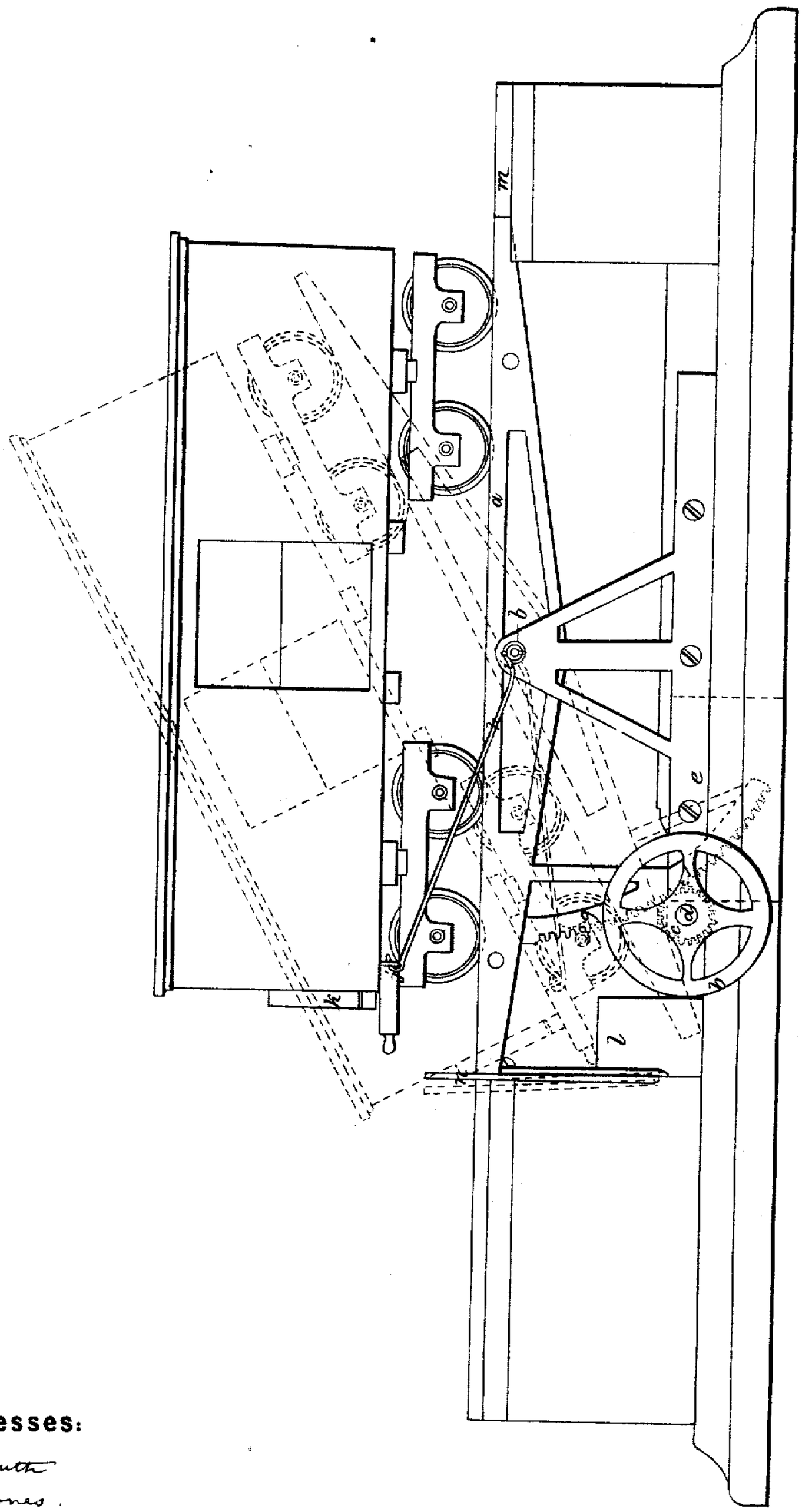
D. J. WHITTEMORE.

Dumping Car.

No. 58,928.

Patented Oct. 16, 1866.



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UNITED STATES PATENT OFFICE.

D. J. WHITTEMORE, OF MILWAUKEE, WISCONSIN.

IMPROVED METHOD OF UNLOADING GRAIN-CARS.

Specification forming part of Letters Patent No. **58,928,** dated October 16, 1866.

To all whom it may concern:

Be it known that I, D. J. WHITTEMORE, of the city of Milwaukee, in the State of Wisconsin, have invented a certain new and useful Improvement for Unloading Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and to the letters and marks thereon.

The invention made the subject of this improvement is designed for unloading grain in bulk from ordinary freight-cars by machinery instead of by the usual manner, by shovels and men.

The unloading of the cars in the usual way is expensive and liable to many objections.

The men will be subjected to the dust from the matter associated with the grain, and therefore liable to such diseases as arise from causes operating upon the membranes of the breathing-tubes mechanically, and the coughing and other annoyances lessen their ability to work. The grain will be exposed to the tobacco-juice and expectoration of the workmen.

Ordinarily, it takes eight men with shovels five minutes to unload a car of three hundred and thirty bushels of grain, while by my invention it can be accomplished in less time—two men only being required to operate the machinery.

The drawings forming part of this specification show how my invention can be practically put in operation, these drawings representing a loaded car in the position of being ready for the unloading, as indicated by the black lines, and in the position of being unloaded, as indicated by the red lines.

A sufficient length of railway-track, *a*, is attached to an axle, *b*, at or near the middle thereof, so that by a proper arrangement of machinery the car, when on the track, and securely fastened to it, may be made to assume an inclination endwise sufficiently much greater than the angle of repose of the material with which the car may be loaded as of its own gravity to pass out of a door constructed for the purpose in or near the end of the car.

The means for moving the car (shown by the drawings) are a toothed wheel, *c*, on a shaft, *d*, having bearings in the side plates, *e*, with a hand-wheel, *f*, or a power-wheel, in connection with a motive power.

The teeth of the wheel *c* fit into the teeth of a segment, *g*, which is affixed to the frame of the track *a*. Rods or bars *h*, properly secured to the frame or axle at the one end *i* and hooked into an eye or socket, *j*, on the bottom or side of the car, will hold the car upon the track *a*, and when the end of the car has been brought down, so that its door *k* is in line with the delivering-chute *l*, the door may be opened by hand, or by the weight of the grain, and the contents of the car be discharged.

When the car is unloaded, reversing the motion and power by which the car and track are operated will carry them back to the line of the stationary track *m*, where the unloaded car can be moved off and another loaded car be moved forward for discharge.

This arrangement of means is particularly applicable to unloading railway-cars loaded in bulk with grain, and to accomplish that special object was my incentive to this improvement; but, as is evident, the invention may be applied to other cars laden with other materials.

The arrangement of means herein described and shown will allow of the one end of the car being depressed or elevated.

If it is desirable that such an arrangement be made as will allow of both ends of the car being moved, some device like that shown at *n*, whereby a lever may move a bar or stud, *o*, to steady or support the end of the rail-bars, can be placed at the other end, and means like or similar to those herein described for raising and lowering the one end of the car may be arranged for use upon the other end of the car also.

If it be desirable to operate the rails and car by some means having a continuous motion, a crank or water-press and pump, working above and below a piston or plunger, or a screw arrangement, could be adopted.

Instead of the outlet and door for the discharging of the grain being like the ones here

shown, any other kind of door, or any other position of the outlet that would answer for the purpose of letting the grain pass out, could be used.

What I claim as my invention, and desire to secure by Letters Patent, is—

Unloading cars by the arrangement of means constructed and operated substantially as herein recited.

This specification signed this 8th day of August, 1866.

D. J. WHITTEMORE.

Witnesses:
J. P. WHALIN,
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