

A. CAMPBELL.
DUMP CAR.

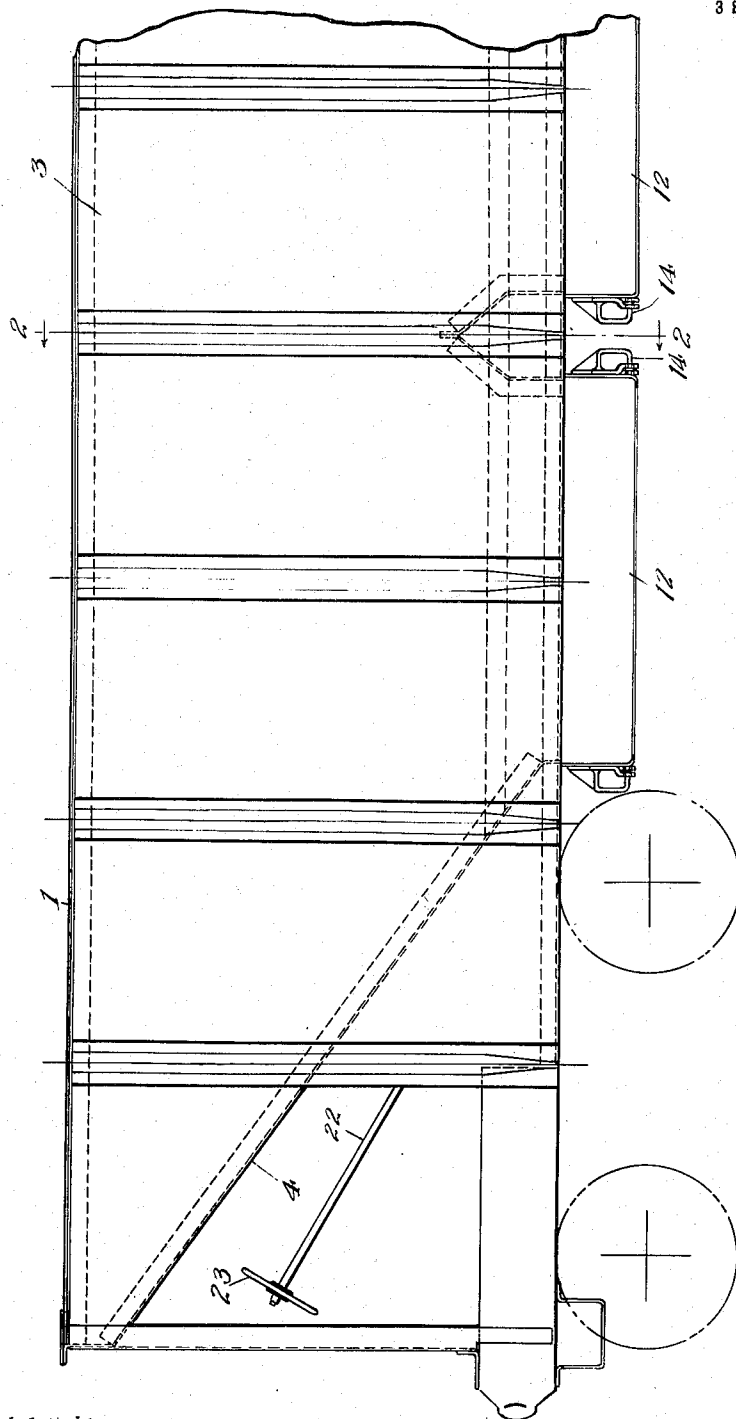
APPLICATION FILED JAN. 18, 1909.

937,416.

Patented Oct. 19, 1909.

3 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
H. W. Munday
Esther Abrams

Inventor:
Argyle Campbell
By Munday, Everts, Adcock & Clarke.

Attorneys

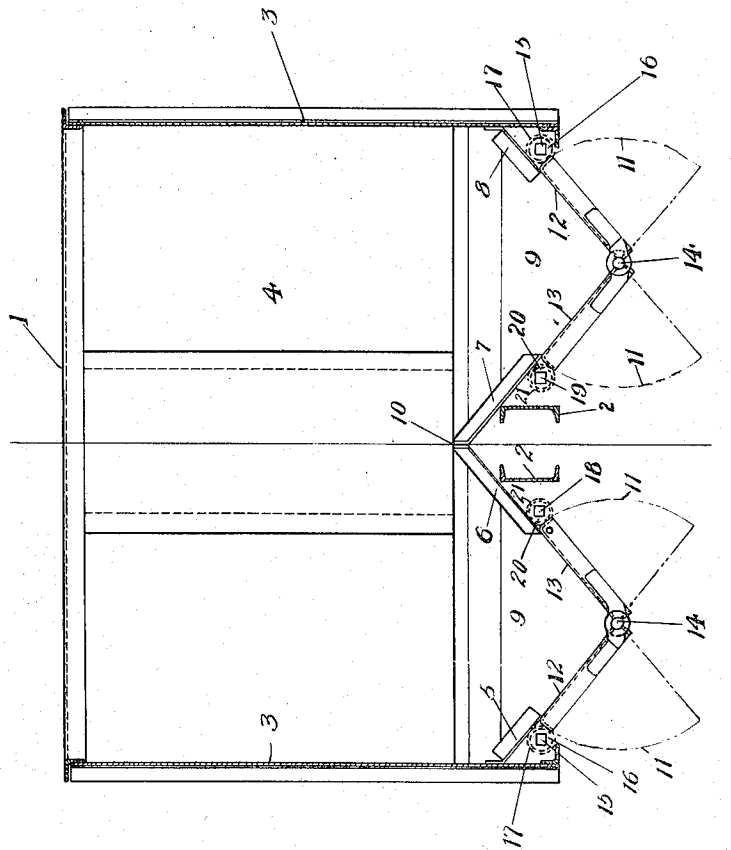
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3 SHEETS—SHEET 2.

Fig. 2.



Witnesses
H. W. Munday
Esther Abrams

Inventor:
Argyle Campbell
By Munday, Coats, Ascock & Clarke,
Attorneys

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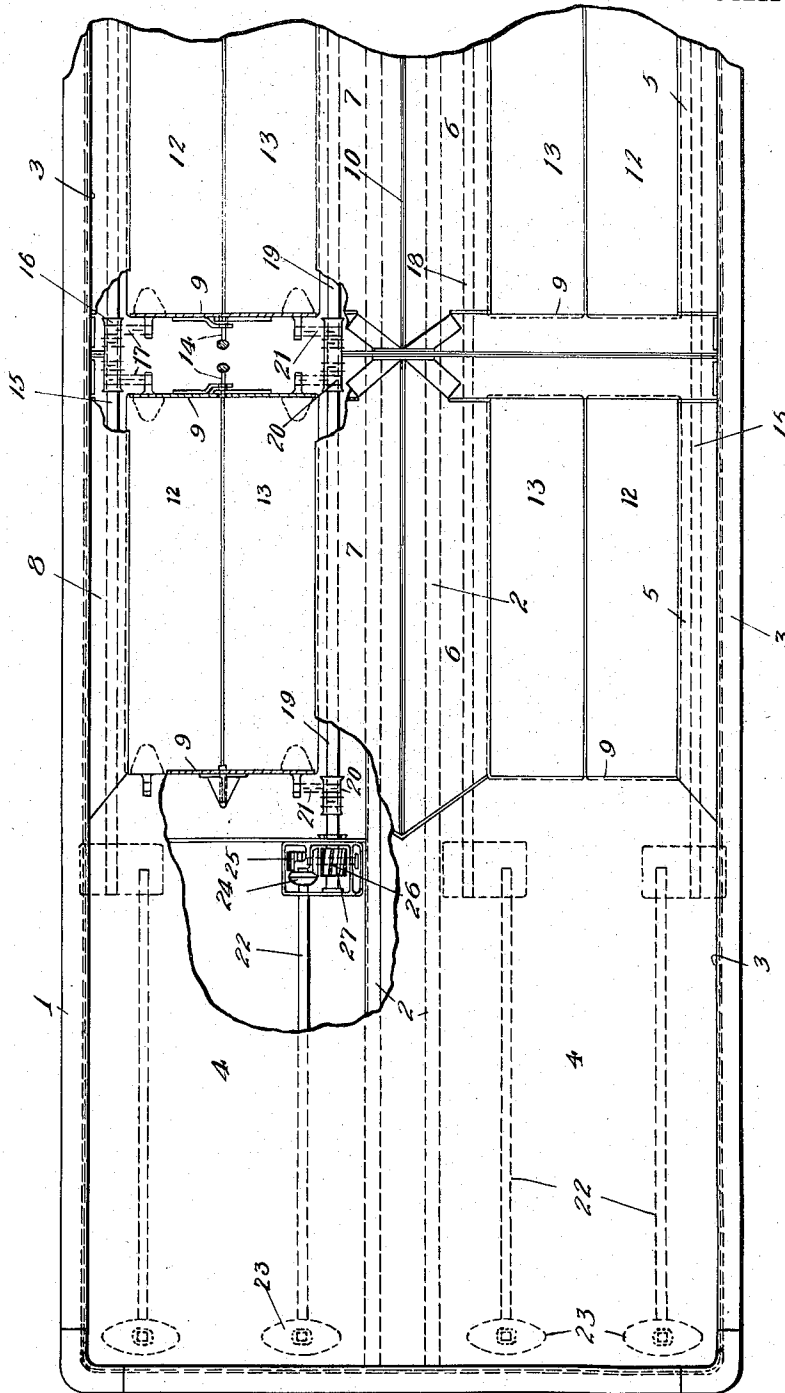
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3 SHEETS—SHEET 3.

Fig. 3.



Witnesses:

A. W. Munday

Esther Abrams.

Inventor:

Argyle Campbell

By Munday, Everts, Adcock & Clarke,

Attorneys

UNITED STATES PATENT OFFICE.

ARGYLE CAMPBELL, OF CHICAGO, ILLINOIS, ASSIGNOR TO ENTERPRISE RAILWAY EQUIPMENT COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

DUMP-CAR.

937,416.

Specification of Letters Patent.

Patented Oct. 19, 1909.

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To all whom it may concern:

Be it known that I, ARGYLE CAMPBELL, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Dump-Cars, of which the following is a specification.

My invention relates to improvements in dump cars.

My invention consists in a dump car having two longitudinally arranged V shaped hoppers, one on each side of the longitudinal center or middle line of the car, each having a pair of doors hinged in a V shaped position at the bottom of the V so that the car may operate either as a center dump or side dump car as may be required, the opening of the inside doors giving a center dump and the opening of the outside doors a side dump.

It further consists in connection with these parts, of operating shafts, winding drums and chains for operating the doors.

In the accompanying drawing forming a part of this specification, Figure 1 is a side elevation of a dump car embodying my invention. Fig. 2 is a vertical cross section on line 2—2 of Fig. 1 and Fig. 3 is a plan view partly broken away and partly in horizontal section.

In the drawing, 1 represents a dump car, 2 the center sills, 3 the upright sides, 4 the inclined ends, and 5, 6, 7, 8 the inclined sides of two longitudinally arranged hopper bottoms 9, 9, one of said hopper bottoms being on each side of the longitudinal center or middle line 10 of the car body. The openings 11, 11 of the hopper bottoms are closed each by a pair of doors 12, 13 and 12, 13, hung in V shape and each hinged at the bottom of the V on a longitudinal extending hinge pin or pintle 14. When the inner door 13 of either pair, or of both pairs are opened, the load may be centrally dumped. When the outer door 12 of either pair is opened, the load may be dumped to the side.

The doors may be operated or opened and closed by any suitable door operating mechanism. The door operating mechanism illus-

trated in the drawing, and which I prefer to use, comprises two longitudinally extending operating shafts 15 extending longitudinally adjacent to the upright sides of the car and furnished with winding drums 16 and chains 17 connecting with the outside doors 12 at their outer side edges, and a pair of longitudinally extending central shafts 18, 19 furnished with winding drums 20 and chains 21 connecting with the inside doors 13, 13 near their inner longitudinal edges. Each of the operating shafts may be geared to a connecting shaft 22 having a hand wheel 23 by any suitable connecting gear, as bevel gears 24, 25, the latter on worm shaft 26, a worm 27 meshing with a worm gear on the operating shaft.

Each of the longitudinally arranged V shaped hoppers may have any desired number of pairs of V hung doors.

I claim:—

1. In a dump car, the combination with a dump car body having two longitudinally extending V shaped hopper bottoms, one on each side of its longitudinal center line, of two pairs of V hung doors, one pair in each of said hoppers, and the doors of each pair being hinged at their lower meeting ends to adapt the car for central dumping when the inside door of a pair is opened and for side dumping when the outside door of a pair is opened, substantially as specified.

2. In a dump car, the combination with a dump car body having two longitudinally extending V shaped hopper bottoms, one on each side of its longitudinal center line, of two pairs of V hung doors, one pair in each of said hoppers, and the doors of each pair being hinged at their lower meeting ends to adapt the car for central dumping when the inside door of a pair is opened and for side dumping when the outside door of a pair is opened, and operating shafts, winding drums and chains for opening and closing the doors, substantially as specified.

ARGYLE CAMPBELL.

Witnesses:

H. M. MUNDAY,
ESTHER ABRAMS.