J. H. STEVENS.

Dumping-Wagon.

No. 49,006. Patented July 25, 1865.

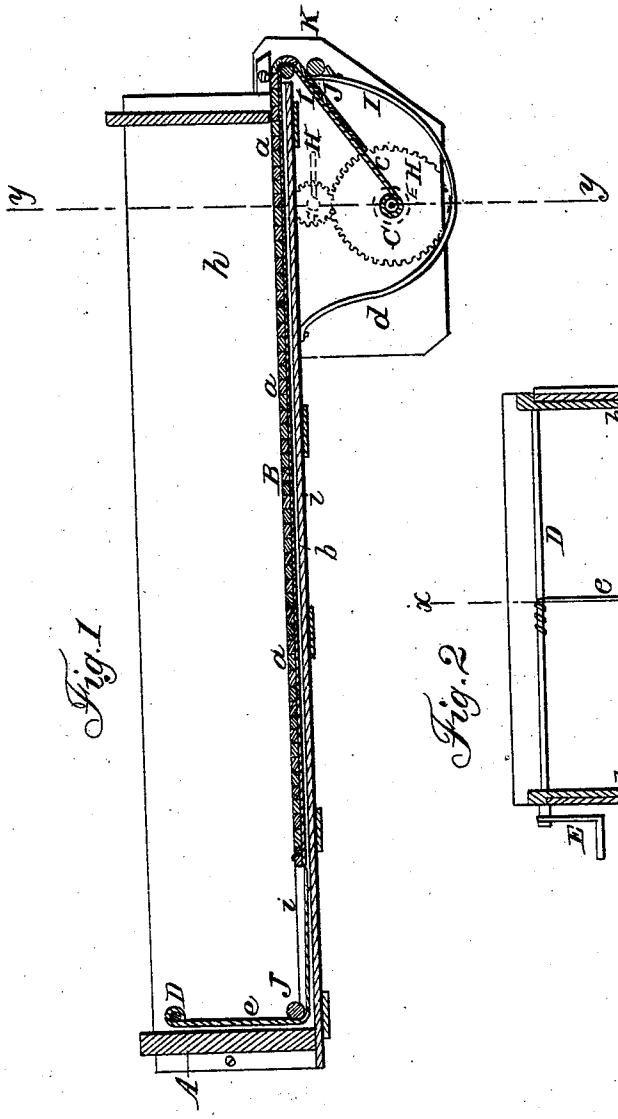

Fig. 1

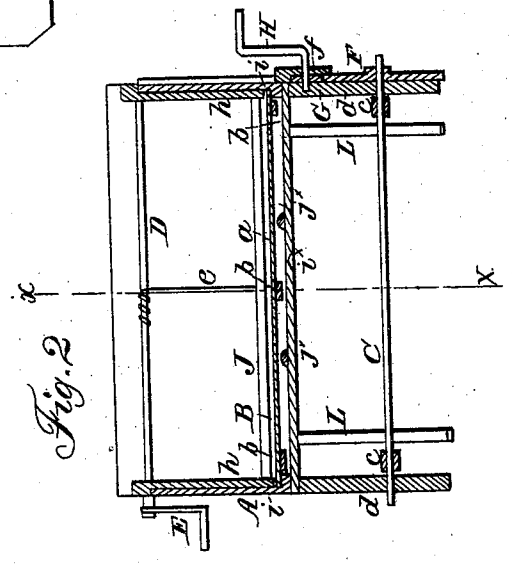

Fig. 2

Witnesses;
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UNITED STATES PATENT OFFICE.

JAMES H. STEVENS, OF EAST DURHAM, NEW YORK.

IMPROVEMENT IN UNLOADING ATTACHMENT FOR WAGONS.

Specification forming part of Letters Patent No. **49,006**, dated July 25, 1865.

To all whom it ... ...ncern:

Be it known that I, JAMES H. STEVENS, of East Durham, in the county of Greene and State of New York, have invented a new and Improved Unloading Attachment for Wagons; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of a wagon with my invention applied to it, *x x*, Fig. 2, indicating the line of section; Fig. 2, a transverse vertical section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and improved unloading attachment for wagons.

The object of the invention is to obtain a device for the purpose specified which will admit of being applied to any ordinary wagon-body in use, capable of being constructed at a very moderate expense, and operated with the greatest facility.

A represents a wagon-body, which may be constructed in the ordinary way, and therefore does not require a minute description.

B is an apron constructed of slats *a*, attached near their ends and at their center to straps *b b b*. One end of this apron is connected by straps *c c* with a shaft, C, which is below the rear end of the body A, the bearings of said shaft being in blocks *d*, attached to the under side of the body A. The opposite end of the apron B is connected by a cord or strap, *e*, to a shaft, D, which is placed on the upper part of the front end of the body A and has a crank, E, at one end of it. The shaft C has a toothed wheel, F, at one end of it, into which a pinion, G, gears, the latter being on a shaft, *f*, which is provided with a crank, H.

I J are two guide-rollers, one of which, I, is at the rear of the bottom *g* of the wagon-body A and the other, J, at the front end of the same. The cord or strap *e* passes around the roller J and the apron B and straps *c c* pass around the roller I.

In the inner surface of each side *h* of the wagon-body, near the bottom, there is made longitudinally a groove, *i*, and these grooves receive the ends of the slats *a* of the apron B, serving as guides for the same.

K is a roller, which is fitted in the same blocks *d* as the shaft C, the roller K being below the roller I, sufficient space being between them to admit of the passage of apron B.

L L are two straps, which are attached at one end to the bottom of the body A, the opposite ends being connected to metal straps or eyes *j j*, which are fitted loosely on the roller K.

From the above description it will be seen that by turning the shaft C the apron B will be wound upon the shaft C, and as this apron forms a false bottom the load which rests upon it will be discharged from the wagon-body A. By turning the shaft D the apron B will be drawn back into the body.

The bottom $i^{\times}$ of the body A has two or more parallel rails, $j^{\times}$ $j^{\times}$, attached longitudinally to it for the apron B to rest upon. These rails form a firm bearing for the apron and at the same time admit of the latter working freely over it without causing much friction. The bottom $i^{\times}$ is not strictly necessary, as the rails *j j* may be attached to cross-pieces on the wagon-body. The rails may be wood or metal.

The roller K and straps L L serve as a support for the apron B, preventing the latter from being drawn out of the body or unwinding from shaft *c* by its own weight when nearly fully wound upon shaft C. The straps L L also serve to confine the roll of apron within proper limits when wound upon shaft C, but chiefly to keep apron from uncoiling from shaft. By this arrangement it will be seen that I can dispense with friction-rollers hitherto used in devices of this kind for the endless apron to work upon. I also dispense with many other parts hitherto used and which render the device quite complicated and liable to get out of repair.

My improvement possesses the advantage of being capable of being applied to any ordinary wagon-body, and it may be manipulated with greater facility than usual.

I would remark that instead of grooves *i* being made in the sides of the wagon-body to receive the ends of the slats *a* of the apron B strips or false side pieces may be screwed or bolted to the inner surfaces of the sides to form grooves or recesses, which will answer the same purpose and be preferable if the body be constructed of thin stuff or material.

I do not claim, broadly, the endless apron B, for that has been previously used for the same purpose; but

I do claim as new and desire to secure by Letters Patent—

1. The rails $j^{\times}$ $j^{\times}$, either with or without a bottom, $i^{\times}$, for the body A, for the purpose of serving as a support for the apron B and still admit of a free movement of the latter, substantially as and for the purpose specified.

2. The flexible apron B, in combination with the two shafts C D, all arranged and applied to the wagon-body to operate substantially as and for the purpose set forth.

3. The rollers I J, arranged in relation with the flexible apron B and used in connection with the shafts C D, for the purpose specified.

4. The supplemental roller K, either with or without the straps L L, arranged substantially as and for the purpose set forth.

JAMES H. STEVENS.

Witnesses:

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