

No. 767,550.

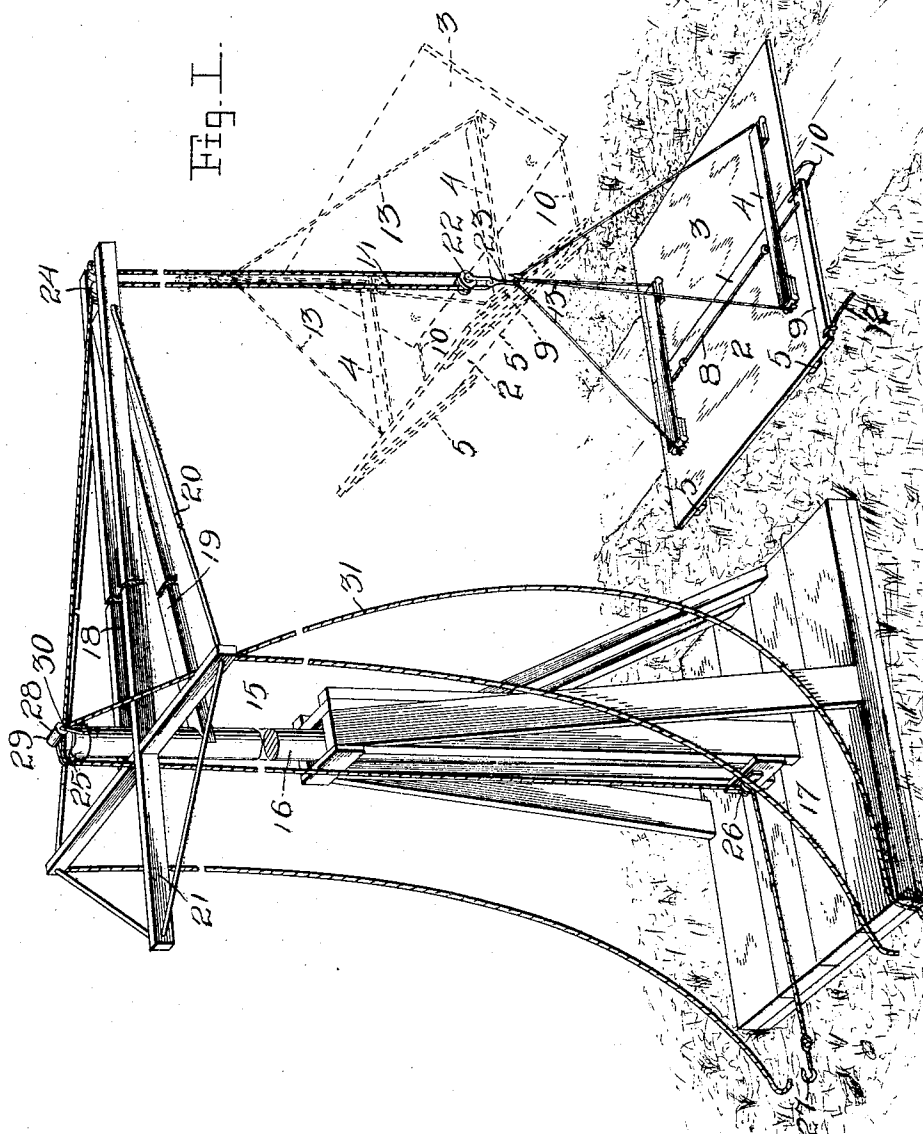
PATENTED AUG. 16, 1904.

F. L. DOTY.  
APPARATUS FOR LOADING WAGONS.

APPLICATION FILED JAN. 28, 1904.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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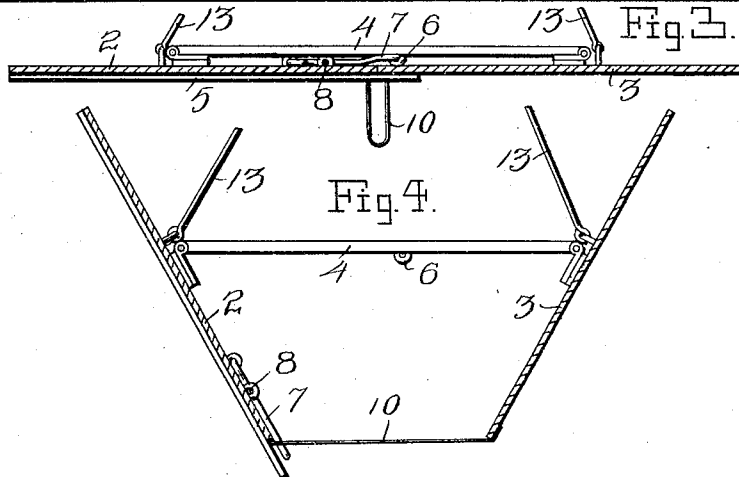
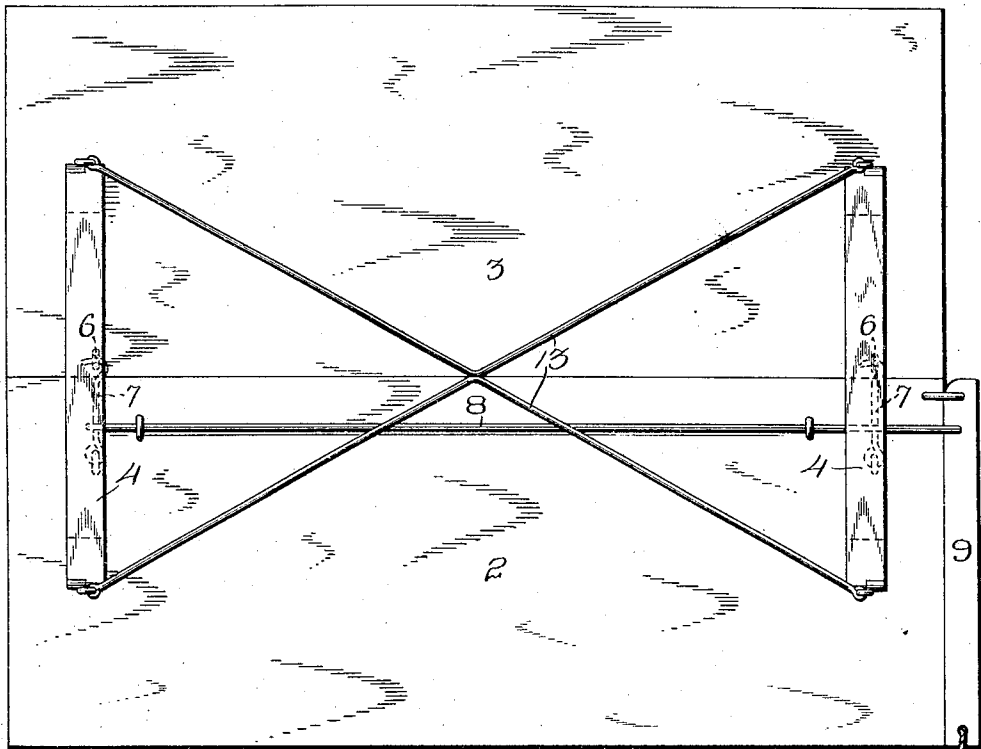
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2 SHEETS—SHEET 2.

Fig. 2.



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# UNITED STATES PATENT OFFICE.

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## APPARATUS FOR LOADING WAGONS.

SPECIFICATION forming part of Letters Patent No. 767,550, dated August 16, 1904.

Application filed January 28, 1904. Serial No. 190,997. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK LORENZO DOTY, a citizen of the United States, residing at Calliope, in the county of Sioux and State of Iowa, have invented certain new and useful Improvements in Apparatus for Loading Wagons; and I do 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.

This invention relates to improvements in apparatus for loading manure, dirt, or anything of this nature into wagons.

The object of the invention is to provide an apparatus whereby the loading of wagons with manure, dirt, or the like that has been accumulated by a scraper or scoop may be quickly and easily accomplished.

A further object is to provide such a device which will be strong and durable, easily operated, and well adapted to the purpose for which it is designed.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view showing in full lines the apparatus in position to be loaded and in dotted lines the raised and dumped position of the same. Fig. 2 is an enlarged detail plan view of the dumping-platform. Fig. 3 is a vertical cross-sectional view of the same, showing the parts closed or in position for loading. Fig. 4 is a similar view showing the dumped position of the parts.

Referring more particularly to the drawings, 1 denotes the dumping-platform, which consists of two sections or members 2 and 3, across which are arranged two cleats 4, disposed near the ends of the sections or members and extending slightly beyond the center line of the same. To the ends of said cleats the members are hinged in such a manner that the greatest width of the same is on the inner side of the hinged connection. On the lower side of the section or member 2 are

fixed cleats 5, the ends of which project a short distance beyond the inner edge of said section and engage under the adjacent edge of the section or member 3, whereby said member is supported in a horizontal position, as shown in Fig. 3.

On the under side of the cleats 4 are fixed eyes or staples 6, which are adapted to be engaged by hooks 7, pivotally connected to the upper side of the section 2. The hooks 7 are connected together by a draw rod or bar 8, which is slidably mounted in guides on said section. The outer end of the rod or bar 8 is pivotally connected to a releasing-lever 9, pivotally connected to the end of the section 2, so that when said lever is operated the hooks 7 will be released from the eyes or staples 6, thereby permitting the inner adjacent edges of the members to drop or swing downwardly, as shown in Fig. 4. To the inner edges of the sections or members are secured the ends of limiting chains or cords 10, by which the downwardly-swinging movement of the sections is limited. An operating-cord 12 is connected to the end of the lever 9, whereby the same may be operated when the platform is in an elevated position.

Supporting cables or chains 13 have their ends secured to the ends of the hinge-cleats 4, and to said supporting-cables is connected a hoisting-cable 14, which is arranged on a crane or a hoisting device 15 of any suitable construction, but preferably of the construction shown in Fig. 1 of the drawings, and consisting of an upright or standard 16, pivotally mounted to turn in a supporting-base 17. To the upper end of the standard is secured a right-angularly-disposed boom 18, which is suitably braced by an inclined brace-bar 19 and by cables 20, which are connected at one end to the outer end of the boom and from thence extend rearwardly and engage the ends of a laterally-projecting cross-bar and then extend to and are secured in the end of a rearwardly-projecting bar 21, which may be a rearward continuation of the boom.

The hoisting chain or cable 14 is here shown as having one end secured to the end of the boom 18, then looped down and through a

pulley 22, having a hook 23, to which is connected the supporting-cables 13. The cable 14 then passes upwardly and over a sheave or pulley 24, journaled in the boom 18, thence  
 5 back over a pulley 25 on the upper end of the standard 16, thence downwardly under a pulley 26, secured to the lower end of the standard, and on the end of the cable is secured a hook 27, to which may be connected  
 10 a whiffletree or other draft device (not shown) by which the cable may be drawn upon to hoist said platform to a raised position.

If desired, a braking device or clamp 28 may be arranged on the standard 16, whereby  
 15 the cable 14 may be gripped to hold the platform in raised position while being dumped. The clamping device here shown consists of a cylindrical roller 29, mounted in a bail 30, pivotally mounted on the standard in position  
 20 to be swung down to clamp said cable against the upper end of said standard and hold the same against movement. An operating-cord 31 is shown connected to said bail, whereby the same is swung down and said roller is  
 25 forced into engagement with said cable.

In operation the platform is arranged flat on the ground and the team pulling the loaded scraper or scoop is driven across the same and the scraper or scoop dumped on the center of  
 30 the platform, which operation is repeated until sufficient material has been dumped on the same to make a wagon-load. The hoisting-cable is now drawn on to raise the platform containing the load high enough for a wagon to be driven beneath the same. The braking  
 35 device is now actuated to clamp said cable and hold the platform in elevated position. After the wagon has been driven beneath the platform the cord 12 from the releasing-lever  
 40 9 is pulled, thereby causing the lever to release the hooks 7 from the eyes 6 on the hinge-cleats 4, which will permit the sections or members or sections of the platform to dump and discharge the load thereon into the  
 45 wagon, after which the platform is lowered and the members or sections are closed and locked, when the platform is again ready to be loaded.

From the foregoing description, taken in  
 50 connection with the accompanying drawings, the construction and operation of the inven-

tion will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be  
 55 resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A dumping-platform consisting of two members or sections, cleats arranged across the same to the ends of which said members or sections are hinged, locking-hooks piv-  
 65 otally connected to one of said members to engage eyes or staples on said cleats to hold said member in a horizontal position, cleats fixed on said locked member to engage under the other member and hold the same in similar  
 70 position, means for hoisting and supporting said platform, and means connected to said locking-hooks whereby the same may be disengaged from said eyes or staples, when said platform is in elevated position to permit  
 75 said members or sections to dump, substantially as described.

2. A dumping-platform consisting of two members or sections, cleats arranged across the same to the ends of which said members  
 80 or sections are hinged, locking-hooks pivotally connected to one of said members to engage eyes or staples on said cleats to hold said member in a horizontal position, cleats fixed on said locked member to engage under  
 85 the other member and hold the same in similar position, means for hoisting and supporting said platform, a draw-rod connected to said hooks, a releasing-lever pivoted to said platform and connected with said draw-rod,  
 90 and an operating-cord connected to said lever whereby the same is actuated to pull said draw-rod and release said hooks to permit the members or sections of the platform to drop, substantially as described.  
 95

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK LORENZO DOTY.

Witnesses:

AMBROSE RING,  
 J. M. LYNN.