L. JARMAN.
Dumping-Wagon.

No. 216,327. Patented June 10, 1879.

FIG. 1.

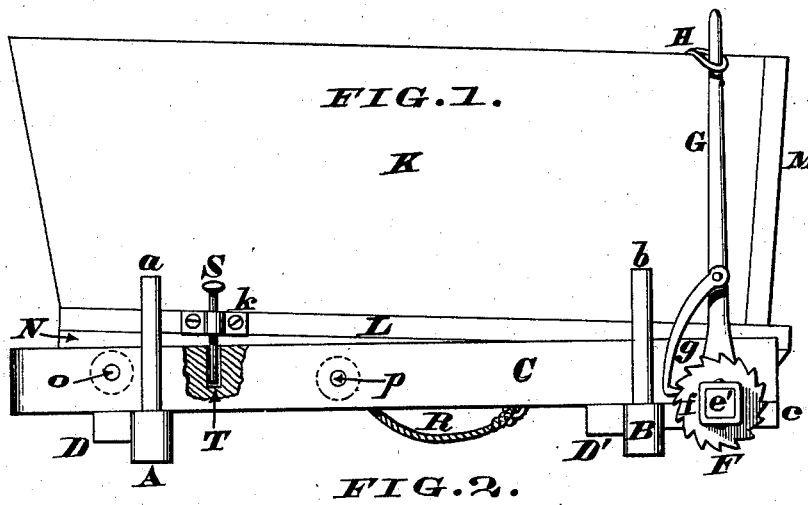


FIG. 4.

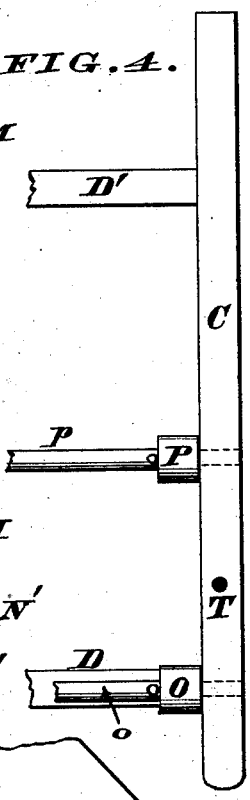


FIG. 2.

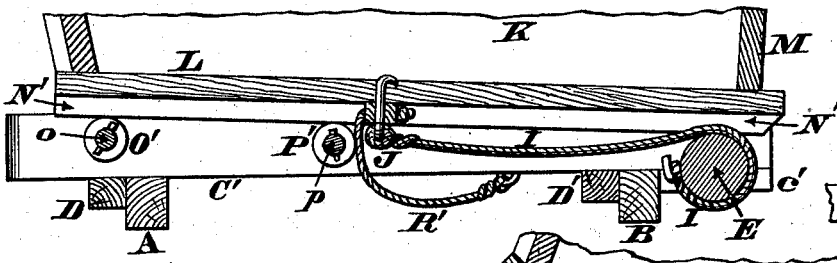


FIG. 3.

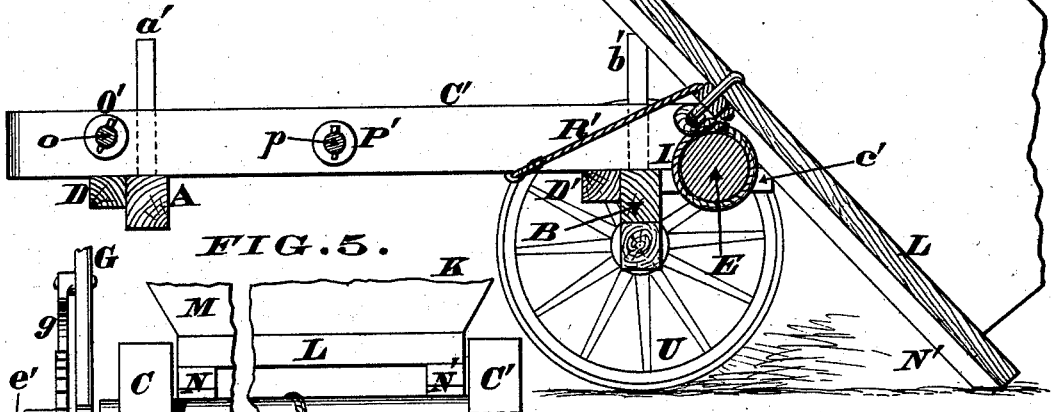
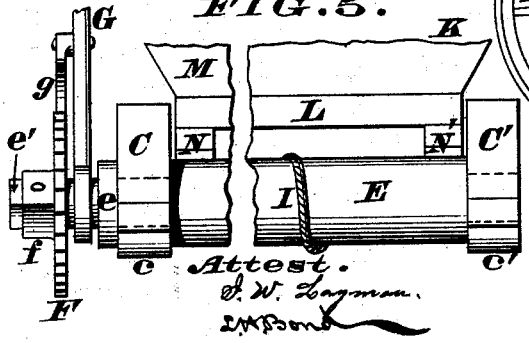


FIG. 5.



Attest.
J. W. Layman.
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Inventor.
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his Attorney.

UNITED STATES PATENT OFFICE.

LEVI JARMAN, OF MOSCOW, OHIO.

IMPROVEMENT IN DUMPING-WAGONS.

Specification forming part of Letters Patent No. **216,327**, dated June 10, 1879; application filed April 1, 1879.

To all whom it may concern:

Be it known that I, LEVI JARMAN, of Moscow, Clermont county, Ohio, have invented certain new and useful Improvements in Dumping-Wagons, of which the following is a specification.

This invention relates to those wagons having movable beds or bodies capable of being shifted rearwardly and then tilted to discharge the load; and my improvements comprise a novel combination of devices for moving such beds.

The devices employed for this purpose consist of a windlass or drum journaled in the rear end of a suitable frame, and adapted to support the hind part of the bed or body of the wagon.

Furthermore, this windlass has coiled around it a rope or chain, or other flexible coupling, that is secured to the bed in such a manner as to retract the latter as soon as the windlass is properly rotated, which rotation may be effected with any convenient appliance.

I prefer, however, to use a lever, pawl, and ratchet-wheel, located at the side of the wagon, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation, showing my improved dumping-wagon in its normal position, the running-gears of the vehicle proper being omitted. Fig. 2 is a longitudinal section through the same. Fig. 3 is a similar section, but showing the body tilted, one of the rear wheels of the vehicle being represented in this illustration. Fig. 4 is a plan of part of the main frame, and Fig. 5 is an enlarged elevation of the rear end of said frame and its accessories.

A B represent, respectively, the front and rear bolsters of any suitable wagon, and *a a′ b b′* are the standards of the same. Adapted to rest upon these bolsters are two stout beams or sills, C C′, connected by cross-ties D D′, which ties bear against said bolsters in the manner shown. The rear ends of these sills are furnished with boxes or other bearings *c c′* for the journals of a stout drum, or cylinder, or windlass, E, having a collar, *e*, and a square arbor, *e′*, which latter is secured within the flange or hub *f* of ratchet-wheel F, said wheel being preferably operated by the pawl *g* of lever G; but, if preferred, holes may be made in collar *e* to admit a capstan-bar, or the drum can be driven with gearing or other convenient appliances.

H is a strap or loop for maintaining the lever G erect when not in use. Attached to drum E is one end of a rope or chain, or other flexible coupling, I, whose other end is secured at J to the shiftable body or bed K, which bed has a bottom, L, an end-gate, M, and two longitudinal rails, N N′, said rails being adapted to slide between sills C C′, as more clearly shown in Fig. 5. These rails rest upon drum E, and also upon rollers O O′ P P′ of shafts *o p*, which shafts are journaled in the aforesaid sills. Furthermore, shaft *o* is placed somewhat higher than the one *p* to impart a rearward pitch to body K.

R R′ are ropes or chains connecting said body to the sills C C′, the object of these stays being to prevent the body becoming detached from the main frame when the load is dumped out. S is a bolt or pin passing through staple *k* of the body, and entering a socket, T, of sill C. U is one of the hind wheels of the wagon.

The body or bed K, when loaded and in its normal position, is secured by the retaining device S; but when it is desired to dump the load this bolt is withdrawn and loop H is disengaged from the lever G. The teamster now gives said lever a few strokes, so as to rotate drum E and coil the coupling I around the same. This operation retracts the body K, and as soon as it recedes far enough the load tilts it, as seen in Fig. 3, the stays R R′ preventing said body being completely detached from its supporting-frame C C′. The load having been thus dumped, pawl *g* is thrown out of gear with ratchet F, and the now empty bed is readily shoved forward on the drum and small rollers, the rope I uncoiling accordingly, and the stays R R′ assuming their slackened condition.

From the above description it will be seen that drum E serves as one of the rollers to support bed K, and consequently the rotation of said drum initiates the retraction of this bed before the slack has been taken out of the coupling I.

An obvious but inferior modification of my

invention may have the rollers O O′ P P′ applied to body K, and adapted to run on inclined tracks or ways secured to the sills C C′.

I claim as my invention—

1. In a dumping-wagon, the cylinder or drum E, serving the twofold purpose of a roller to support the rear end of the body K and a windlass around which is wound the chain or rope I, substantially as herein described.

2. An improved dumping-wagon, consisting of the windlass E, ratchet-wheel F, lever G, pawl *g*, and rope or chain I, for retracting the shiftable bed K, which windlass or drum serves as a roller to support the rear end of said bed, as herein described and set forth.

3. An improved dumping-wagon, consisting of the sills C C′, windlass E, ratchet-wheel F, lever G, pawl *g*, connection I, body or bed K, and rollers O O′ P P′, the windlass E being located at the rear end of said sills, and serving as a support for the bed, as herein described.

4. In a dumping-wagon, the roller-shafts *o p*, placed at different levels, for the purpose of giving the bed K a rearward pitch, as herein described and illustrated.

In testimony of which invention I hereunto set my hand.

LEVI JARMAN.

Witnesses:

JAMES H. LAYMAN,

L. H. BOND.