No. 676,103. Patented June 11, 1901.

J. J. SOUDER.

DUMPING CAR.

(Application filed Oct. 16, 1900.)

(No Model.) 2 Sheets—Sheet 1.

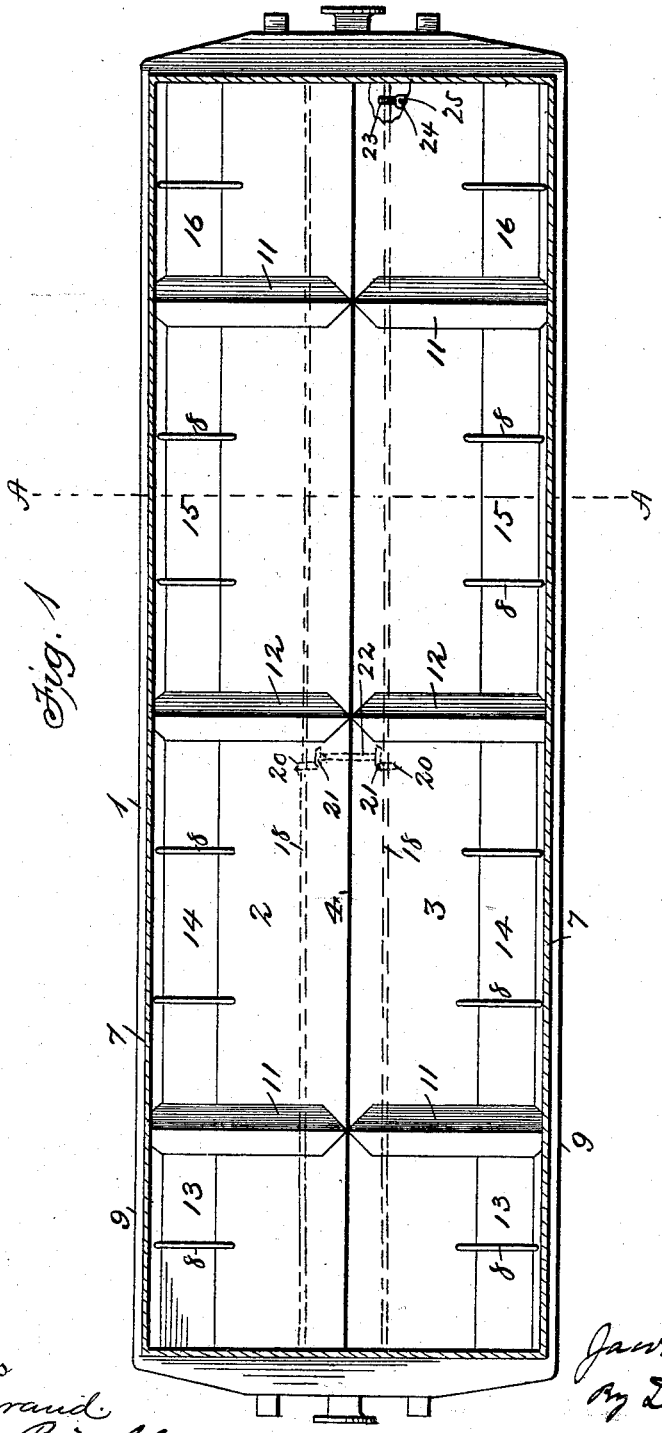

Fig. 1

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Fig. 2.

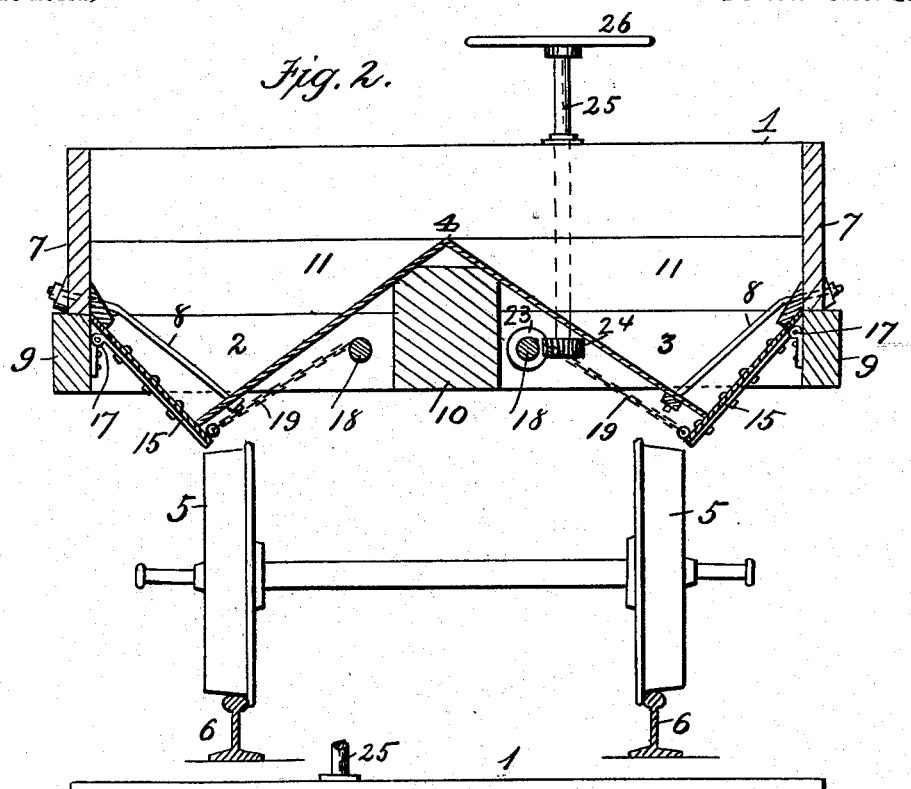
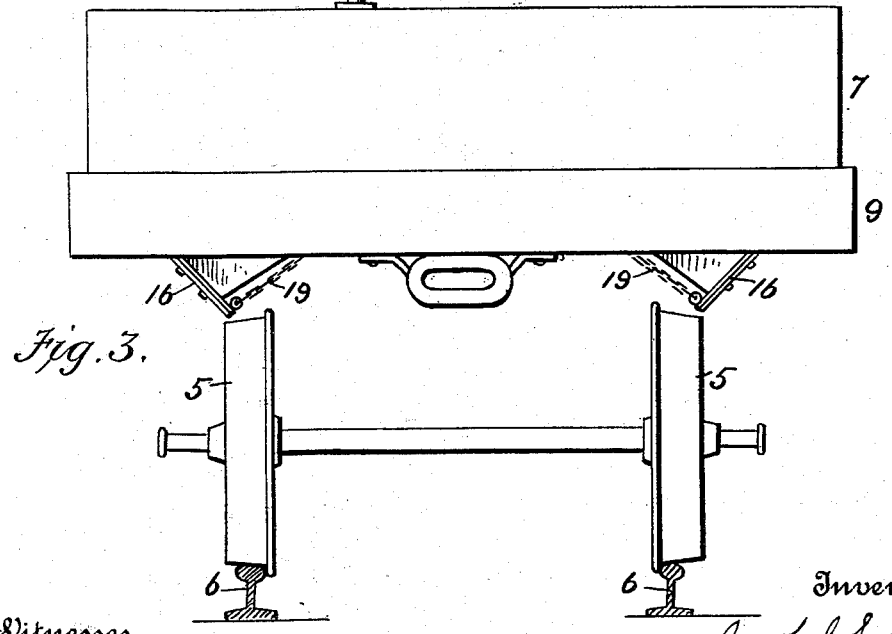


Fig. 3.



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UNITED STATES PATENT OFFICE.

JACOB J. SOUDER, OF WASHINGTON, DISTRICT OF COLUMBIA.

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 676,103, dated June 11, 1901.

Application filed October 16, 1900. Serial No. 33,226. (No model.)

To all whom it may concern:

Be it known that I, JACOB J. SOUDER, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Dumping-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 railway freight-cars, has especial reference to that class of cars which discharge their contents through the bottom of the car, has for its object rapid unloading of the car, and consists in certain improvements in construction which will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a top plan view of a railway freight-car embodying my improvements; Fig. 2, a vertical transverse section on the line A A on an enlarged scale, and Fig. 3 a side elevation of one end of a car.

Reference being had to the drawings and the designating characters thereon, 1 indicates the body of the car, and 2 and 3 sections of the bottom of the car, which extend from the apex 4 in the transverse center of the car downward and outward to a point in a line over the wheels 5 of the car, as shown in Fig. 2, to discharge the contents of the car outside the wheels and the rails 6 of the track. The outer edges of these sections are secured to and supported on the sides 7 of the car-body by stay-rods 8, which are connected to the sides just above the side sills 9, and the inner edges of the sections rest upon and are secured to the center sill 10 in any suitable manner.

The sections 2 and 3 on each side of the transverse center of the car extend throughout the length of the car, as shown in Fig. 1, and crossing the car over the bolsters (not shown) are double inclined caps 11, and a like cap 12 crosses the car in the longitudinal center thereof. These inclined caps, which are about eighteen inches deep, together with the inclined bottom sections 2 and 3, direct the contents of the car in discharging toward the openings in the bottom of the car.

13, 14, 15, and 16 indicate hinged sections or doors in the bottom of the car, which close against the outer edges of the fixed sections and extend throughout the entire length of the body of the car. The sections 13 and 16 extend, respectively, from one end of the car to the bolster, and the sections 14 and 15 extend from the bolsters to the longitudinal center of the car. The sections 13, 14, 15, and 16 are hinged to the inside of the side sills 9 at 17, and when open to their full extent they assume a vertical position and control the contents of the car in their discharge and prevent them being projected too great a distance from the car, or they direct the contents into suitable receptacles. The hinged sections are connected to rods or shafts 18 on each side of the center sill 10, under the fixed sections 2 and 3, where they cannot be interfered with, clogged, or set by the settling of the contents of the car, by chains 19 and are lowered and raised thereby to control the discharge of the contents of the car. These rods or shafts are provided with miter gear-wheels 20, which are engaged by like wheels 21 on opposite ends of a transverse rod or shaft 22 by which the rods 18 are connected, and on one end of one of the rods 18 is a worm-gear 23, which is engaged by a like gear 24 on a vertical rod or shaft 25, having a hand-wheel 26, by which the rods or shafts 18 and 22 are revolved, and all the hinged sections are lowered gradually and simultaneously to unload the car and again raised in like manner after the contents of the car have been discharged. The rods or shafts 18 and 22 are supported in suitable hangers, (not shown,) such as are commonly used for the purpose.

Having thus fully described my invention, what I claim is—

1. A dumping-car having fixed inclined bottom sections extending from the transverse center of the car outward over the wheels thereof, and inwardly-inclined bottom sections hinged at their outer edges to the side sills of the car and resting against the outer edges of the fixed sections when closed, opening outward from said sections and discharging the contents outside the wheels of the car; in combination with means under the fixed bottom for lowering and raising the hinged sections synchronously.

2. A dumping-car having fixed inclined bottom sections extending from the transverse center of the car outward over the wheels, inwardly-inclined bottom sections hinged at their outer edges to the side sills of the car and resting against the outer edges of the fixed sections when closed, opening outward from said sections and discharging the contents outside the wheels of the car, and stay-rods engaging the fixed sections near their outer edges and the sides of the car; in combination with rods adjacent to the center sill and chains under the fixed sections between said rods and hinged sections, and means for operating said rods to lower and raise the sections synchronously.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB J. SOUDER.

Witnesses:
D. C. REINOHL,
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