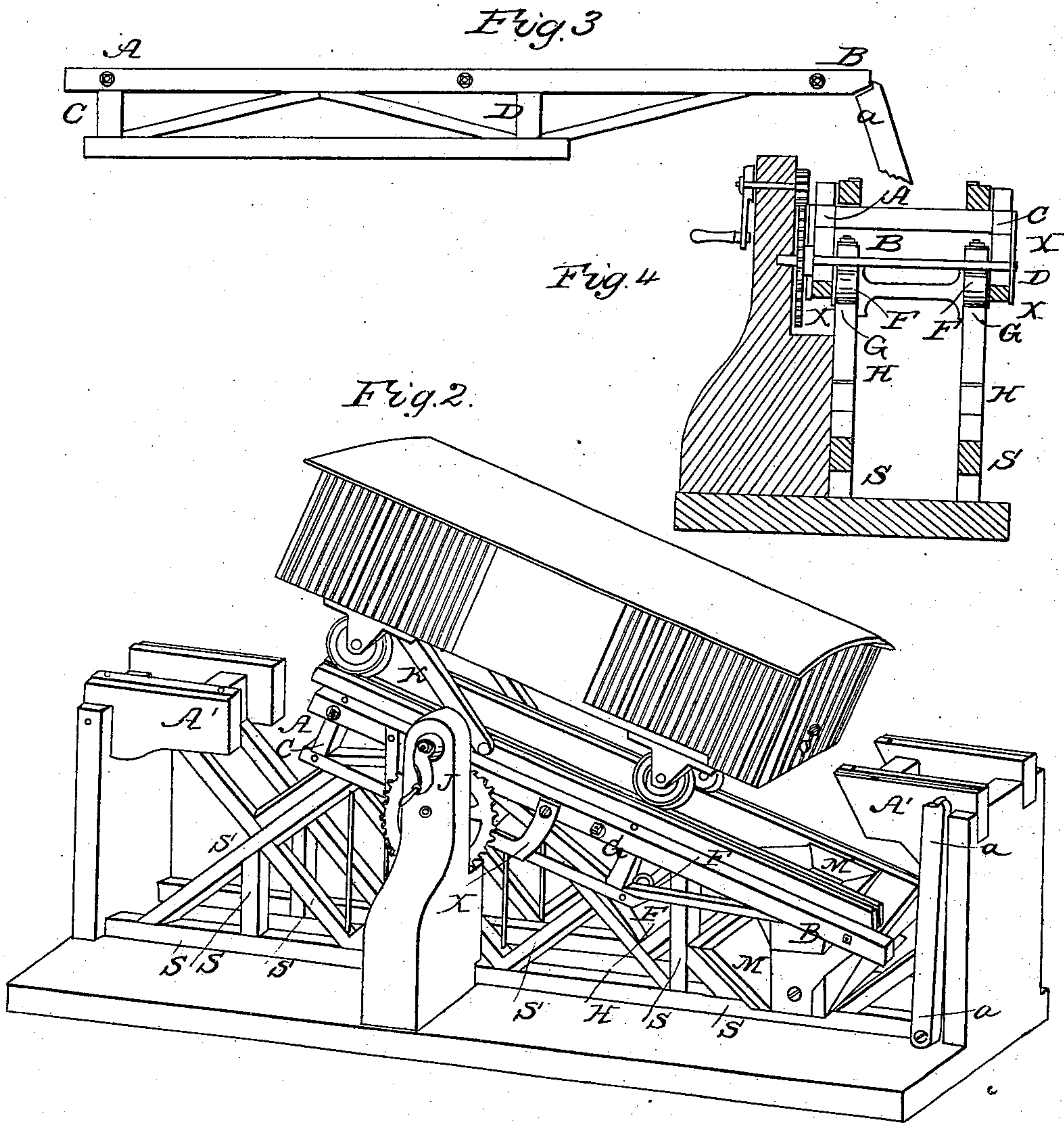
GOODWIN & McCORD.

2 Sheets—Sheet 2.

Dumping Car.

No. 85,086.

Patented Dec. 22, 1868.



Witnesses
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GEORGE B. GOODWIN AND SAMUEL McCORD, OF MILWAUKEE,
WISCONSIN.

Letters Patent No. 85,086, dated December 22, 1868.

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, GEORGE B. GOODWIN and SAMUEL McCORD, of Milwaukee, in the county of Milwaukee, and State of Wisconsin, have invented a new and useful Improvement in Mode of Unloading Wagons, Cars, &c.; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of our invention, showing the cradle in position, and the track continuous.

Figure 2 is a perspective view of our invention, showing the operation of the tilting-cradle.

Figure 3 is a side elevation of the frame-work of the cradle.

Figure 4 is a transverse section through the cradle and truss.

Figure 5 is a side elevation of truss, to support the segmental track.

This invention relates to a means for unloading grain from wagons, cars, and the like; and

It consists in a tilting-platform, upon which the car or other vehicle is to be placed, and then tilted, until the grain will, by its own gravity, run out through a small gate at the end of the car.

Though this invention is applicable to the unloading of vehicles of all kinds, yet, for convenience, we will only describe its application to the unloading of railroad-cars, the same principles being involved whether cars or wagons are being unloaded.

A A are parts of an ordinary railroad-track, and

A, B, C, and D, are parts of a tilting-cradle, made in said track, so that where a car rests upon said cradle, it may be tilted into the position shown in fig. 2, and, by opening a gate, I, in the end of the car, the grain will, by its own gravity, run out through said gate, and fall into a hopper, M, which conducts it into the elevator-bin or other receptacle.

The cradle A B C D rests upon truck-wheels E F, and these latter travel upon a segmental track-way, G H, so that the cradle does not simply tilt, but is carried forward and backward on said track-way, and is much more easily managed than if it moved upon a pivot.

As railway grain-cars are usually unloaded by men who go inside of the cars for that purpose, much dust is raised from the moving grain, and this dust is exceedingly detrimental to the health of the workmen. A large number of men also is required, frequently six or eight to a car.

By our invention, the car may be unloaded with less number of hands, in less time, and without any detriment to the health of the men employed.

The means employed for operating the cradle may be various, but the most simple is a rack and pinion,

aided by intermediate gearing, if the cradle is to be operated by hand-power.

We therefore employ the racks X, which are secured to each side of the cradle; and suitable pinions, operated by the crank J, are secured in bearings upon the truss-frame, which supports the segments G H. By turning the crank J, by hand or any other power, the cradle is run forward upon the curved track G H, until the car assumes the position shown in fig. 2, when the gate I may be opened for the exit of the grain, and, when the car has been emptied, a reverse motion of the crank and pinion restores the cradle to its original position.

When the cradle is in position to make the track-way continuous, as in fig. 1, the swing-braces *a a*, or equivalent devices, are moved forward, so that their tops come beneath the ends of the said pieces B, and prevent the cradle from sinking at that end under a car that is passing along the track.

In order to hold and support a car while upon the tilting-cradle, and keep it from running forward as the cradle is being tilted, the braces K K, or their equivalents, are attached to the track-way, and their free ends are raised up, so as to engage with some convenient part of the car or one of its trucks, as shown in fig. 2.

In the above description, we have set forth a very simple plan for carrying our invention into effect. The details of its construction may be very greatly varied, without in any degree changing the nature of the invention, and it may be applied to the unloading of cars, wagons, or other vehicles, and they may be made to tilt sideways by a proper arrangement of the cradle and segmental track, if, from convenience or any other reason, it may be desirable.

In place of trucks, smooth shoes may be employed sometimes, and, in that case, they may be regarded as the full equivalents of the trucks.

Having described our invention,

What we claim as new, is—

1. A carriage or cradle, constructed in the roadway, and resting upon trucks or shoes, and travelling upon a segmental track, substantially as described, and for the purpose set forth.

2. The arrangement of the cradle, trucks E and F, and segmental track G H, when constructed as described.

3. The swing-braces *a a* and K K, or their equivalents, as and for the purpose set forth, in combination with the tilting-cradle and segmental track, as set forth.

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SAM'L McCORD.

Witnesses:

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