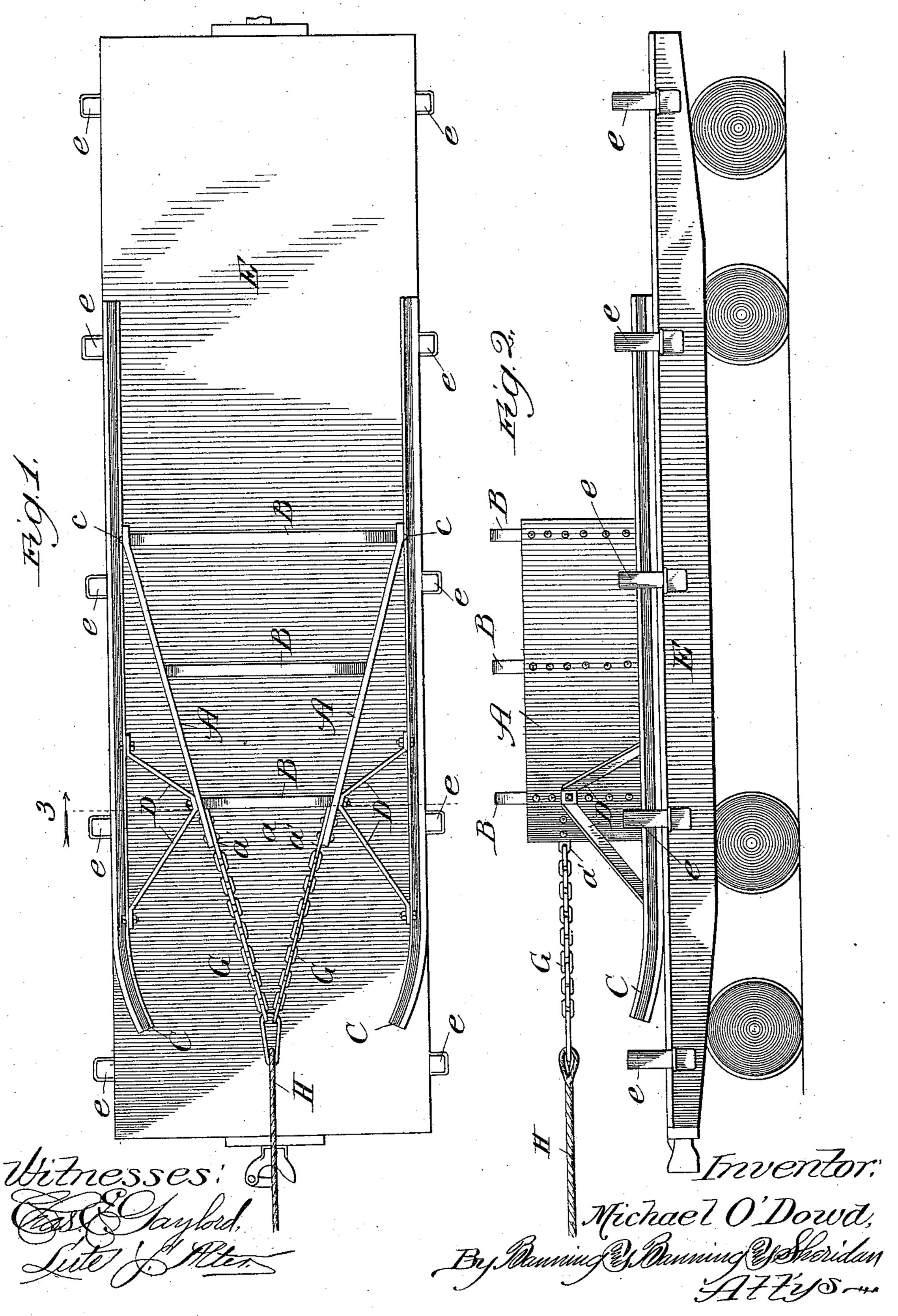
M. O'DOWD. CAR UNLOADER.

No. 575,492.

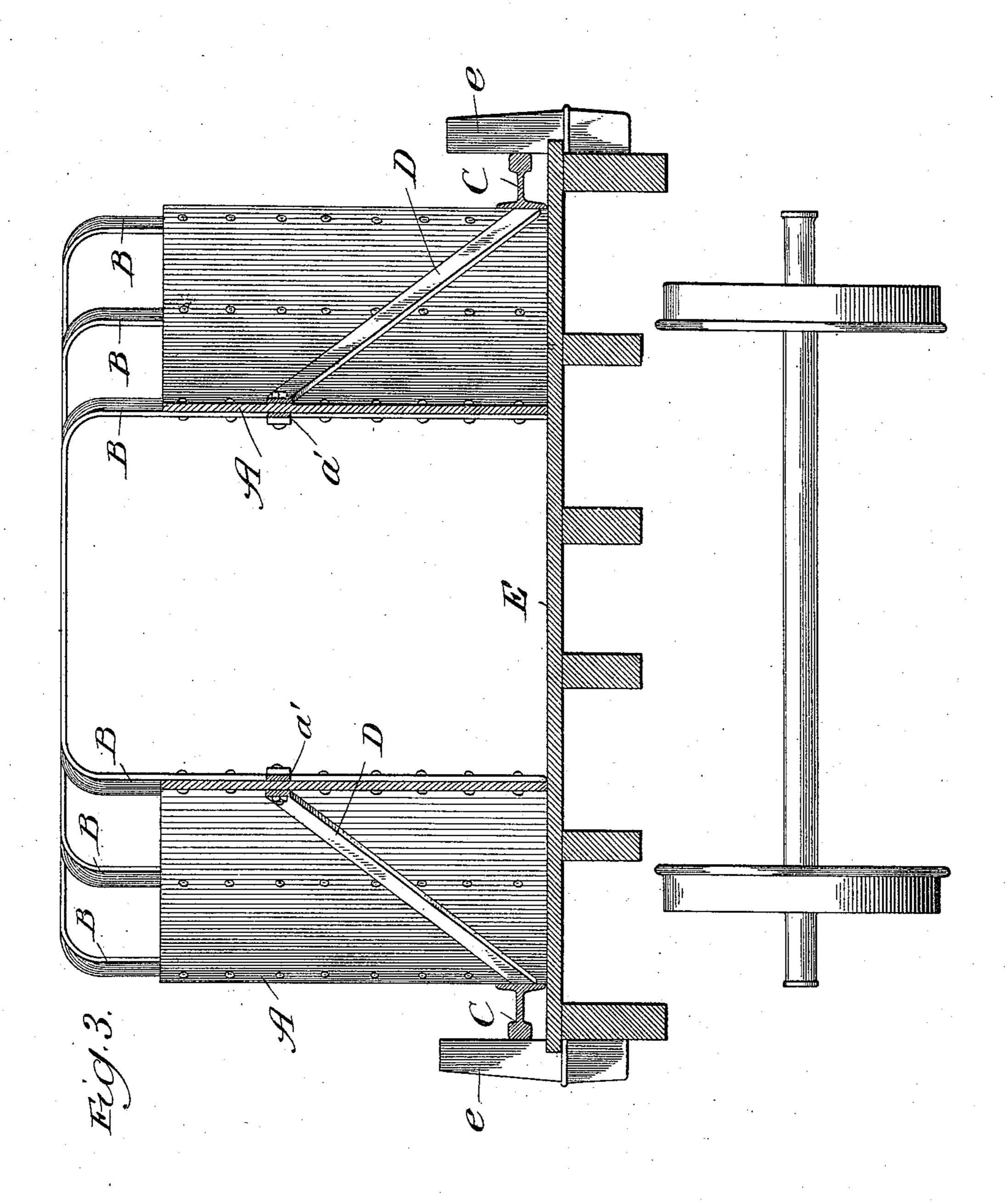
Patented Jan. 19, 1897.



M. O'DOWD.
CAR UNLOADER.

No. 575,492.

Patented Jan. 19, 1897.



Witnesses: Cost Chylord, Lite Hun

Inventor:
Michael O'Dowa,
By Minning Manning Sheridan
Attisom

United States Patent Office.

MICHAEL O'DOWD, OF CHILLICOTHE, ILLINOIS, ASSIGNOR OF ONE-HALF TO CHARLES F. RESSEGUIE, OF CHICAGO, ILLINOIS.

CAR-UNLOADER.

SPECIFICATION forming part of Letters Patent No. 575,492, dated January 19, 1897.

Application filed July 29, 1896. Serial No. 600,879. (No model.)

To all whom it may concern:

Be it known that I, MICHAEL O'DOWD, a citizen of the United States, residing at Chillicothe, in the county of Peoria and State of 5 Illinois, have invented certain new and useful Improvements in Car-Unloaders, of which the following is a specification.

My invention relates particularly to that class of mechanisms for unloading railway-10 cars, and especially to that class for unloading ballast sand and gravel from platformcars.

The object of my invention is to provide a simple, economical, and efficient mechanism 15 for unloading ballast, such as crushed stone, rock, gravel, and sand, from platform-cars in desired quantities; and the invention consists in the features, combinations, and details of construction hereinafter described 20 and claimed.

In the accompanying drawings, Figure 1 is a plan view of my improvement shown in combination with a platform-car and looking at the same from the top; Fig. 2, a side ele-25 vation of the same; and Fig. 3 a transverse sectional elevation, taken on line 3 of Fig. 1, showing the parts somewhat enlarged.

In the art to which this invention relates it is customary and usual in unloading plat-30 form-cars to shovel material from the cars by manual labor. This is a very slow method, as well as expensive, in that it requires a large force of laborers for the purpose of unloading the car in anything like a satisfactory 35 manner. Further, it is well known that in ballasting railroad-beds about half a car-load of material is the amount necessary for the top-dressing of the bed for a length equal to the length of a car, so that it is desirable to 40 have mechanism that will discharge about one-half the load at a time.

My improvement therefore is intended principally to obviate the objections existing in the art and to provide a simple, economi-45 cal, and efficient mechanism for unloading or discharging one-half of a load at a time.

In constructing an unloader in accordance with my improvement I make the discharge portion of two vertical metallic sections A, 50 arranged at an acute angle with relation to each other, and preferably to provide a sub-

stantially central passage a between such sections. This central passage is for the purpose of allowing or permitting a portion of the material on the car to remain practically 55 undisturbed thereon. The size of the opening should be proportioned so as to leave about one-half the load on the car; that is, each of the discharging-sections should discharge or deflect from the car one-quarter of 60 the load to each side thereof. In order to strengthen this mechanism and hold the discharging-sections in their operative positions, I provide overhead trusses B, that are practically arch-shaped and have their lower de- 65 pending legs carried down the full width of the discharging-sections, so that while they strengthen and stiffen the structure they do not in any manner interfere with either the discharge of the material or with the material 70 that is left on the car.

To stiffen the side portion of the dischargesections and provide guides for the structure, I make what I will term two "guide-rails" C C, formed, preferably, of railway-iron, or 75 rails with their head portions arranged outwardly and the flanges extending inwardly. The lower rear portions of the discharge-sections, as at c, are secured to these guard-rails and the front portions are provided with 80 trusses D, that connect substantially or practically the upper front portions of the discharging-sections with the guard-rails. These guide-rails are preferably of a length exceeding the length of the discharging-sections, 85 and the front portions thereof are curved inwardly and upwardly, so that during the operation they will contact side stakes e of a platform-car E and guide the discharge mechanism through the longitudinal center of the 90 car or from car to car. At the same they will act as guards to protect the other mechanism from contacting the stakes and being injured thereby.

To operate the parts, the front parts of the 95 operating-sections adjacent to the side and upper front trusses are provided with hooks a', to which a chain G may be secured for the purpose of having a pulling-cable H draw the same, as desired.

In operation the unloader is placed on an empty platform-car, the cable secured thereto

100

575,492

and to a locomotive. The car or cars to be unloaded are placed in line with the car that carries the unloader. The locomotive is then started and the unloader drawn onto the 5 loaded cars, which operation is insured by the side stakes and acts to discharge one-half of the load of each car. To discharge the entire load, the front open space of the half-unloader may be provided with an A-shaped de-10 flecting portion, such portion and the main portion being rigidly secured together in any economical manner, so that the entire load may be discharged, when desired.

The advantages of my invention are that 15 either one-half or the entire load may be discharged, as desired, at a minimum expense and the saving of considerable time. At the same time the structure is economical to build and efficient in operation and will perform

20 the work of a great many laborers.

While I have described my invention with more or less minuteness as regards details and arrangements and as being embodied in certain precise forms, I do not desire to be 25 limited thereto unduly, no more than as pointed out in the claims. On the contrary, I contemplate all proper changes in form, construction, and arrangement, the omission of immaterial elements, and the substitution of 30 equivalents, as circumstances may suggest or render expedient.

I claim—

1. In a machine of the class described, the combination of a discharging portion formed 35 of two substantially vertical sections arranged

.

.

at an acute angle with relation to each other and to provide a substantially central passage so that a portion only of a load is discharged, and mechanism for guiding the structure in the desired position along a car and from car 40

to car, substantially as described.

2. In a machine of the class described, the combination of discharge portion formed of two substantially vertical sections arranged at an acute angle with relation to each other 45 and to provide a central passage therethrough, overhead arched trusses for securing the parts together, and guide-rails, one arranged at each side of the structure and exceeding the length of the discharge-sections for the purpose of 50 guiding the structure in the desired position along a car or from car to car, substantially as described.

3. In a machine of the class described, the combination of a discharging portion formed 55 of two substantially vertical sections arranged at an acute angle with relation to each other, truss mechanism for securing the sections together, and guide-rails, one at each side of the discharging portion formed of railway me- 60 tallic rails of a length exceeding the length of the discharging-section and having their front portions bent upwardly and inwardly, and truss mechanism for securing the front portion of the discharge-sections to the guide- 65 rails, substantially as described.

MICHAEL O'DOWD.

Witnesses:

· · · · ·

C. B. STROHM, F. McFarland.