

No. 808,357.

B. A. FOUST.
LOADING DEVICE.
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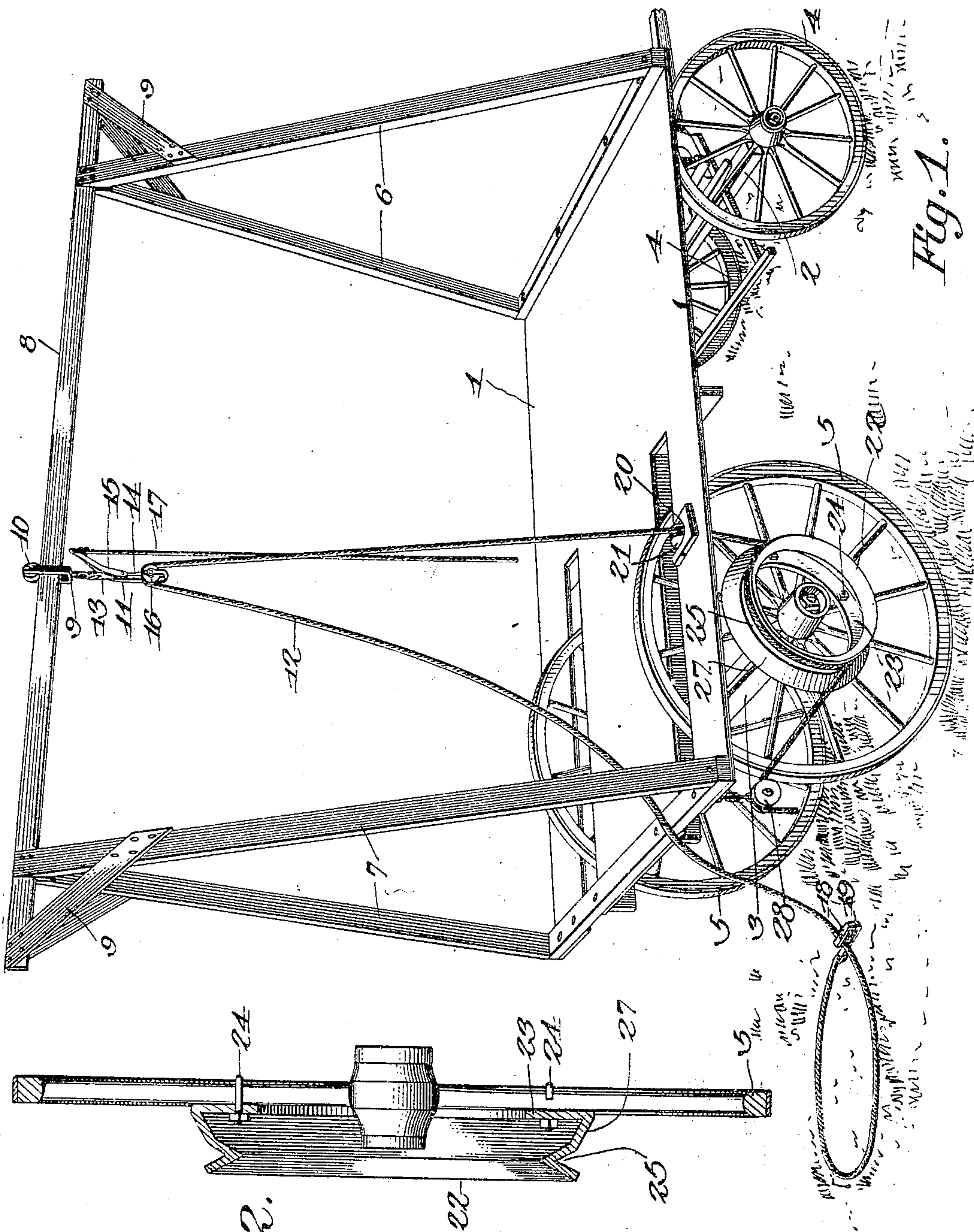


Fig. 1.

Fig. 2.

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BARRETT A. FOUST, OF MEADVILLE, PENNSYLVANIA.

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No. 808,357.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, BARRETT A. FOUST, a citizen of the United States, residing at Meadville, in the county of Crawford and State of Pennsylvania, have invented a new and useful Loading Device, of which the following is a specification.

This invention relates to loading devices; and it has among its objects to simplify and improve the construction and operation of this class of devices.

The present invention has special reference to devices for loading shocks of corn upon a movable platform or vehicle; and it consists more particularly in certain improvements in the construction of such vehicle or movable platform.

The invention further consists in certain improvements in the hoisting mechanism, the power for which is derived from one of the supporting-wheels of the vehicle.

The invention further consists in the improved construction and novel arrangement and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of embodiment of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that the right is reserved to any changes, alterations, and modifications to which recourse may be had within the scope of the invention without departing from the spirit or sacrificing the efficiency of the same.

In said drawings, Figure 1 is a perspective view of a device constructed in accordance with the principles of the invention. Fig. 2 is a vertical sectional view of the power-wheel.

Corresponding parts in both the figures are indicated by like characters of reference.

The movable platform of the device consists of a bed or platform 1, supported upon an ordinary running-gear including front and rear axles 2 3, front and rear wheels 4 5, and connecting members such as are usually employed in a running-gear, but which do not need to be particularly described, as they do not form a part of the present invention.

At the front and rear ends of the platform 1 are supported pairs of upwardly-extending inclined converging uprights 6 6 and 7 7, the upper ends of which support a longitudinally-

disposed track-beam 8, the ends of which are extended beyond the uprights 6 7 and are connected with said uprights by obliquely-disposed braces 9. The track-beam 8 supports a carrier including a frame 9 and a roller 10, which travels upon the upper side of the track-beam. Said carrier supports a trip-pulley 11, over which passes a flexible hoisting element, such as a rope or cable 12. The member, which is briefly designated as a "trip-pulley," includes a supporting member 13, terminating at its lower end in a brake member 14 and a pivoted member 15, carrying a sheave 16, said pivoted member having connected therewith a trip-rope 17. The hoisting element may pass freely over the sheave in one direction, but is restrained from passage in the opposite direction by the brake member 14 unless the swinging sheave-carrying member is tripped or tilted, thus releasing the hoisting element from contact with the brake member.

One end of the hoisting element carries a hook 18, in which is journaled a small sheave or pulley 19, whereby the said hoisting element may be readily looped or noosed around a shock of corn or other object to be hoisted onto the platform. The opposite end of the hoisting element is guided through an opening 20 in the bed or platform, adjacent to which is mounted a guide-pulley 21, whereby abrasion of the hoisting element is prevented.

One of the wheels of the running-gear, preferably one of the hind wheels 5, is provided with a grooved band or drum 22, having an annular flange 23 for the passage of hook-bolts 24, whereby it is detachably mounted upon the spokes of the wheel, said drum being preferably in a position with its periphery in close proximity to the opening 21 in the platform, so that the end of the hoisting element passing through said opening may be readily wound upon the drum, as indicated in Fig. 1. Said drum is provided in the face thereof with an annular V-shaped groove 25, which is formed, preferably, near the outer edge of said drum, the inner portion of the face of which is sloped, as at 27, in the direction of said V-shaped groove. The latter is for the reception of a portion of the cable or flexible hoisting element 12, which passes through the aperture 20, as above set forth, said cable being wound or hitched around the drum, the V-shaped groove of which is adapted to frictionally engage the cable. The free end of the latter

passes over a guide-pulley 28, suitably supported under the rear end of the rack or platform at a suitable elevation to support the free end of the hoisting element in the desired contact with the friction-drum.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The device is propelled in the usual manner by draft-animals or by power of any description. When a point has been reached where a load is to be taken on, the device is stopped while one end of the hoisting element is looped around the object to be hoisted. The hoisting element is then drawn taut, and when the device is propelled the free end thereof is pulled by manual force, thus causing said hoisting element to be wound around the drum, and the object connected therewith will be hoisted to the desired elevation, where it is retained by the brake member forming a part of the trip-pulley. The carrier is then guided to the vicinity of the point where it is desired to deposit the load, which latter is then dropped into position by tripping the pulley.

This device or apparatus while particularly designed for the purpose of loading corn-shocks and the like in the field is by no means limited to this particular use, but may be successfully employed for a variety of purposes, and the right is specially reserved to such modifications of the structure with a view of adapting it to special purposes, as may be within the scope of the skilled mechanic.

The device is extremely simple in construction and very inexpensive. In fact, the bed or platform, with its elevated track, carrier, and hoisting element and the hoisting-drum, may be readily applied to any running-gear of ordinary construction.

Having thus described the invention, what is claimed is—

1. In a device of the class described, the combination with a running-gear, of a bed or platform, an elevated track supported thereby, a carrier upon said elevated track, a trip-pulley supported by said carrier, a hoisting element guided over the trip-pulley and through an aperture in the platform, and a hoisting-drum connected with the outer face of a hind wheel of the running-gear; said hoisting element having a free end hitched around the hoisting-drum.

2. In a hoisting device, the combination with a wheel-supported running-gear, of a bed or platform, converging uprights upon said platform, a track supported by said uprights, and hoisting mechanism including a trip-pulley, a drum connected with one of the wheels of the running-gear, and a hoisting ele-

ment hitched around the drum and having one free end and the other end guided over the trip-pulley.

3. A loading device including a running-gear, a drum connected with one of the wheels of the running-gear, a suitably-supported elevated track, a trip-pulley suspended from and movable with relation to said track, and a hoisting element guided over the trip-pulley, provided at one end with a hook and having its other end disposed adjacent to and adapted to be looped around the winding-drum.

4. A loading device consisting of an equipment to be used in connection with a running-gear, said equipment including a bed or platform, an elevated track supported above the same, a carrier movable upon said track and having a trip-pulley, a hoisting element engaging said trip-pulley and guided through an aperture in the platform, a guide-pulley in said aperture, a drum, and means for attaching said drum to a transporting-wheel of a running-gear; said hoisting element having a loop engaging the drum and a free end extending from said loop.

5. In a device of the class described, a running-gear, a track supported thereby, a pulley upon said track, a hoisting element passing over said pulley, and a winding-drum for said hoisting element connected with a wheel of the running-gear; said winding-drum having a groove near the outer edge of its face, the inner portion of the face being sloping in the direction of said groove.

6. In a device of the class described, a running-gear, a track supported thereby, a pulley upon said track, a hoisting element passing over said pulley, a winding-drum for said hoisting element connected with a wheel of the running-gear, and a suitably-supported guide-pulley for the free end of the hoisting element; said hoisting element being looped around the drum prior to passing over said guide-pulley.

7. In a device of the class described, a running-gear, a pulley suitably supported above said running-gear, a hoisting element passing over the pulley, a drum connected with a wheel of the running-gear and having a V-shaped groove for the reception of a loop of the hoisting element, and guiding means for the latter adjacent to opposite sides of the winding-drum; one of said guiding means supporting a free end of the hoisting element.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

BARRETT A. FOUST.

Witnesses:

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