E. DAVIS.

DUMPING-CAR.

No. 182,901. Patented Oct. 3, 1876.

Fig. 1.

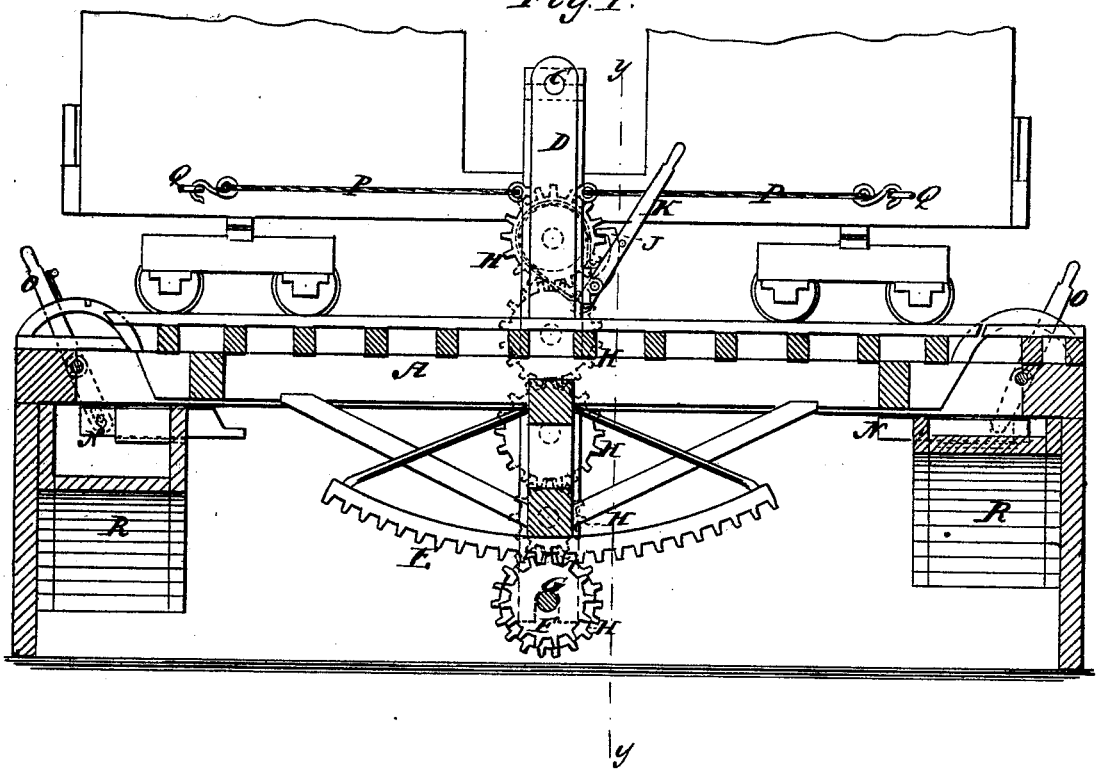
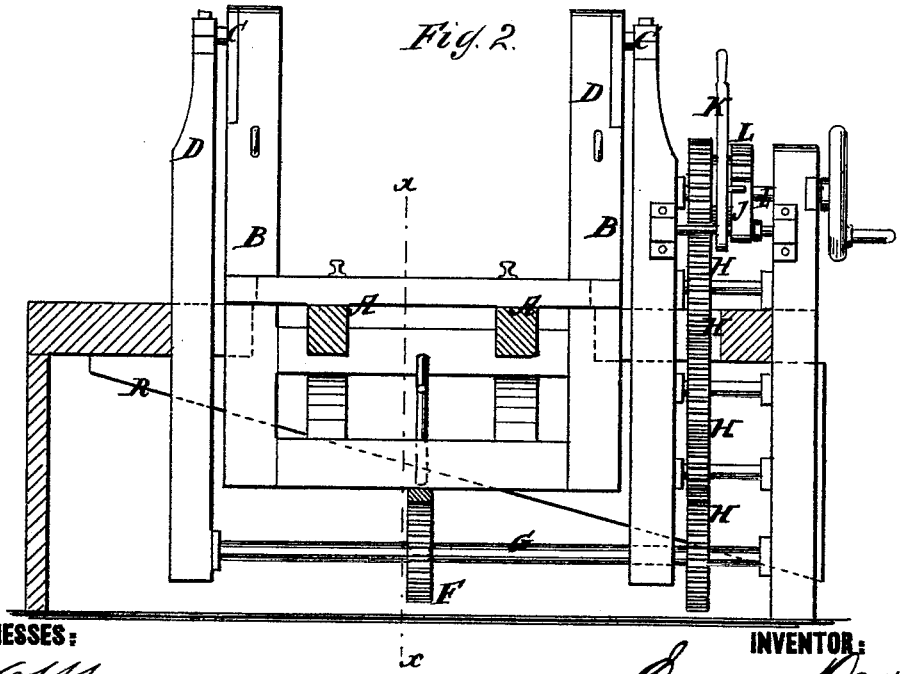


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EUGENE DAVIS, OF CLINTON, ILLINOIS.

IMPROVEMENT IN DUMPING-CARS.

Specification forming part of Letters Patent No. **182,901**, dated October 3, 1876; application filed May 9, 1876.

To all whom it may concern:

Be it known that I, EUGENE DAVIS, of Clinton, in the county of De Witt and State of Illinois, have invented a new and Improved Car-Unloading Apparatus, of which the following is a specification:

The present invention has reference to certain improvements in that class of car-unloading apparatus in which a tilting or swinging track-section is used in connection with a main track for running a car on and off said tilting section; and the invention consists in the combination, with a centrally-pivoted track-section, of an arc-shaped or segmental rack-bar engaging with a spur-wheel on a driving-shaft. By the arrangement of the rack-bar below the axis of the tilting track-section the same can be depressed at either end by simply turning the operating gearing in opposite directions, thus dispensing with two sets of devices for tilting the track.

Figure 1 is a longitudinal sectional elevation of my improved car-unloading apparatus, taken on the line *x x* of Fig. 2; and Fig. 2 is a transverse section, taken on line *y y*, Fig. 1.

A is a short section of the railway-track suspended on the frame B, which is pivoted at C, above the track, on the permanently-fixed posts D, so as to swing in a vertical plane coincident with the track; and the bottom of said frame B is geared by the toothed segment E with the pinion F on shaft G, which gears by the train of wheels H with a crank-shaft, I, by which the track A is tilted. J is a pawl and K a pawl-lever for holding the track by interlocking with wheel L when required. N represents slide-bolts, and O levers to fasten it up level; and P, cords or chains attacked to posts of frame B and hooking into eyes Q in the side of the car, to hold it on track A, when it is tilted up for dumping out the car. R represents chutes to receive the material from the cars and chute it into the proper receptacle.

In practice, this dumping apparatus will be arranged on a little incline, so that the cars will run on and off by gravity. In operating it the cords P will be hooked on the car at the end which descends just before the car arrives at the stopping-place; and the slide-bolt on the dumping end will be withdrawn as the car comes to rest, so that the inertia will assist in tilting the car.

The apparatus may be set on any suitable foundation, and it may be employed for dumping into other cars, boats, bins, or pits, as desired. An upright shaft and bevel-gears may be employed to connect shaft G with the crank-shaft. I propose, in practice, to have the swinging frame so suspended that it may be readily hooked onto a scale for weighing the load.

I am aware that it is not new to pivot a section of a railroad-track so as to tilt in either direction for the purpose of dumping cars, but hitherto the section has swung from a pivot below the track, thus requiring an elevation of grade or a deep pit. I obviate this entirely by swinging from a point above the track, and am enabled to place my chutes fixedly and directly under the track; hence

What I claim is—

The combination of the arc-shaped rack E, shaft G, spur-wheel F, and suitable operating devices, with the centrally-pivoted track-section A, stationary track, and discharge-chutes R, all relatively arranged as and for the purpose set forth.

EUGENE DAVIS.

Witnesses:

JOHN WARNER,

JOS. I. KELLY.