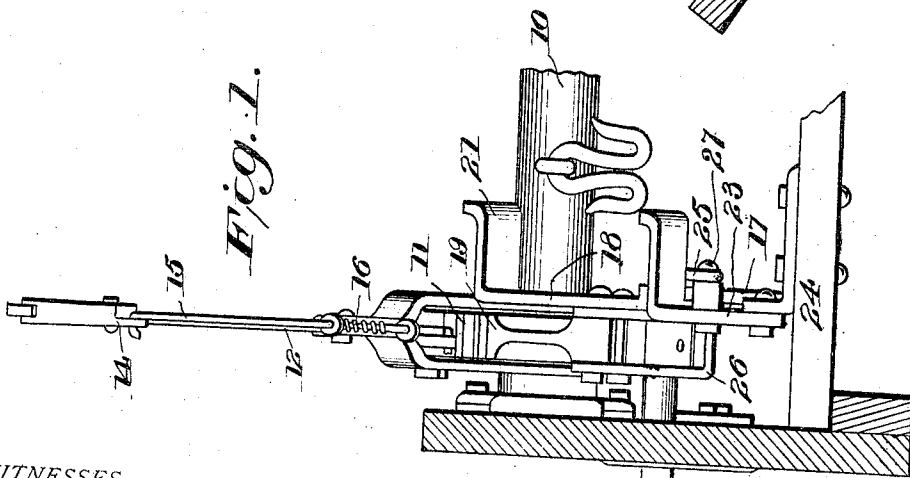
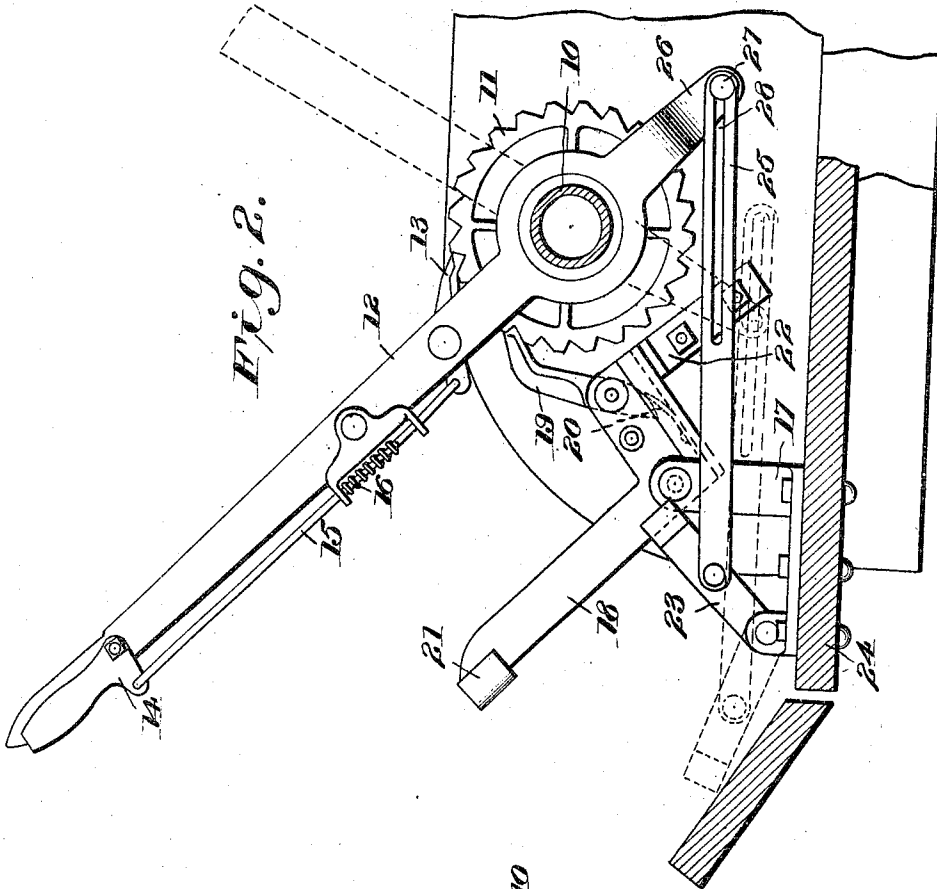


C. M. HAESKE & R. F. ANDERSON.
WINDING MECHANISM FOR DUMP WAGONS.
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1,039,121.

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WITNESSES

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CHARLES M. HAESKE AND ROY F. ANDERSON, OF SOUTH BEND, INDIANA.

WINDING MECHANISM FOR DUMP-WAGONS.

1,039,121.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, CHARLES M. HAESKE and ROY F. ANDERSON, citizens of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Winding Mechanism for Dump-Wagons, of which the following is a specification.

This invention relates to certain new and useful improvements in winding mechanism for dump wagons.

Among the objects of the invention is to provide improved means for operating the drop bottom of a dump wagon, and to prevent reverse rotation of the winding drum when said drop bottom is being closed.

A further object is to provide novel means for preventing accidental unwinding of the drum after the bottom has been closed.

A further object is to provide an improved locking device for the drum actuated by the operating lever for said drum.

The invention will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawing:—Figure 1 is a front elevation of our improved winding mechanism applied to a dump wagon, the latter being shown in section. Fig. 2 is a side view thereof, the winding drum and the wagon body being shown in section.

Referring to the drawing, 10 designates the winding drum, and 11 a ratchet secured thereto, the winding lever 12 being pivoted upon the drum and provided with the pawl 13 adapted to engage said ratchet. Said pawl is controlled by a hand piece 14 pivoted to lever 12 and connected to the pawl by a link 15, said pawl being normally held out of engagement with the ratchet by a spring 16.

Pivottally mounted in a support 17 secured to the platform of the wagon is a tripping foot lever 18 provided with a pawl 19 held normally in engagement with the ratchet 11 by means of a spring 20. Said tripping lever is provided with a laterally extending foot piece 21, and rearward movement thereof is limited by means of a stop 22. A locking link 23 is pivoted to the foot board or platform 24 and arranged to catch under the lever 18 to prevent forward movement of the latter. Said link is connected by a slotted link 25 with a prolongation 26 of the lever 12, said prolongation being provided

with a stud 27 fitting within the slot 28 of the link 25.

Fig. 2 illustrates the parts in the positions occupied when the chains are wound up and the drop bottom closed. The drum 10 cannot unwind because of the engagement of the pawl 19 and the ratchet 11, and said pawl cannot move out of engagement with the ratchet because of the engagement of the link 23 with the lever 18. To unload, lever 12 is thrown back, and stud 27 is thrown forward in the slot 28 until it strikes the inner end of the latter, whereupon the link 25 is moved so as to push the link 23 from under the lever 18, thus leaving this lever free to be pushed forward by the foot to disengage pawl 19 from the ratchet 11. This frees the drum 10 which unwinds under the weight of the load on the drop bottom. It will be noted that the pawl 13 is normally held out of engagement with the ratchet 11, but when the hand grasps the lever 12 the hand piece 14 is thrown over so as to move the pawl into engagement with the ratchet, the pawl thereby causing the rotation of the drum as the lever 12 is oscillated. The slot 28 is long enough to allow of oscillation of lever 12 in winding up the drum. Said lever, however, is thrown forward in the initial winding movement until the stud 27 strikes the end of the slot 28, whereupon the link 23 is pulled up into locking position beneath the foot lever 18. The foot lever 18 is thus held up during the rest of the winding movement and until it is desired to drop the load. By this means the winding drum is securely locked so that it will not jar loose in driving over a rough roadway, and yet the same may be readily and quickly released when it is desired to dump the load.

Having thus explained the nature of our invention and described an operative manner of constructing and using the same, although without attempting to set forth all of the forms in which it may be made, or all of the forms of its use, what we claim is:—

1. A winding mechanism for dump-wagons comprising a winding drum, an operating lever therefor, a locking pawl for preventing reverse rotation of said drum, a carrier for said pawl, and means operated by said lever for locking said carrier with said pawl in operative relation with said drum.

2. A winding mechanism for dump wagons comprising a winding drum, an op-

erating lever therefor, a tripping foot lever, a pawl carried by said foot lever for preventing reverse rotation of said drum, and means controlled by said operating lever for
5 locking said foot lever.

3. A winding mechanism for dump wagons comprising a winding drum, an operating lever therefor, a tripping foot lever, a pawl carried by said foot lever for preventing reverse rotation of said drum, a
10 locking link for said foot lever, and means connected with said operating lever for controlling said locking link.

4. A winding mechanism for dump wagons comprising a winding drum, an operating lever therefor, a tripping foot lever, a pawl carried by said foot lever for preventing reverse rotation of said drum, a
15 locking link for said foot lever, and a lost

motion connection between said link and 20 said operating lever.

5. A winding mechanism for dump wagons comprising a winding drum, an operating lever therefor provided with an extension, a tripping foot lever, a pawl carried
25 by said foot lever for preventing reverse rotation of said drum, a locking link for said foot lever, a link connected to said locking link and provided with a longitudinal slot, and a stud on the extension of said operat- 30 ing lever working in said slot.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES M. HAESKE.

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Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."