

No. 778,259.

PATENTED DEC. 27, 1904.

A. S. MILNE.  
MANURE LOADER.  
APPLICATION FILED JUNE 24, 1904.

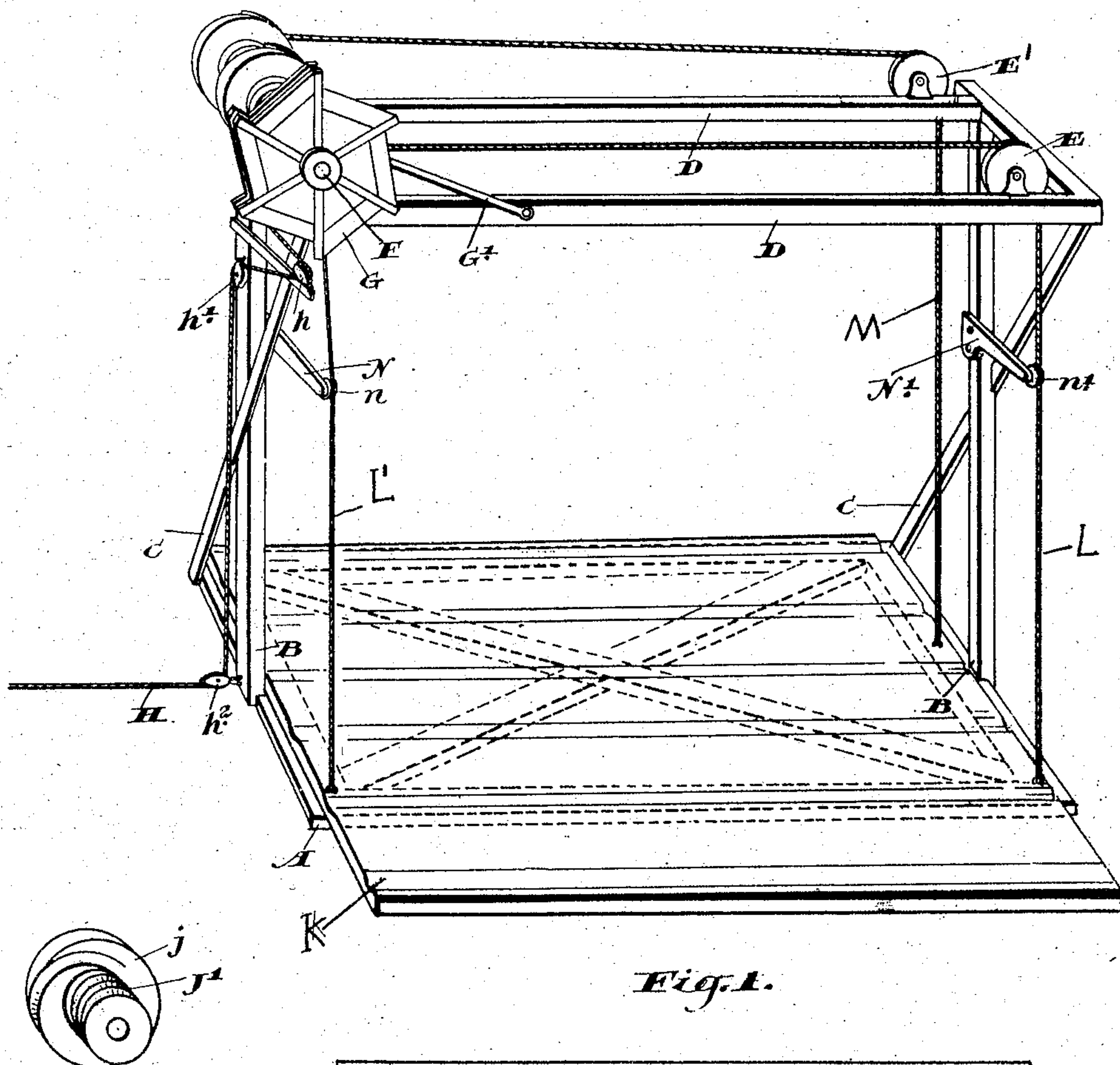


Fig. 1.

Fig. 3.

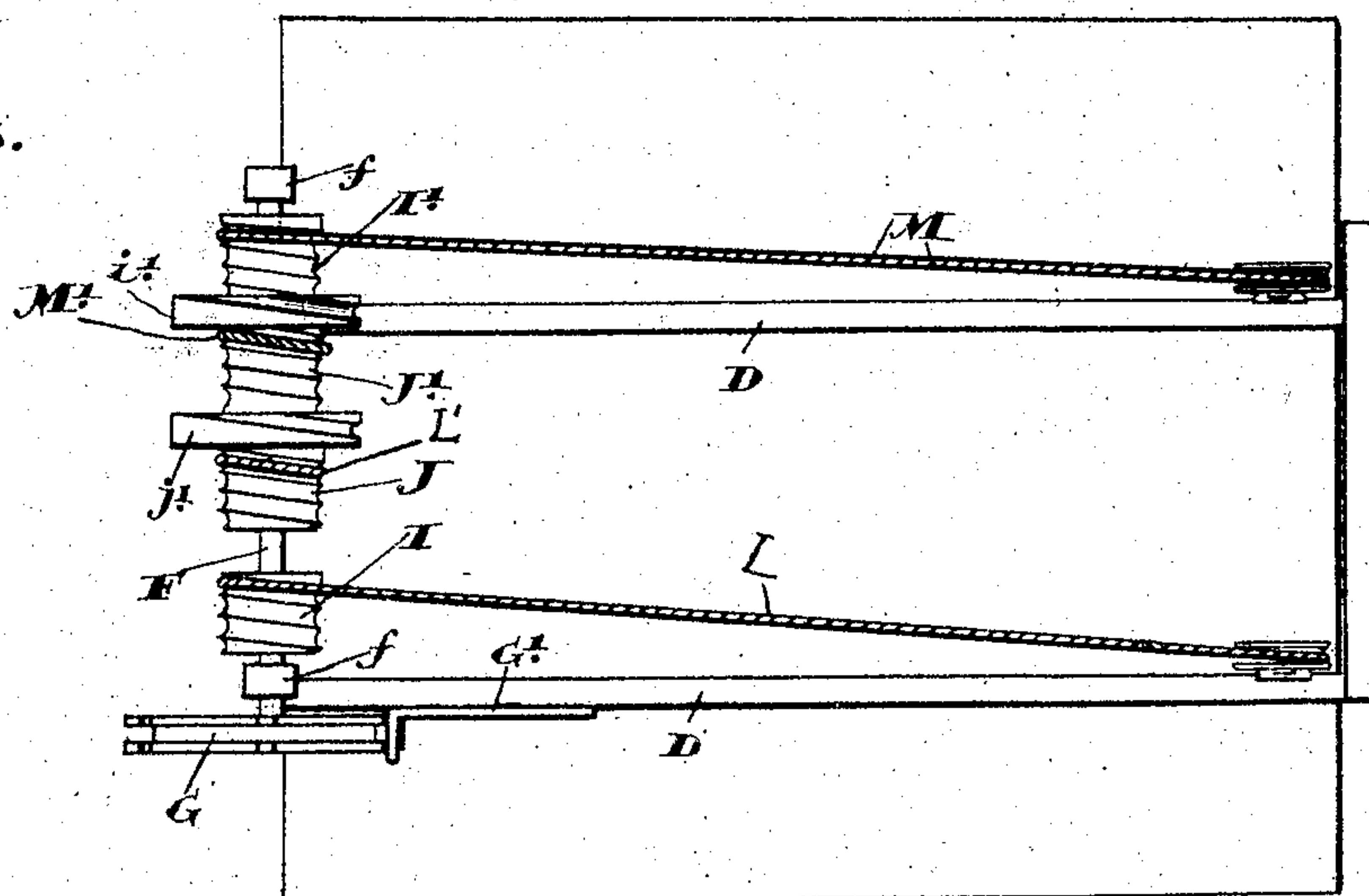


Fig. 2.

Witnesses  
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# UNITED STATES PATENT OFFICE.

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## MANURE-LOADER.

SPECIFICATION forming part of Letters Patent No. 778,259, dated December 27, 1904.

Application filed June 24, 1904. Serial No. 214,036.

*To all whom it may concern:*

Be it known that I, ANDREW STEWART MILNE, farmer, of the village of Leaskdale, in the county of Ontario, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Manure-Loaders, of which the following is a specification.

My invention relates to improvements in manure-loaders; and the object of the invention is to devise a simple device whereby manure or other like commodity may be elevated from the ground and conveniently loaded into a wagon; and it consists, essentially, of a frame having a pair of standards, one at each end, and suitable braces for the same, and a top frame supported on said standard, a platform located between the standards, and chains connected at the bottom to the platform and suitable winding-drums, and an operating-drum supported on a shaft journaled in bearings at one end of the top frame, the upper ends of the chains extending to the winding-drums and the parts being otherwise constructed and arranged in detail, as hereinafter more particularly explained.

Figure 1 is a perspective view of my improved manure-loader. Fig. 2 is a plan view. Fig. 3 is an enlarged perspective detail of one of the winding-drums.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the base-frame, which is made, preferably, rectangular in form and suitably braced, as indicated in dotted lines.

B represents the standards, which are secured one at each end of the frame, and C represents braces extending from the base-frame obliquely upwardly. The standards B and braces C support the upper rectangular frame D.

E E' are guiding-pulleys journaled in suitable bearings at one end of the frame D.

F is a shaft journaled in suitable bearings *f* in the frame D.

G is the operating-drum, which is made grooved and in the form of a ratchet-wheel, such ratchet-wheel being designed to be engaged by a holdfast-pawl G'.

H is a chain which is fastened at one end of the drum and passes around the same and

down to and through the guiding-pulleys *h h'* and to and through the floor-pulley *h''*, whence it passes to the horse.

I and I' are spirally-grooved winding-drums fastened to the shaft F. The winding-drum I' is provided with an enlargement *i'*, onto which the continuation of the spiral groove of said drum extends.

J and J' are winding-drums secured also on the shaft F, the winding-drum J being provided with an enlargement *j'*, having the continuation of the spiral groove of the drum J' extending onto the same. (See detail Fig. 3 as to the construction of the drums I' and J'.)

K is the platform.

L and L' are the forward chains, which are suitably connected at the bottom to the platform K. The chain L passes over the guiding-pulley E to the drum I. The chain L' passes upwardly onto the winding-drum J. M and M' are the rear chains, which are suitably connected at the bottom to the platform. The chain M passes upwardly over the guiding-pulley E' to the drum I'. The chain M' passes upwardly onto the drum J'.

N and N' are arms secured to the standards B and provided with guiding-pulleys *n* and *n'*, to the front of which extend the chains L' and L.

It will now be seen that the horse upon pulling upon the chain H will rotate the drum G, and consequently the shaft F, and thereby the winding-drums, which will raise the platform a certain height, when the chains M and M' on the drums I' and J', respectively, will climb up onto the enlargements *i'* and *j'*, and thereby serve to cause the back of the platform to raise more quickly, and thereby cant the platform. Just before the time, however, that the chains M and M' begin to rise on the enlargements aforesaid the chains L and L' have dropped off the ends of their respective drums, and thereby the movement of the front platform is practically stopped. It will thus be seen that the platform is readily canted to the desired slant. When the platform has been raised sufficiently, of course, the wagon would at that period be driven under or as far under the platform as is necessary, so that when the cant takes place the wagon



is in a position to receive its load. The arms N and N', with their guiding-pulleys *n* and *n'*, serve to retain the front of the platform in position—that is, prevent it receding when  
5 the rear end of the platform is being raised so as to cant the platform. After the platform has been raised and the load dumped the dog G' may be relieved and the platform allowed to drop again ready for the next  
10 load.

By such a loader as I describe it will be readily seen that a great deal of time may be saved in loading manure and such like material.

15 What I claim as my invention is—

1. In a manure-loader, the combination with the base-frame and uprights and braces connected to the base-frame and to the uprights and the top frame supported on the top of the  
20 uprights and braces, of the platform located between the uprights and normally resting on the base-frame, the front and back pair of lifting-chains, the guiding-pulleys located at one end of the top frame, the shaft journaled  
25 in suitable bearings at the opposite end, the winding-drums on the shaft to which the upper ends of the lifting-chains are connected and means for turning the shaft as and for the purpose specified.

30 2. In a manure-loader, the combination with the base-frame and uprights and braces connected to the base-frame and to the uprights

and the top frame supported on the top of the uprights and braces, of the platform located  
35 between the uprights and normally resting on the base-frame, the front and back pair of lifting-chains, the guiding-pulleys located at one end of the top frame, the shaft journaled in suitable bearings at the opposite end, the  
40 winding-drums on the shaft to which the upper ends of the lifting-chains are connected, the ratchet-shaped winding-drum and dog and the operating-chain suitably affixed and wound upon the drum as and for the purpose specified.

45 3. In a manure-loader, the combination with the base-frame and uprights and braces connected to the base-frame and to the uprights and the top frame supported on the top of the uprights and braces, of the platform located  
50 between the uprights and normally resting on the base-frame, the front and back pair of lifting-chains, the guiding-pulleys located at one end of the top frame, the shaft journaled in suitable bearings at the opposite end, the  
55 spirally-grooved drums on the shaft, the two rearmost of which have annular enlargements and means for turning the shaft as and for the purpose specified.

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Witnesses:

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