No. 814,610.

PATENTED MAR. 6, 1906.

C. S. LEFFERTS.

CAR DUMP.

APPLICATION FILED APR. 8, 1905.

2 SHEETS—SHEET 1.

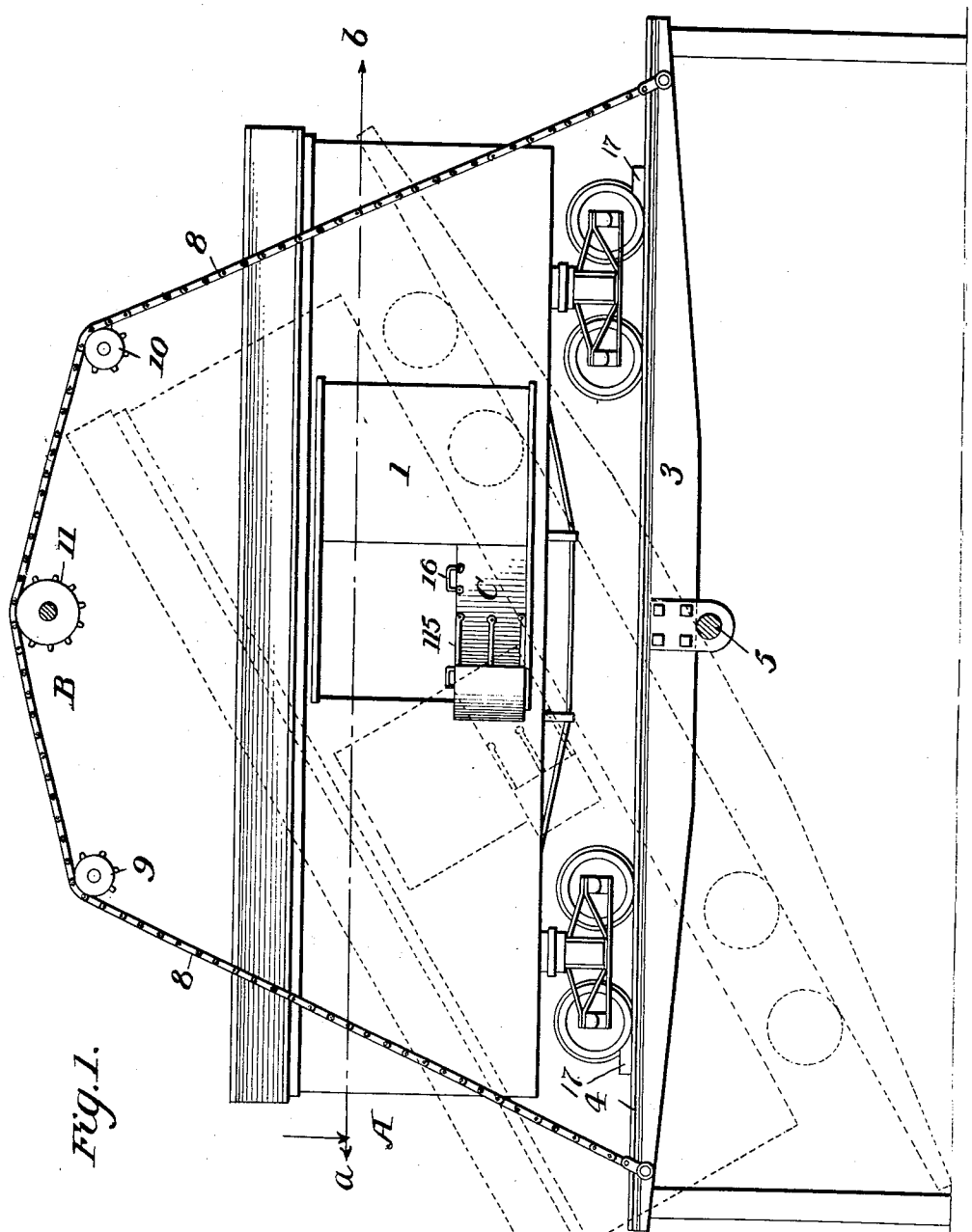

Fig. 1.

Witnesses
F. G. Finkel
Thos. Howe

Inventor
Charles S. Lefferts
by Foster, Freeman & Watson
Attorneys

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2 SHEETS—SHEET 2.

Fig. 2.

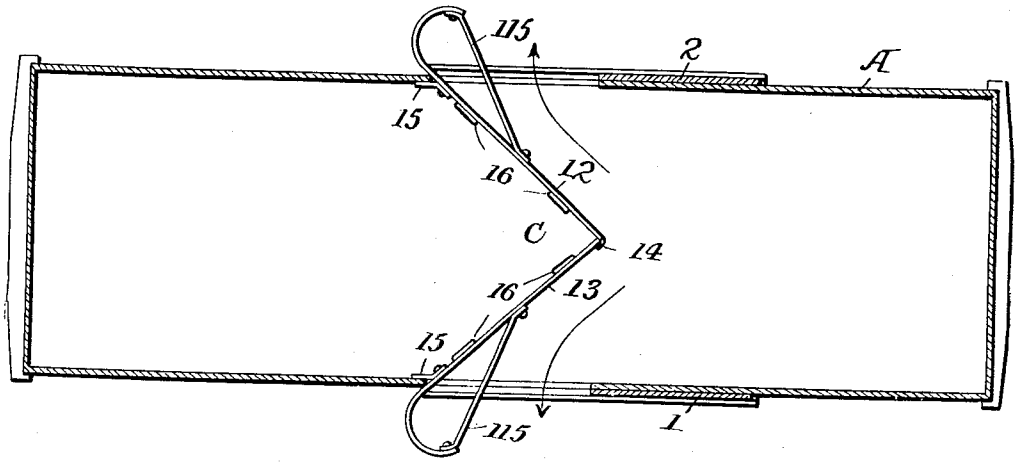
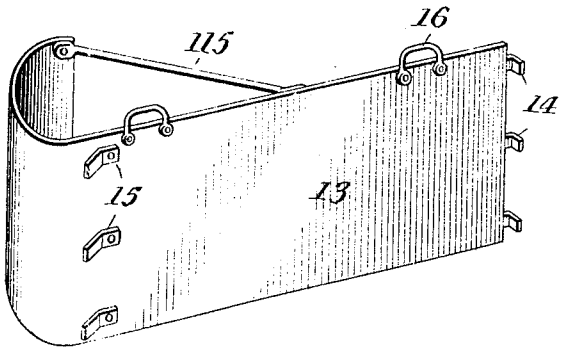


Fig. 3.



Witnesses
J. G. Hinkel
Thos. Howe

Inventor
by Charles S. Lefferts
Foster, Freeman & Watson
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES S. LEFFERTS, OF COUNCIL BLUFFS, IOWA, ASSIGNOR OF ONE-HALF TO CHARLES T. PEAVEY, OF OMAHA, NEBRASKA.

CAR-DUMP.

No. 814,610. Specification of Letters Patent. Patented March 6, 1906.

Application filed April 8, 1905. Serial No. 254,599.

To all whom it may concern:

Be it known that I, CHARLES S. LEFFERTS, a citizen of the United States, residing at Council Bluffs, in the county of Pottawattamie, State of Iowa, have invented certain new and useful Improvements in Car-Dumps, of which the following is a specification.

This invention relates to means for emptying cars of their contents, and has for its object the provision of apparatus whereby the contents may be discharged through the side doors of a car constructed as freight-cars are usually constructed.

In the accompanying drawings, Figure 1 is an elevation of a car equipped according to my invention and apparatus for manipulating the car, as will be hereinafter set forth. Fig. 2 is a sectional view on the line *a b* of Fig. 1 looking in the direction of the arrow, and Fig. 3 is a view of a detail.

Referring to the drawings, the apparatus comprises a car A and apparatus B, by which the car may be tilted. The car coöperates with a guide C, by which the exit of the contents of the car through the side doors is accomplished.

Referring to the apparatus shown in detail, a freight-car A, constructed in any suitable manner and having side doors 1 and 2, is adapted to be run upon a tilting table 3, provided with a rail-track 4, adapted to guide the car upon the table in a manner as is well known in connection with railway turn-tables. The table 3 is mounted upon an axle 5, which extends transversely to the rail-track upon the table, so that by tipping the table upon the axle the car will be inclined longitudinally. To accomplish the tipping of the table upon its axle, a suitable flexible connector 8, as a rope or sprocket-chain, is secured at its ends to the table, as shown, and after passing over guide-pulleys 9 and 10 is secured to a driving-wheel 11, which may be driven by any suitable power. The connector 8 is so engaged with the wheel 11 that upon turning of the wheel one end of the connector will be paid out, so as to permit the corresponding end of the table to be lowered, while the other end of the connector will be retracted, so as to lift its end of the table. It will thus be obvious that the direction in which the wheel 11 is revolved will determine the direction in which the table is inclined and that when the wheel 11 is stationary the table 3 will be held in whatever position it may be, whether inclined or horizontal, by means of the connector 8.

The guide C comprises oppositely-inclined portions 12 and 13, which unite to form a **V**-shaped member extending from one side of a door upon one side of a car to the corresponding side of the door upon the opposite side of the car. The members 12 and 13 may be secured together by any suitable fastenings, as 14, and may be similarly secured to the sides of the doors by fastenings 15.

In order to prevent contents of the car from being spilled upon the ground by being projected too far, the outer ends of the members 12 and 13 are outwardly turned or curved, as shown, so that the contents of the car cannot be projected beyond approximately the edge of the doorway. The curved ends may be strengthened by means of braces 115, as shown. Handles 16 may be provided upon the members 12 and 13 to facilitate their manipulation.

Of course suitable means, as scotching-blocks 17, will be provided for preventing the car from being moved with relation to the table when said table is tilted.

The operation of the apparatus may be described as follows: A car having been run upon the table and scotched in position, as shown, the wheel 11 is revolved in the proper direction to tilt the table upon its axle, and thereby tilt the car longitudinally—that is, endwise. The direction of tilting will of course be such that the contents will flow against the apex of the **V**-shaped guide, for if tilted in the opposite direction it will be obvious that unless the guide were forced out of the way the contents could not escape. The car having been tilted as described, the contents of the upper end of the car will be guided in both directions by the guide C and will simultaneously flow from the side doors 1 and 2 into proper receptacles placed beneath the doorways. The contents of one portion of the car—in this case the upper end—having been discharged, the guide C may be unfastened from the sides of the doors 1 and 2 and reversed—that is, it is secured to the opposite sides of the doors 1 and 2, with its apex pointing in the opposite direction. By turning the wheel 11 in the opposite direction the car will be oppositely inclined

and the contents of another portion of the car—that is, the opposite end from that already cleared—will be simultaneously discharged from both the side doors. The car contents or any portion of them having been removed, the table may be returned to its horizontal position. The car may then be drawn off the rail-track 4 to a similar track exterior to the table, but registering with the rails 4.

While I have illustrated the invention in what is considered its best form, it will be understood that it may be embodied in a variety of constructions. The invention should not, therefore, be limited to the construction shown.

What I claim is—

1. The combination with a car having an opening in each side, of means for simultaneously guiding contents of said car to said openings when said car is tilted, and means for tilting said car, substantially as described.

2. The combination with a car having an opening in each side, of means for simultaneously guiding contents of said car to said openings when said car is tilted, and means for longitudinally tilting said car, substantially as described.

3. The combination with a car having opposite side openings of a V-shaped guide extending from one side of one opening to the corresponding side of the opposite opening, substantially as described.

4. The combination with a car having a side opening of a diagonal partition adapted to guide contents of said car to said opening when said car is tilted, said guide having an outwardly-turned portion near said opening for preventing spilling of the car contents, substantially as described.

5. The combination with a car having opposite side openings of a V-shaped guide extending from one side of one opening to the corresponding side of the opposite opening and having outwardly-curved ends projecting beyond said openings, substantially as described.

6. The combination with a car having a side opening, of a V-shaped guide adapted to guide contents of said car to said opening, substantially as described.

7. The combination with a car having a side opening, of a diagonal guide secured to said car and adapted to guide contents of said car to said opening when said car is tilted, substantially as described.

8. The combination with a car having a plurality of side openings, of a V-shaped guide comprising a plurality of members secured to each other and to said car, and adapted to guide contents of said car to said openings when said car is tilted, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES S. LEFFERTS.

Witnesses:
A. M. WALKER,
D. L. ROSS.