W. D. MOUNT.

CAR AND VEHICLE LOADER.

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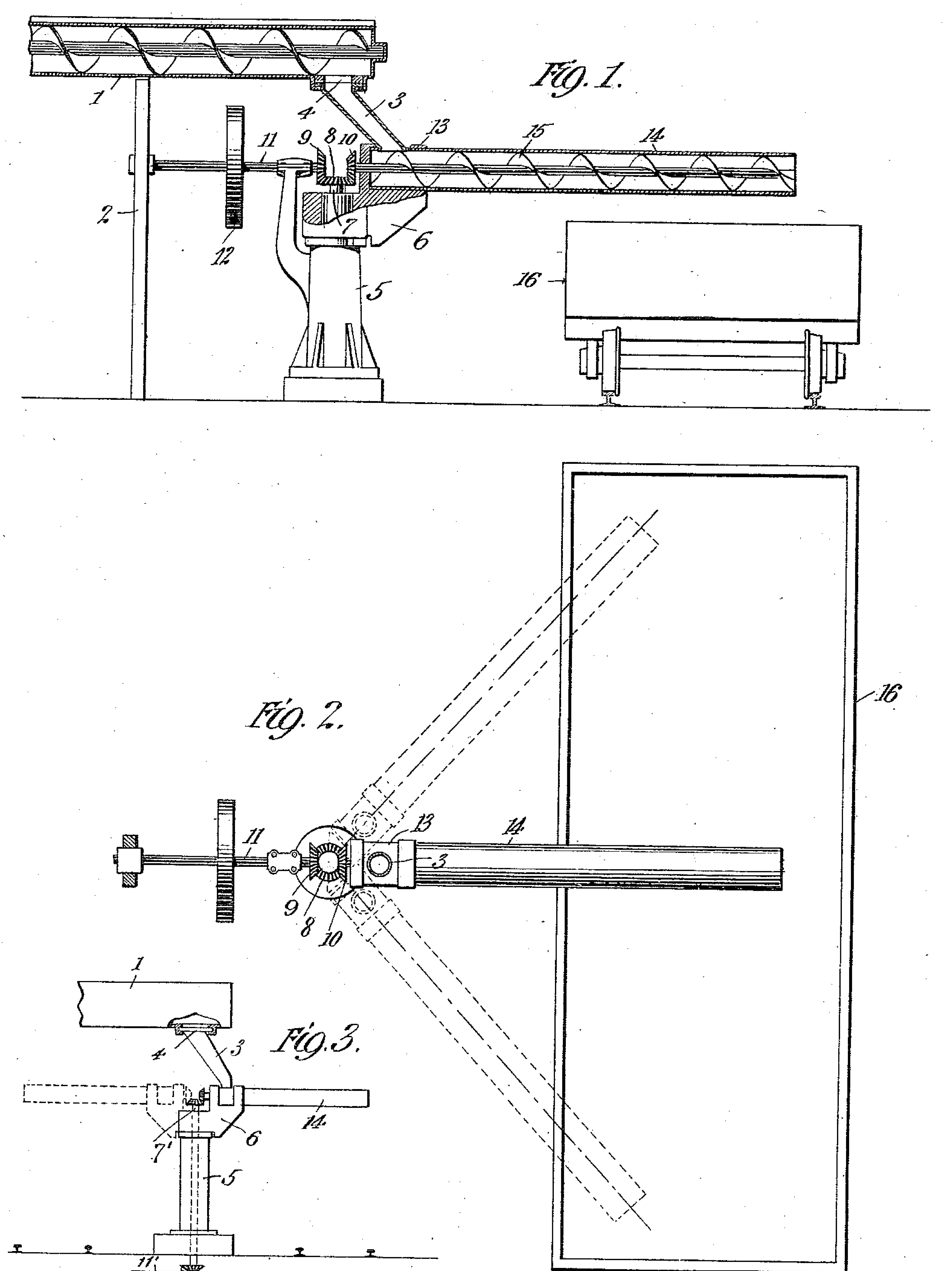
985,436. Patented Feb. 28, 1911.



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WILLIAM D. MOUNT, OF SALTVILLE, VIRGINIA.

CAR AND VEHICLE LOADER.

985,436. Specification of Letters Patent. Patented Feb. 28, 1911.

Application filed March 24, 1910. Serial No. 551,264.

To all whom it may concern:

Be it known that I, WILLIAM D. MOUNT, a citizen of the United States, residing at Saltville, in the county of Smyth and State of Virginia, have invented certain new and useful Improvements in Car and Vehicle Loaders, of which the following is a full, clear, and exact description.

This invention relates to car and vehicle loaders, and has for its object the provision of means whereby a car may be loaded readily from a conveyer without necessitating shifting the position of the car to equalize the load; thereby effecting a considerable saving in time and labor.

The construction disclosed is simple, compact and not liable to disarrangement.

My invention contemplates the provision of a pivoted conveyer section in combination with suitable driving means therefor, arranged to drive the movable elements of said section with equal facility irrespective of its position; and a pivoted chute coöperating with a fixed conveyer for directing material into the pivoted section in any position thereof. By means of this arrangement I am enabled to simply run the car to be filled up into proper position and to thereafter fill said car with any material which may be conveniently handled by conveyers, without shifting the position of the car; by merely displacing the conveyer section angularly about its pivotal axis.

Various other novel features of my invention will be hereinafter set forth and more particularly pointed out in the appended claims.

Referring to the drawings which form a part hereof; Figure 1 shows an elevation of a car loader which embodies the principles of my invention; Fig. 2 a plan of the same; and Fig. 3, an elevation of a modified arrangement of car loader.

A fixed conveyer 1, which in the embodiments shown is a screw conveyer, is supported upon standards 2 at a proper height above the ground. The end of the conveyer is closed except for an opening into a preferably downwardly disposed chute 3. This chute I prefer to position at an angle, the inclination of which should be sufficient to insure the free passage of the material to be handled; and the said chute is pivotally connected to the conveyer casing, by means of suitable castings 4, or the like. Directly beneath the pivotal point is a standard 5, upon the upper extremity of which is rotatably mounted a casting or frame 6. Vertically journaled in the axis of said standard, is a shaft or spindle 7, the upper extremity of which has mounted thereon a bevel gear 8. This gear is intermeshed with a pair of oppositely disposed gears 9 and 10. Gear 9 is keyed or otherwise properly secured to the extremity of a shaft 11; which shaft may be mounted in any suitable manner, and is adapted to be driven by a pulley 12, or the like. Carried in a suitable bracket 13 formed integral with or secured upon the upper portion of frame 6, is a preferably cylindrical casing or pipe 14. The frame 6, being pivotally mounted, permits of the disposition of pipe or casing 14 into any position desired within a range of considerably more than 180°. Rotatably mounted in the interior of this casing is a screw member of any proper construction. The casing 14 and its screw 15 provide a section of screw conveyer. The chute 3 delivers into the upper portion of casing 14, preferably through an aperture in bracket 13, and the connection between said chute and bracket is preferably rigid, at least laterally, so that the rotation of the casing about its pivotal axis correspondingly effects a rotation of the said chute. A car 16 is diagrammatically indicated below the extremity of the pivoted conveyer, and rotation of the latter about its axis will move the extremity thereof through an arc of a circle which will enable material discharged therefrom to be deposited in substantially any portion of the car desired. Particular attention is directed to the compact drive of the conveyer, the gearing of which is disposed about the axis of rotation; and also to the provision in connection therewith of the pivoted chute 13 which delivers into the pivoted conveyer-section. The disposition of this chute is such that material deposited thereinto from the main conveyer 1 may fall directly down into the pivoted conveyer at a point along the length thereof and beyond the said axis of rotation.

In Fig. 3, I have shown a slight modification of my device wherein the shaft 7′ is the driving shaft, being driven in turn from a shaft 11′ disposed beneath the standard 5. This form of device permits of my car loader being used to effect the filling of cars disposed upon tracks extending along either side of the conveyer; it being merely necessary to swivel the conveyer-section 14

around through 180° or thereabout. The driving arrangement in this form of car loader obviously permits of the conveyer-section being swung completely around its axis.

Having described my invention, what I claim is:

1. A car loader comprising an upright standard, a conveyer having a swiveled connection therewith, and adapted to rotate in a horizontal plane around said standard as an axis, a fixed conveyer located above said standard, and an inclined chute having a swiveled connection at one end with said fixed conveyer and terminating at its opposite end in said movable conveyer with its rotating axis coinciding with the axis of the movable conveyer.

2. A car loader comprising an upright standard, a conveyer swiveled thereon and adapted to rotate in a horizontal plane around said standard as an axis, a means for driving the material through said conveyer, a vertical shaft in said standard having a bevel gear at the end thereof, a horizontal shaft in said standard having a bevel gear at the end thereof meshing with said first mentioned gear and a horizontal shaft in said conveyer in alinement with the first horizontal shaft and having a bevel gear in the end thereof meshing with said first mentioned gear, all acting as a drive for said means.

In witness whereof, I subscribe my signature, in the presence of two witnesses.

WILLIAM D. MOUNT.

Witnesses:

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