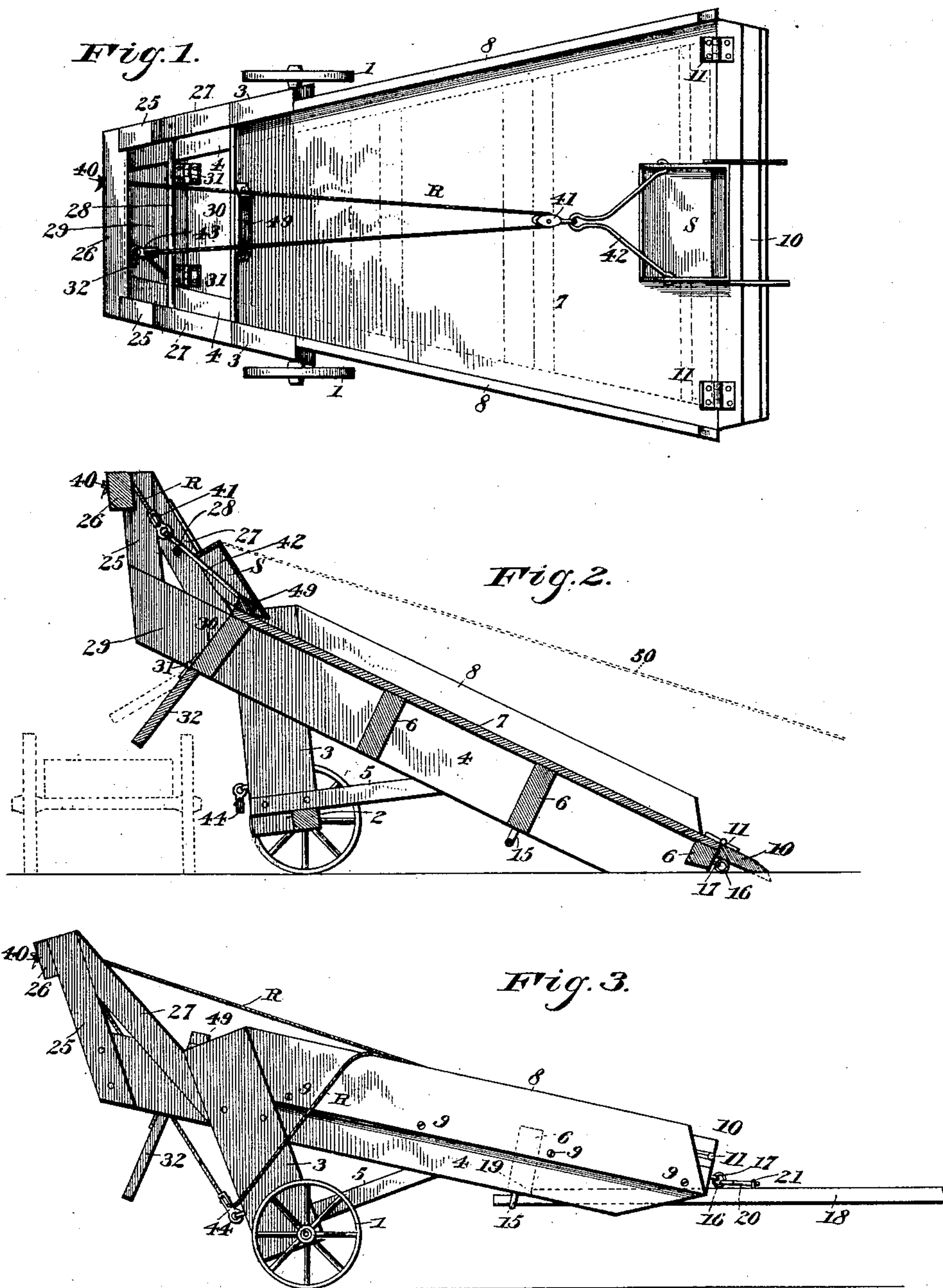


(No Model.)

J. E. EVELETH.
PORTABLE WAGON LOADER.

No. 482,169.

Patented Sept. 6, 1892.



Witnesses;

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UNITED STATES PATENT OFFICE.

JAMES E. EVELETH, OF SALIX, IOWA.

PORTABLE WAGON-LOADER.

SPECIFICATION forming part of Letters Patent No. 482,169, dated September 6, 1892.

Application filed March 18, 1892. Serial No. 425,461. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. EVELETH, a citizen of the United States, residing at Salix, in the county of Woodbury and State of Iowa, have invented certain new and useful Improvements in Portable Wagon-Loaders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to portable loading-machines, and more especially to that class thereof known as "shoveling devices;" and the object of the same is to effect certain improvements in the details of construction thereof.

To this end the invention consists in the specific construction of parts hereinafter more fully described and claimed, and as illustrated in the drawings, wherein—

Figure 1 is a plan view of this machine, showing the scoop as just passing onto the incline. Fig. 2 is a central longitudinal section thereof, showing the scoop as in the act of dumping and also showing the manner of using the hinged directing-board and the hinged receiving-board. Fig. 3 is a side elevation of the machine as being moved along the road.

Referring to the said drawings, 1 1 are wheels mounted on an axle 2, from which extend normally-vertical risers 3, and 4 is a beam at each side, about twenty feet in length, standing normally at an angle to the horizontal and having its lower end beveled off, so as to rest squarely on the ground. These beams are supported by said risers, horizontal braces 5 being provided to steady the parts. The length of the beams and arrangement of parts are such that when their beveled ends are raised from the ground so that the beams will be about horizontal (see Fig. 3) the whole structure will about balance on the main axle 2. The two beams 4 diverge toward their forward ends and are connected by joists 6, (seen in dotted lines in Fig. 1,) upon which is secured an inclined flooring 7, the lowermost joist being smaller than the others to permit the beveled ends of the beams to rest upon the ground. The next adjacent joist is, however, of the size of those remaining, as seen; but by the inclination of the structure the

lower face of this second joist stands higher than that of the lowermost joist when said beveled ends rest upon the ground. 8 are side boards secured by screws 9 to the edges of this flooring, above whose upper face they rise for a short distance, as seen, the screws permitting their removal or substitution when desired. 10 is a receiving-board connected by hinges 11 with the lower end of the flooring in such manner that it may be raised, as in Fig. 3, when the machine is to be moved, or may be let down in exact alignment with the flooring, as seen in Fig. 2. At this time the free edge of this board enters the ground slightly, since the bevel of the lower ends of the side beams and the small size of the lowermost joist permit the hinge to come very near the ground.

For moving the machine I preferably provide the following devices: 15 is a staple secured in the second joist, and 16 is a ring connected with a staple 17, which is seated in the outer face of the lowermost joist at a point below the lowermost position of the receiving-board to permit the latter to be lowered, as seen in Fig. 2, without interfering with the ring or staple. To move the machine a short distance, as to change its position, an operator may grasp this ring, the board 10 being raised out of the way, and draw the machine as desired; but to transport the machine over the road or for some considerable distance a pole or tongue is used and horses hitched thereto, as usual. The body of this pole stands under the lowermost joist, as seen, while its inner end is reduced, as at 19, to enter the staple 15, and 20 is a hook secured in a staple 21 in the pole at a proper point to take into the ring 16, and thus connect the pole with the framework of the machine in such manner that the reduced inner end 19 cannot disengage the staple 15. The weight of said machine is, as above stated, so disposed that it will nearly balance over the axle 2 when the pole is raised and sustained in horizontal position by the horses, and hence there will be but little weight on them. At the upper ends of the beams 4 uprights 25 rise therefrom and are connected by a transverse bar 26, being also preferably braced, as at 27, and additionally strengthened by a rod 28. The flooring terminates where

the risers connect with the beams, and between the latter above the risers is an opening 29, under which a wagon may be driven, as seen in dotted lines in Fig. 2. In order to
 5 direct the dumpings away from the machine, I may provide an inclined rigid chute-board 30, to whose lower edge I hinge, as at 31, a directing-board 32, which hangs below the lower edge of the beams and may be used as
 10 illustrated.

The letter S designates the scoop, for which no novelty is claimed.

R is a rope secured, as at 40, to the bar 26, passing thence down over the flooring and
 15 through a block 41, carried by an eye of the bail 42 of the scoop, thence back and through a block 43, connected with said bar, thence down through the opening 29 and through a block 44, (of which there are two, one carried
 20 by each riser,) and thence away to the horse or other source of power. The bail 42 is pivoted to the body of the scoop, as seen, so that said body may dump, and for the purpose of causing the dumping to take place automati-
 25 cally I provide the stop 49 at the upper end of the flooring, as usual in machines of this character.

The operation, with the uses and advantages of my machine, is as follows: The team
 30 being hitched to the pole, the machine is drawn to the scene of operations and the pole removed. This permits the front edge of the flooring to fall onto the ground, and the hinged receiving-board is then brought into
 35 alignment with the flooring and slightly embedded in the ground, the reduced lower joists and beveled lower ends of the beams permitting, as seen in Fig. 2, so as to prevent the scoop from catching thereon. Yet this
 40 board may be at any time raised to gain access to the ring, as when it is desired to slightly alter the position of the machine. A wagon is then driven transversely across the rear end of the machine under the chute and
 45 the directing-board adjusted so as to deliver the dumpings to any part of the wagon-body and also to prevent them from spilling over or failing to fall into said body. Side boards of the desired height are then secured in
 50 place, the scoop adjusted, and one or more horses hitched to the rope R, according to the size of the scoop and the weight and density of the material to be hauled and delivered into the wagon. One operator then attends
 55 to the scoop in a manner which will be clear

and another drives the horse, who may be at either side of the machine, as permitted by the two blocks 44. When the horse is started, the scoop may be thirty feet or more from the receiving-board, and as it is drawn forward the
 60 operator there directs its mouth into the soil or under the manure, so as to collect the desired quantity, after which the scoop is caused to simply slide over the ground. It may then be released and the rope R will draw it to and
 65 over the embedded receiving-board onto and up the flooring until it strikes the stop 49, when it will automatically dump its contents through the chute and into any part of the wagon-body, according as the directing-board
 70 is adjusted. The flooring stands at so gentle an angle that an operator may walk up the same to draw the scoop back to operative position, or an additional rope 50 may be provided for this purpose, as seen in dotted lines
 75 in Fig. 2. In the act of dumping the scoop turns over so that its bail falls onto the rod 28, which prevents the scoop falling through the chute, and the latter may therefore be made larger than usual, so that the dumpings
 80 will not choke therein. The location of the bar 26 above the plane of the flooring causes the rope R to also stand above said flooring and holds the block 43 and rope out of the manure, if the machine is used for loading
 85 that substance.

What is claimed as new is—

A portable wagon-loader comprising an axle and supporting-wheels, a loading-platform having a dumping-stop, a discharge-
 90 opening, and a chute at its upper end and a receiving-board hinged to its lower end, said platform comprising inclined side beams supported by risers from the axle, transverse joists and a flooring, uprights at the upper
 95 ends of said beams, a cross-brace and a stationary rod connecting the uprights, a shoveling device having a pivoted bail, and a hoist-rope secured to said bail and led through a block carried by the brace, whereby the shovel-
 100 ing device engages said stop to cause it to dump and the bail engages said rod to prevent the device falling through the opening, all substantially as described.

In testimony whereof I affix my signature in
 105 presence of two witnesses.

JAMES E. EVELETH.

Witnesses:

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