

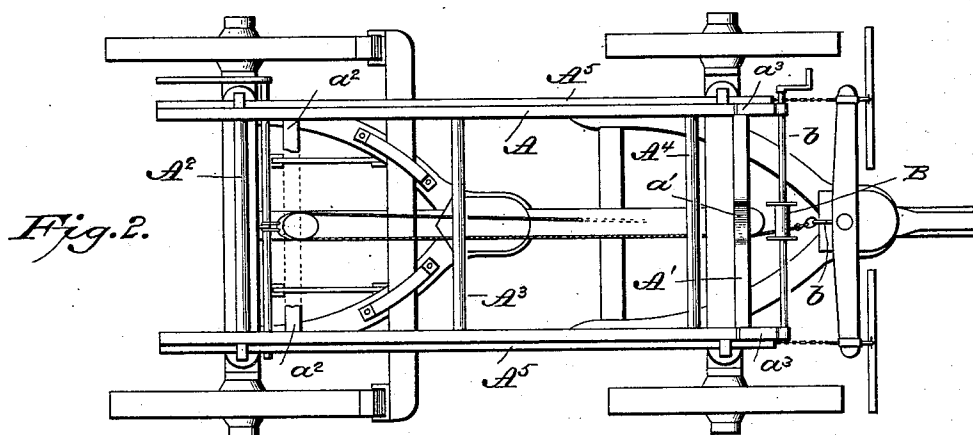
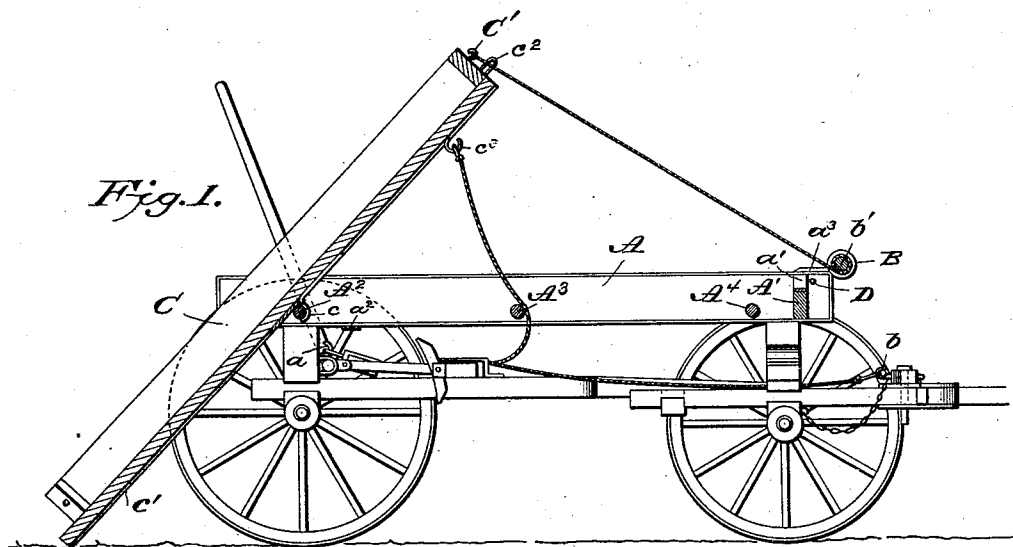
(No Model.)

2 Sheets—Sheet 1.

D. S. LANE.
DUMPING WAGON.

No. 566,194.

Patented Aug. 18, 1896.



WITNESSES
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E. Johnson

Daniel S. Lane
INVENTOR

by *[Signature]* Attorney

(No Model.)

2 Sheets—Sheet 2.

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Fig. 3.

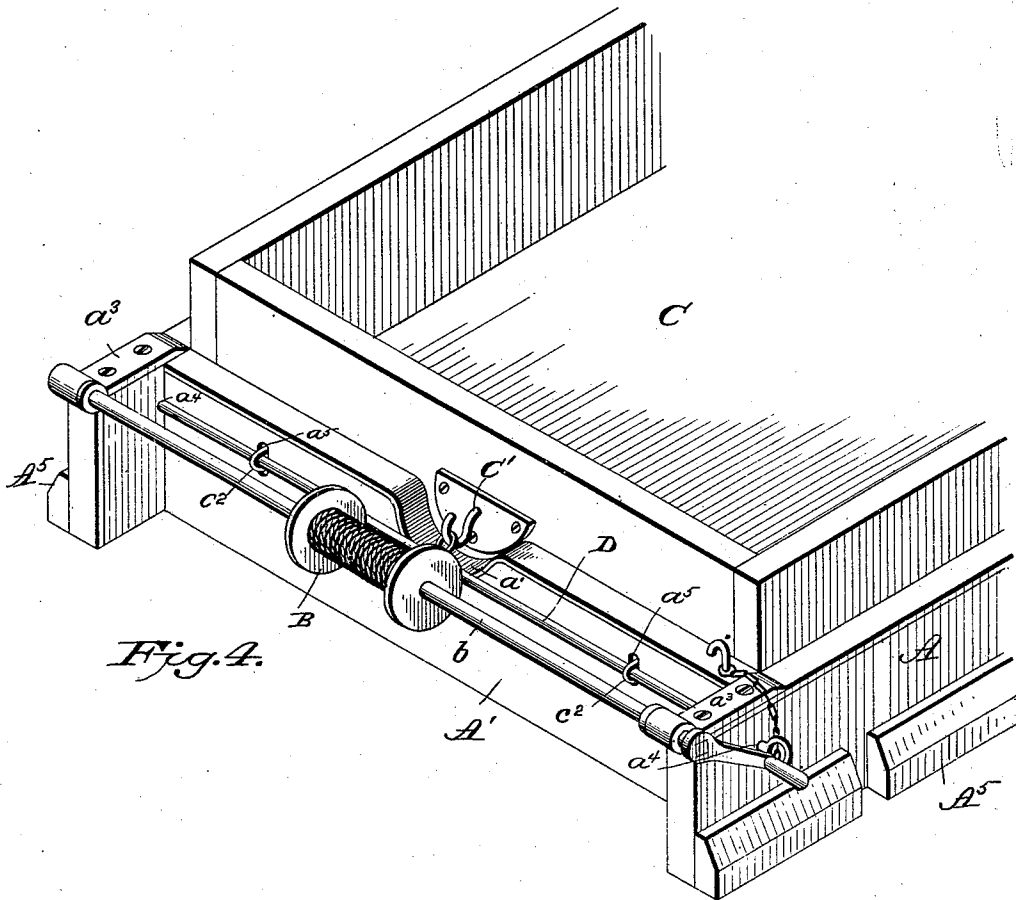
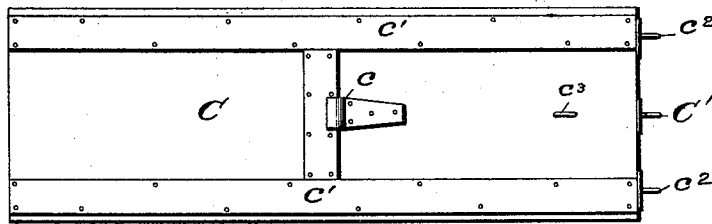


Fig. 4.

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UNITED STATES PATENT OFFICE.

DANIEL S. LANE, OF JOHNSTOWN, PENNSYLVANIA.

DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 566,194, dated August 18, 1896.

Application filed June 20, 1896. Serial No. 596,318. (No model.)

To all whom it may concern:

Be it known that I, DANIEL S. LANE, a citizen of the United States of America, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Dumping-Wagons; 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in dumping-wagons.

The object of the invention is to provide a dumping-body of improved construction for four-wheeled vehicles of improved construction; to provide means whereby the wagon-body can be tilted upon a supplemental frame supported by the bolsters of the vehicle, said vehicle having attached thereto means for carrying my invention into effect.

The invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a longitudinal sectional view of a dumping-wagon constructed in accordance with my invention. Fig. 2 is a plan view with the wagon-body removed. Fig. 3 is an inverted plan view of the wagon-body. Fig. 4 is a perspective view showing the front portion of the frame and wagon-body.

My invention is designed to be applied to a four-wheeled vehicle of the ordinary type, and the only substantial difference in the running-gear is the attachment of a hook *a* for the connection thereto of a suitable pulley or block, said hook being attached to the front side of the rear bolster above the running-gear. The doubletree which is attached to the wagon-tongue is also provided with a hook *b*, which projects rearward from the center of the doubletree, said doubletree being removed from the tongue by withdrawing the king-bolt and loosening the chains extending to the axle.

A designates a frame, which is connected

at its forward end by a vertical cross-piece *A'*, having a central depression *a'*. The side pieces of this frame A are also connected to each other in front of the rear bolster by a flat bar or strip *a*².

*A*², *A*³, and *A*⁴ designate rollers the ends of which are slightly reduced and enter bush-bearings in the side pieces of the frame A. These rollers are positioned as shown in the drawings, the one *A*² being located over the rear bolster. The longitudinal strips of the frame A are provided on their exterior with strips *A*⁵, and said strips are cut away, so that the standards carried by the bolster may pass through the cut-away portions, the standards holding the frame securely in position upon the running-gear of the vehicle. To the front of the frame A are secured brackets *a*³, the corners of which are provided with eyes or journals in which is mounted a rod *b'*, said rod carrying a drum B, to which is attached a rope or other flexible connection.

The projecting ends of the longitudinal side pieces of the frame A have perforations *a*⁴, and the vertical cross-piece *A'* has slots or openings *a*⁵. There is also secured to one side of the upper edge of the cross-piece *A'* a hook, as fully appears in Fig. 4 of the drawings, and it will also be noted that the shaft or drum B has one end key-ended or squared for the application thereto of a crank-handle.

The wagon body or box C is provided at a point a little in advance of its center with a hook or catch *c*, the hook thereof projecting rearwardly, and to the under side is attached strips *c'*, with which the rollers *A*², *A*³, and *A*⁴ engage. The front portion of the wagon-body is centrally provided with a hook and with forwardly-projecting staples *c*², which are adapted to pass through the slots and be engaged by a rod D, which rod passes through the perforations *a*⁴ in the frame A and holds the wagon-body securely in position.

In operation the frame A rests upon the bolsters and is maintained in position by the standards, and the wagon-body rests upon the rollers of said frame. A rope or flexible connection is attached at one end to the hook *c*³, carried by the wagon-body and passes therefrom around the roller *A*³, through the block or pulley carried by the hook *a*, and from there passes to and is connected to the

hook *b*, carried by the doubletree. A second flexible connection extends from the drum B to the hook C' of the wagon-body. When it is desired to dump the wagon, the rod D is withdrawn from the eyes *c*², the king-bolt and chains of the doubletree are disconnected, and the horses are driven forward and pulling upon the flexible connection attached to the doubletree and wagon-body will move the latter rearward upon the supporting-rollers until the hook *c* engages the rear roller, when the said wagon-body will be tilted. If the load is not heavy, this rearward movement of the wagon-body can be accomplished either by shoving the same rearward or by drawing upon the flexible connection. When the wagon is dumped, a pull upon the flexible connection will bring it to a horizontal position, and it can then be drawn forward by turning the drum. When drawn sufficiently forward, the rod D is passed through the eyes to secure the wagon-body in place.

Prior to my improvements it has been proposed to provide a dumping-wagon with frames one of which slides upon the other, hooks being used to engage projections at the rear end of the frame, and it has also been proposed to provide cords or flexible connections for drawing the wagon-body back in place after it has been dumped; but in practice frames sliding upon each other are objectionable, and in order to render them operative it is necessary to use a large quantity of grease which exudes beyond the sides of the frame, and it is therefore difficult to keep such a vehicle neat and clean.

With my improvements it is not necessary to use but a small amount of lubricant for the journals of the rollers, and the wagon-body rests entirely upon said rollers.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a dumping-wagon, the combination with a running-gear of ordinary construction provided with a hook *a* attached to the rear bolster, and with a hook carried by the double-

tree; of a frame mounted on the bolsters and provided with transverse rollers positioned as shown; a wagon-body having on its under side a hook for engagement with the rear roller, and in advance of the same a hook *a*³; together with two ropes or flexible connections, connected to the wagon-body and extending therefrom to and over the central roller, from there to and around a pulley carried by the hook *a* to the doubletree, substantially as shown and for the purpose set forth.

2. In a dumping-wagon, the combination with a running-gear carrying a frame which is supported on the bolsters thereof, said frame having side pieces, a transverse connecting-piece centrally recessed and provided with slots *a*³, said bed also carrying a transverse shaft provided with a central drum; a wagon-body adapted to be supported by the bed said wagon-body having forwardly-projecting staples *c* through which a rod is adapted to be passed, and a flexible connection extending from the drum to the hook at the forward end of the wagon-body, substantially as shown and for the purpose set forth.

3. In a dumping-wagon, the combination, of a running-gear having hooks one of which is attached to the rear bolster and the other to the doubletree; a frame or bed having transverse rollers and a shaft carrying a drum, said frame being mounted on the bolsters; together with two ropes or flexible connections, one extending from the front of the wagon-body direct to the drum and the other being attached at one end to the under side of the wagon-body, passing therefrom over a pulley carried by the hook attached to the rear bolster and from there to the doubletree to which it is connected, the parts being organized substantially as shown and for the purpose set forth.

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

DANIEL S. LANE.

Witnesses:

THOMAS J. ITTELL,
N. B. SWANK.