No. 676,102. Patented June 11, 1901.

J. J. SOUDER.

DUMPING CAR.

(Application filed Oct. 16, 1900.)

(No Model.) 2 Sheets—Sheet 1.

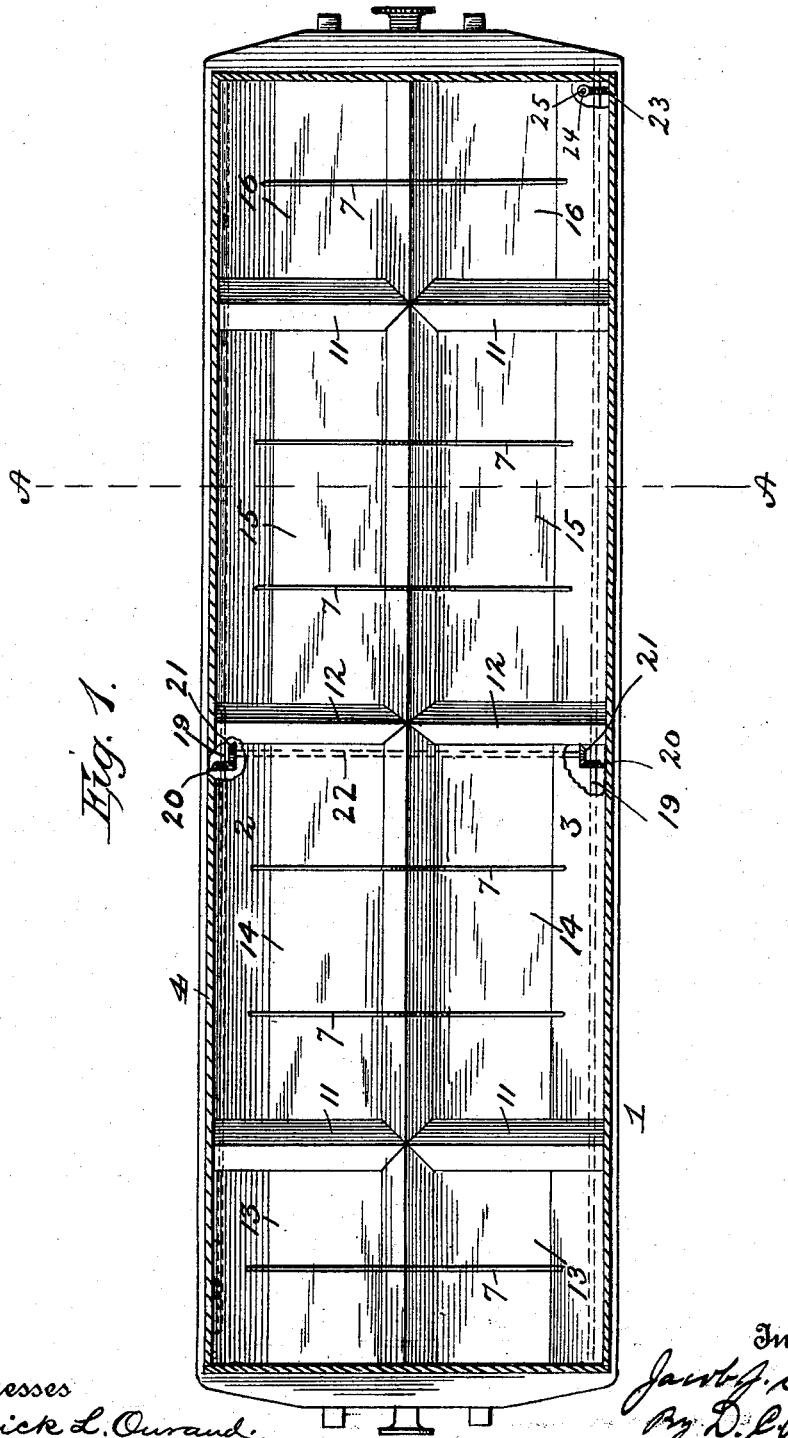


Fig. 1.

Witnesses
Franck L. Durand.
W. Parker Reinhl.

Inventor
Jacob J. Souder.
By D. L. Reinhl
Attorney

No. 676,102. Patented June 11, 1901.

J. J. SOUDER.

DUMPING CAR.

(Application filed Oct. 16, 1900.)

(No Model.) 2 Sheets—Sheet 2.

Fig. 2.

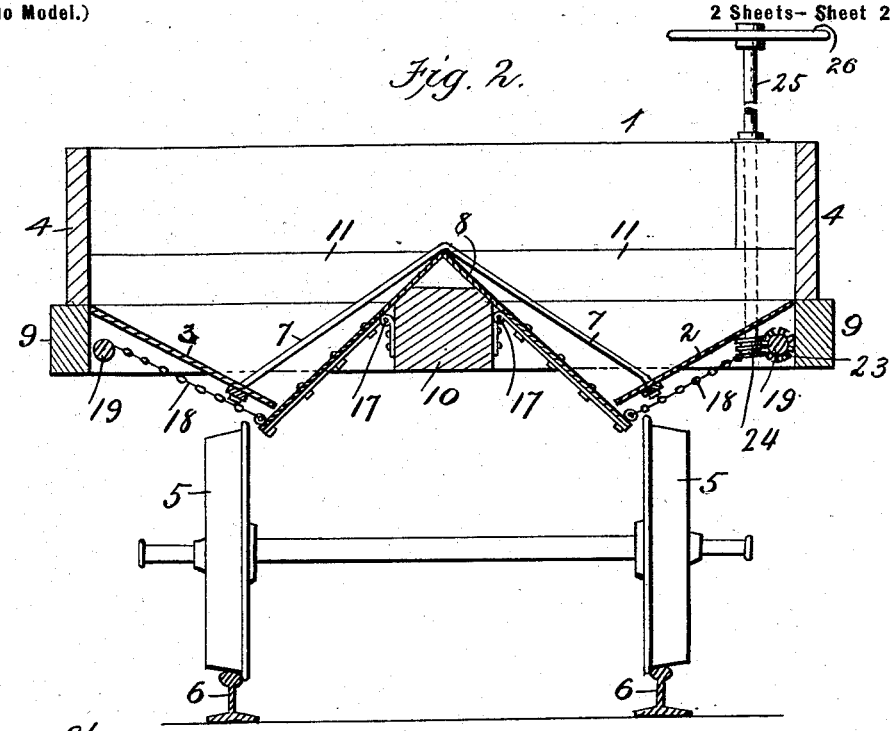
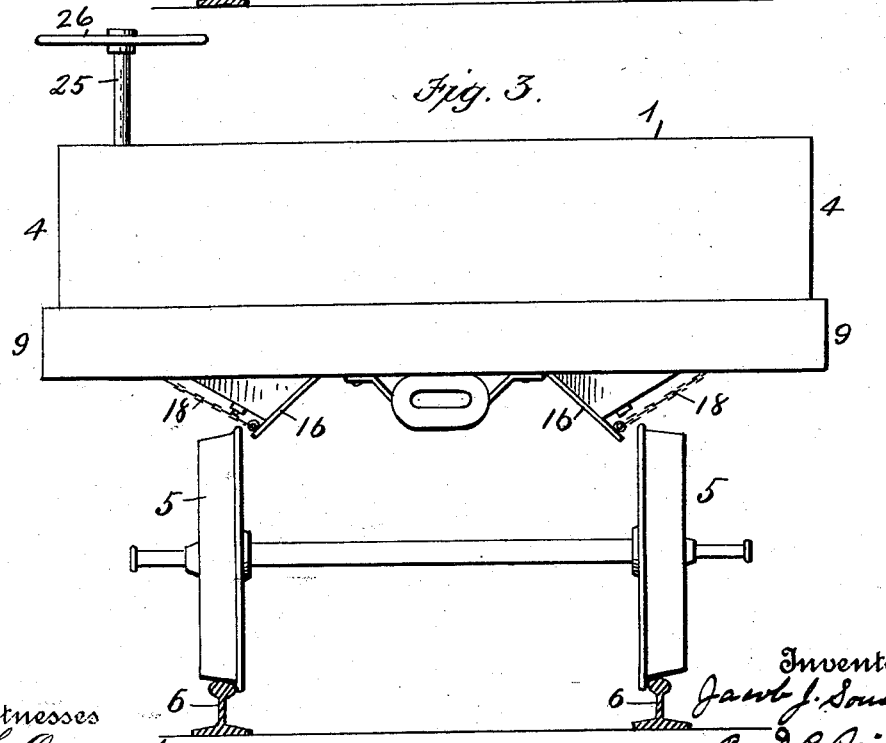


Fig. 3.



Witnesses
F. L. Ourand
W. Parker Reinohl.

Inventor
Jacob J. Souder.
By D. C. Reinohl
Attorney

UNITED STATES PATENT OFFICE.

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

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 676,102, dated June 11, 1901.

Application filed October 16, 1900. Serial No. 33,225. (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 sides 4 of the body downward and inward beyond the wheels 5 of the car, as shown in Fig. 2, to discharge the contents of the car between the rails 6 of the track. The inner edges of the sections are supported upon stay-rods or trusses 7, which cross and rest upon the apex or center section 8 of the bottom of the car. The outer edges rest against and are secured to the sides 4 of the car in any suitable manner, and the sides rest upon the sills 9, while the apex or center section 8 rests upon and is secured to the center sill 10 in any suitable manner. The fixed side sections and the center section extend throughout the length of the car, 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 toward the openings in the bottom of the car when discharging.

13, 14, 15, and 16 indicate sections or doors in the bottom of the car, which are hinged at 17 to the sill 10, adjoin the center section 8, are of the same angle of inclination as the section 8, close against the inner edges of the fixed sections 2 and 3 and open inward toward the transverse center of the car, and when fully open assume a vertical position and rest against and are braced by the sill 10. These sections extend throughout the length of the car-body, the sections 13 and 16 respectively extend from one end of the car to the bolster, and the sections 14 and 15 respectively extend from the bolster to the longitudinal center of the car. The hinged sections are connected by chains 18 to rods 19 on each side of the car under the fixed sections 2 and 3 and are supported upon hangers in the usual manner of supporting such devices on cars. 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 19 are connected, and on one end of one of the rods 19 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 are revolved, and all the hinged sections are lowered simultaneously to discharge the contents of the car and again raised in like manner after the contents have been discharged. The chains 18 and the rods 19 are located under the fixed sections 2 and 3, so that they cannot become clogged or fixed by the settling of the contents of the car and interfere with their ready operation.

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

1. A dumping-car having fixed inclined bottom sections extending throughout the length of the car and from the sides of the body inward beyond the line of the wheels of the car, and hinged inclined sections closing against the inner edges of said fixed sections and secured to the center sill of the car to open inward or toward the transverse center of the car; in combination with means under the fixed sections for lowering and raising the hinged sections synchronously.

2. A dumping-car having fixed and inclined bottom sections extending throughout the length of the car and from the sides of the

body inward beyond the wheels, stay-rods or trusses supporting the adjacent edges thereof, and hinged inclined bottom sections closing against the inner edges of the fixed sections, and secured to open inward or toward the transverse center of the car; in combination with means under said fixed sections for raising and lowering the hinged sections synchronously.

3. A dumping-car having fixed inclined bottom sections extending throughout the length of the car and from the sides of the body inward beyond the wheels, a fixed center section of the bottom resting upon the center sill, stay-rods or trusses crossing said center section and supporting the adjacent edges of the side sections, and hinged inclined sections of the angle of inclination of the center section and secured to said sill to open inward or toward the transverse center of the car and to be supported thereby when open; in combination with means under the fixed sections of the car for lowering and raising the hinged sections synchronously.

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

JACOB J. SOUDER.

Witnesses:
D. C. REINOHL,
DAVID MAYER.