W. H. McGANN.

BOX CAR UNLOADER.

APPLICATION FILED APR. 27, 1914.

1,146,267.

Patented July 13, 1915.

2 SHEETS—SHEET 1.

Fig. 1.

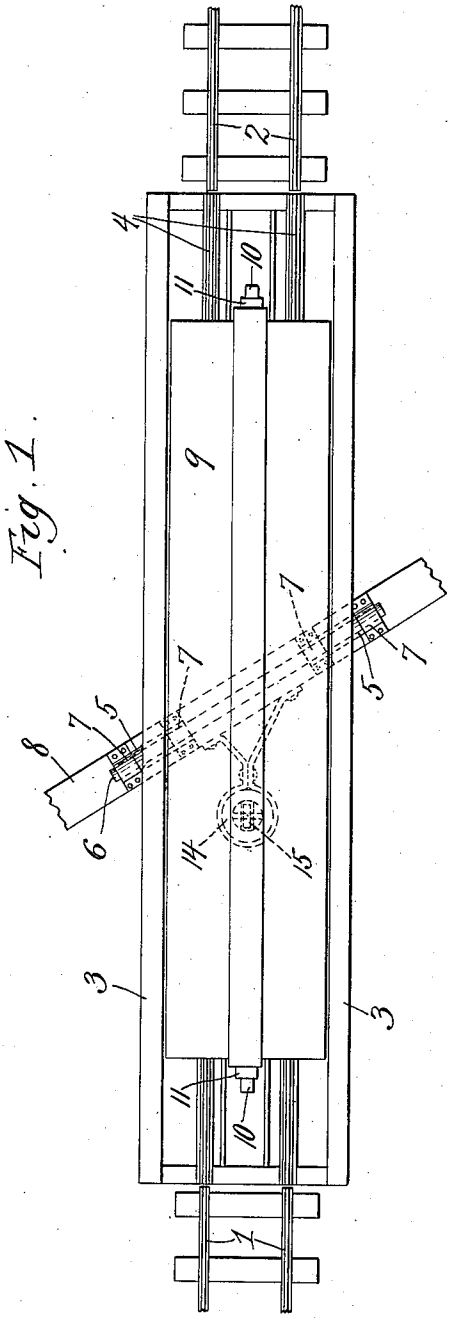
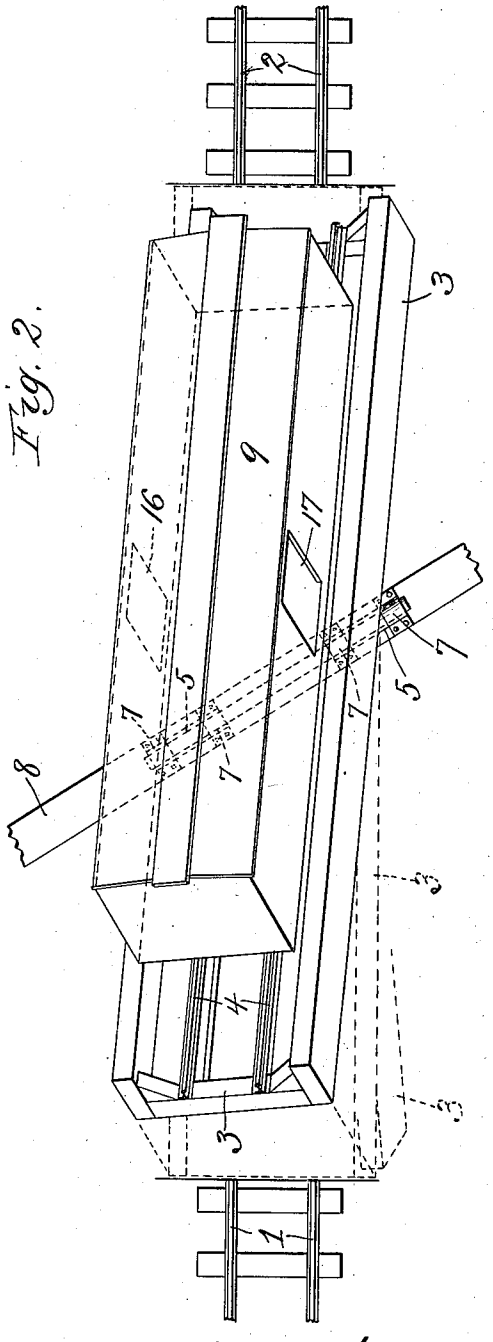


Fig. 2.



Witnesses.

Edward T. Wray.

Emma Smith

Inventor.

William H. McGann.

by Parker & Burton

Attorneys.

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2 SHEETS—SHEET 2.

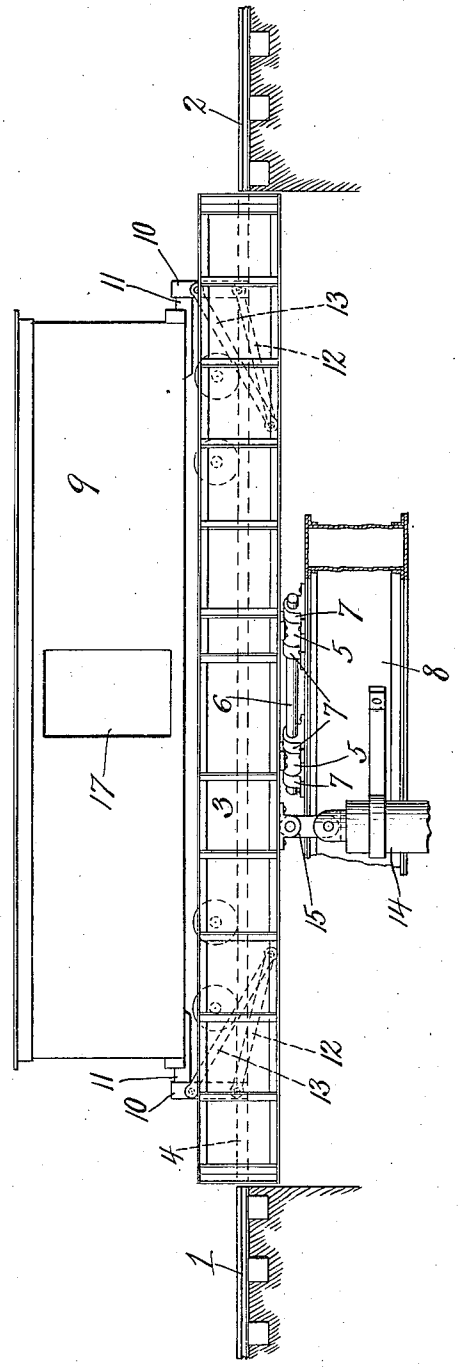


Fig. 3.

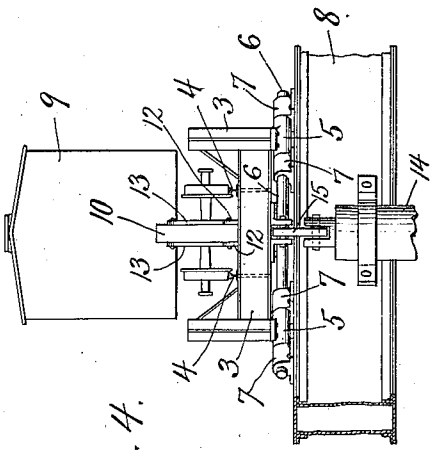


Fig. 4.

Witnesses.
Edward T. Wray.
Emma Bertolette

Inventor.
William H. McGann.
by Parker & Burton
Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM H. McGANN, OF CHICAGO, ILLINOIS, ASSIGNOR TO LINK BELT COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

BOX-CAR UNLOADER.

1,146,267. Specification of Letters Patent. Patented July 13, 1915.

Application filed April 27, 1914. Serial No. 834,628.

To all whom it may concern:

Be it known that I, WILLIAM HENRY MCGANN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Box-Car Unloaders, of which the following is a specification.

My invention relates to box car unloaders and is illustrated diagrammatically in one form in the accompanying drawings, wherein—

Figure 1 is a plan view before unloading has taken place; Fig. 2 is a plan view after unloading has commenced; Fig. 3 is a side elevation in part section; and Fig. 4 is an end elevation in part section.

Like parts are indicated by like numerals throughout the several figures.

1, 2 are railroad tracks over which a car to be unloaded may be moved.

3 is a girder bridge carrying a railroad track 4 normally in line with and connecting the tracks 1, 2. This girder bridge is provided with hinge sleeves 5 which rest upon and are supported by a hinged pin 6 which is supported from bearings or sleeves 7 on a foundation beam 8. The pin 6 and sleeves 5 and 7 are arranged so that their axis line while in a horizontal plane is inclined to the longitudinal axis of the girder 3 and track 4.

9 is a box car traveling along the track 4 and supported thereby.

10, 10 are buffer or stop members adapted to be swung up to engage the draw bar heads 11 of the box car being supported on the pivotal rams 12, 13 from the girder 3.

14 is a hydraulic ram diagrammatically shown mounted on the foundation beam 8 and connected by a link 15 to the girder or bridge 3 whereby the girder or bridge may be rotated in both positions on the supporting pin 6, for instance in position shown in Fig. 2. When this takes place the box car is tilted sidewise by virtue of the inclined position on the pivot. When in the position shown in Fig. 2 the material will be discharged from the left-hand end of the box car through the door 16. When the left-hand end of the car has been unloaded the arm will be operated to tilt the bridge and car in opposite directions whereby the material in the right hand of the car will be unloaded through the door 17.

I have not in this instance shown in detail the mechanism for holding the box car in position or for loading or tilting it as means other than those here shown might be used although the means here shown will be quite ample to show the desired structure and I wish, therefore, that my drawings be regarded as in a sense diagrammatic.

I have called my device a box car unloader, because that is its usual technical name, and because it is primarily intended to be used to unload box cars, but it must be quite evident that it will work equally well for unloading ordinary cars, and even for unloading and emptying articles other than cars. I wish therefore the term "box car unloader" to be understood as applying generally to a device for expeditiously unloading loose and fragmentary material and emptying from receptacles in which it may be contained.

I claim:—

1. An unloader comprising a bridge a track thereon means for holding a car in position upon said track and means for tilting said bridge and said car about an axis inclined to the longitudinal axis of the car and bridge.

2. In an unloader a car unloading bridge having a pivotal support whose axis is inclined to the longitudinal center line of the bridge, and means for rotating said bridge upon said pivotal support.

3. An unloader comprising a bridge a track thereon means for holding a car in position thereupon and means for tilting said bridge said means comprising a driving mechanism and a supporting pivot inclined to the longitudinal axis of the bridge.

4. In an unloader a car unloading bridge having a pivotal support whose axis is inclined to the longitudinal center line of the bridge.

5. An unloader comprising a bridge a track thereon means for holding a car in position thereupon and means for tilting said bridge said means comprising a driving mechanism and a supporting pivot located

in a horizontal plane and inclined to the longitudinal axis of the bridge.

6. In an unloader a car unloading bridge having a pivotal support whose axis is located in a horizontal plane and inclined to the longitudinal center line of the bridge.

7. An unloading device comprising means for gripping the object to be unloaded, and means for subsequently rotating the object to be unloaded about the axis inclined to its longitudinal central axis.

In testimony whereof, I affix my signature in the presence of two witnesses this 24th day of April, 1914.

WILLIAM H. McGANN.

Witnesses:

GENEVA HERTH,

BESSIE S. RICE.