

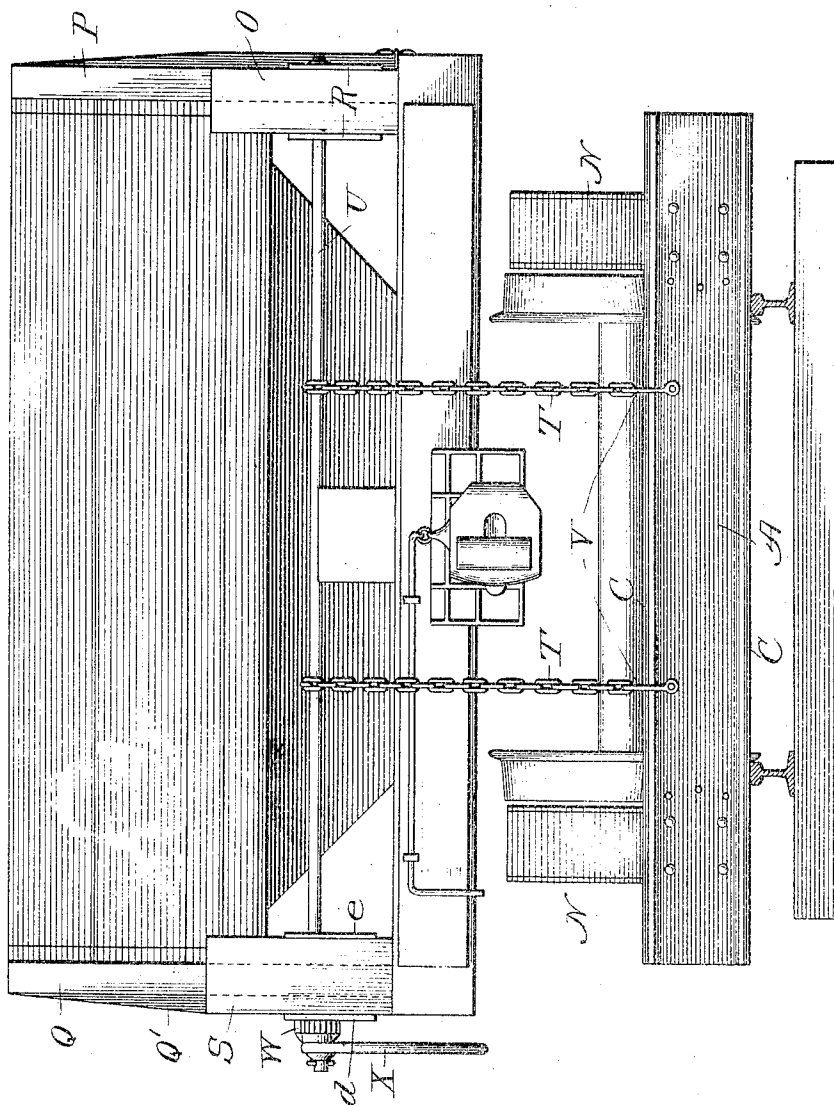
J. B. GALIVAN.
 BALLAST SPREADER.
 APPLICATION FILED NOV. 7, 1910.

1,058,959.

Patented Apr. 15, 1913.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:
 John Enders
 T. H. Sheridan

Inventor.
 John B. Galivan.
 by Sheridan, Wilkinson, Scott, Richmond
 By Walter Scott Attys.

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2 SHEETS—SHEET 2.

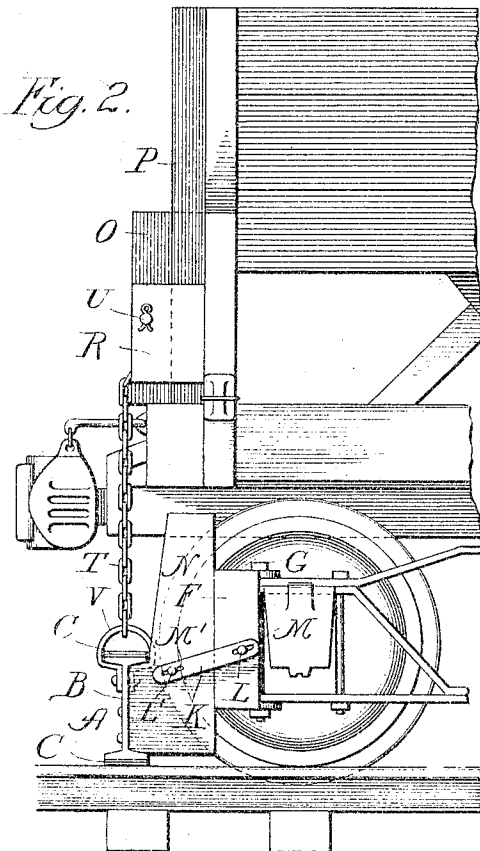


Fig. 2.

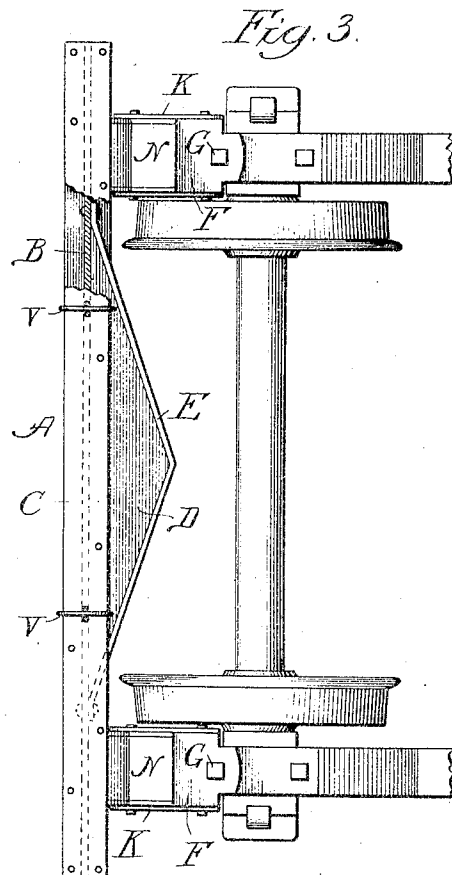


Fig. 3.

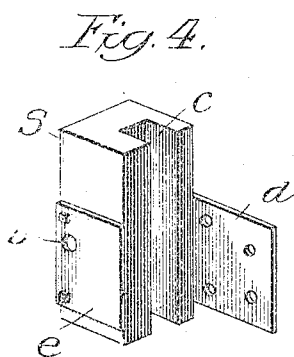


Fig. 4.

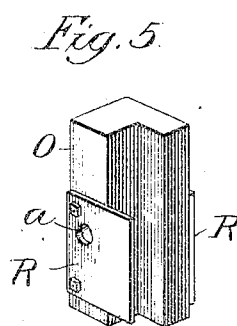


Fig. 5.

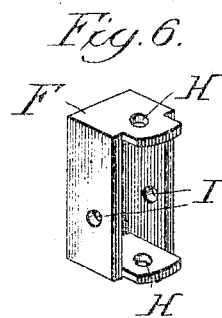


Fig. 6.

Witnesses:
John Enders
T. H. Sheridan

Inventor:
John B. Galivan,
by Sheridan, Wilkinson, Scott & Richmond
By Walter A. Scott Attys.

UNITED STATES PATENT OFFICE.

JOHN BERNARD GALIVAN, OF SAN BERNARDINO, CALIFORNIA.

BALLAST-SPREADER.

1,058,959.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed November 7, 1910. Serial No. 591,120.

To all whom it may concern:

Be it known that I, JOHN B. GALIVAN, a citizen of the United States, residing at San Bernardino, in the county of San Bernardino and State of California, have invented certain new and useful Improvements in Ballast-Spreaders, of which the following is a specification.

My invention relates to a ballast spreader in which a heavy reinforced I-beam is placed so as to just clear the rails.

The objects of my invention are to spread ballast economically, quickly and uniformly leaving the track clear for traffic at all times while ballast is being applied and also avoiding the use of manual labor when unloading from center dump cars.

I attain these objects by the mechanism illustrated in the accompanying drawings.

Figure 1 shows an end elevation of my invention as applied to a car. Fig. 2 is a side elevation of the same. Fig. 3 is a plan view partly in section showing the manner of fastening the spreader to the car truck. Figs. 4, 5 and 6 are perspective detail views.

The spreader A comprises an I-beam B reinforced at top and bottom with heavy steel plates C. Fitted to the back of the I-beam B is a heavy wooden beam D preferably of the form shown in the drawings. This beam D is held in place by the plate E, which is fastened by rivets or other means to the I-beam B. These reinforcements serve to keep the beam from buckling when used to spread ballast. Secured to the car truck on each side is a block member F, see Fig. 6. This block member is adapted to fit over the journal-box, as shown in Fig. 2, and is secured thereto by the journal bolt G passing through the holes H in the ends of the block. Each of these blocks is provided with holes I drilled through the sides. The link members K are pivotally secured to the blocks F by means of bolts L passed through holes I in the blocks and slots M near the ends of the links, the bolts being headed over to prevent disengagement of the links, but allowing pivotal and sliding motion to occur.

Secured to the back of the spreader A by rivets or other means are the hanger blocks N preferably constructed of wood and plated with metal plates. These hanger blocks N are arranged in line with the blocks F and are pivotally attached to the links

K by bolts L' sliding in slots M', the slots M and M' permitting a certain amount of translation when the spreader is being raised or lowered.

Secured to the upright end structure P of the car on one side is a journal-block O suitably notched at one side to fit the end structure P and having reinforcing plates with apertures a. The journal-block S is secured to the other upright end structure Q by means of the groove c and the reinforcing plate d. The block S also carries a journal-plate e in addition to the reinforcing plate d, both plates being provided with holes b.

Supported by and journaled in the blocks O and S is the hoisting bar U carrying the hoisting chains T. These chains are secured at one end to the hoisting bar U and at the other end are secured to the spreader member A by means of the claws or hooks V fastened to the spreader beam B by rivets or other suitable means. At one end of the hoisting bar U is a pawl and ratchet device W by means of which the ballast spreading member, through the operation of the hoisting bar and chains, may be raised or lowered. The location of the notch e in the block S permits of sufficient clearance between the lever X of the pawl and ratchet device and the beam Q' of the car body.

The operation of this device will appear sufficiently clear from the above description.

I claim:

1. In a device of the class described, a car truck, fixed blocks secured to end journals of said truck, a spreading member, hanger blocks secured to the ends of said spreading member, slotted links connecting said hanger blocks with said fixed blocks, whereby the spreading member may be raised or lowered in relation to a car track, said slotted links permitting a certain amount of translation of said spreading member.

2. In a device of the class described, a spreading member, blocks secured to said member, blocks adapted to be secured to car end journals, said first named blocks being adapted to rest against and slide on said second named blocks, and slotted links connecting said first named blocks to said second named blocks.

3. In a device of the class described, a spreading member, blocks secured to said member, blocks adapted to be secured to

car end journals, said first named blocks
being adapted to rest against and slide on
said second named blocks, projecting bolts
secured to each of said blocks, and slotted
5 links engaging respective pairs of said bolts
and thereby movably connecting said first
named blocks to said second named blocks.

In testimony whereof, I have subscribed
my name.

JOHN BERNARD GALIVAN.

Witnesses:

KARL FAIRFIELD TUTTLE,
JOSEPH LAMPRECHT.