

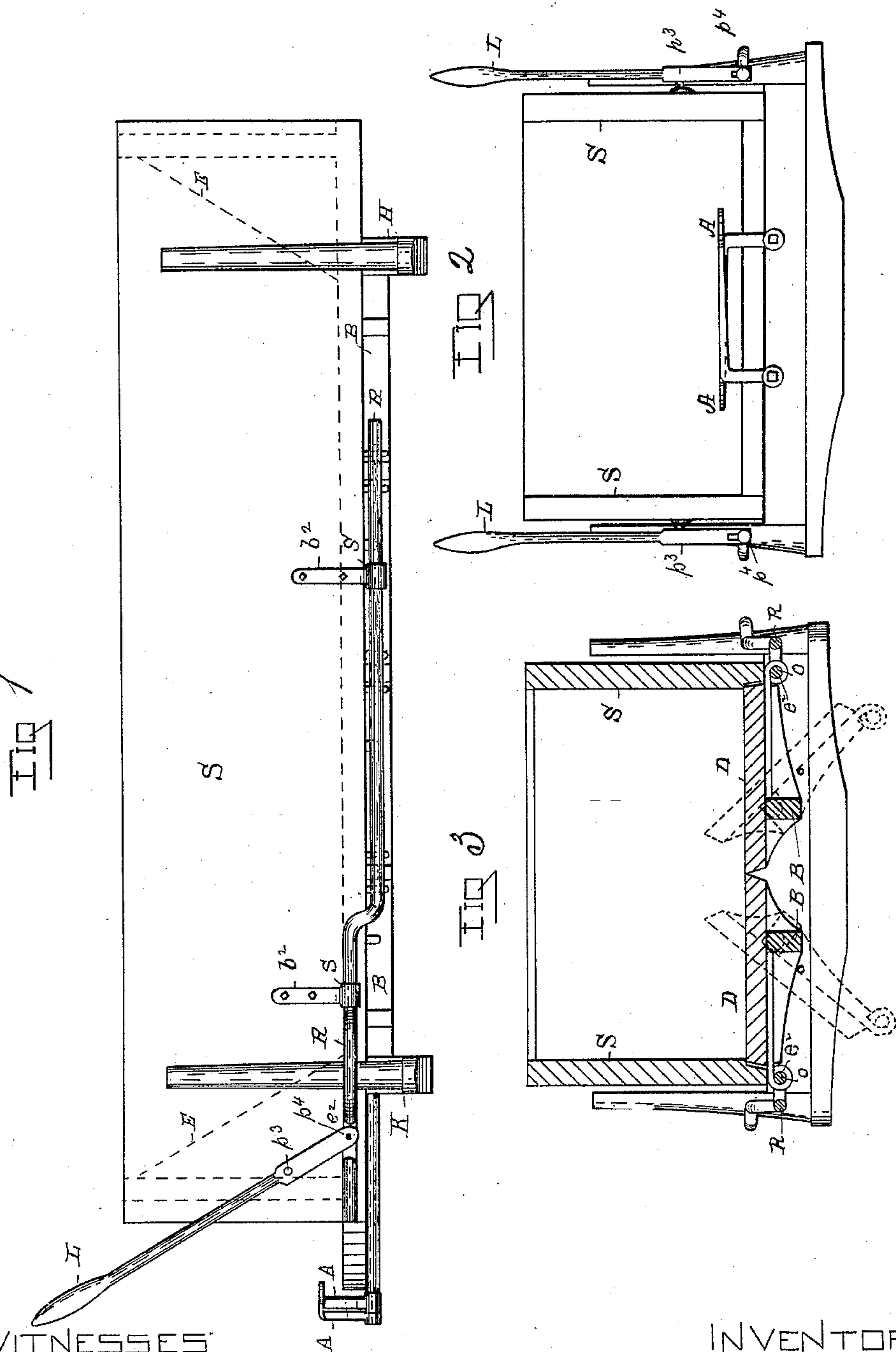
(No Model.)

2 Sheets—Sheet 1.

W. H. LONG.  
DUMPING WAGON.

No. 418,338.

Patented Dec. 31, 1889.



WITNESSES:

William A. Sweet

Charles S. Reinhall

INVENTOR

William H Long

By W.C. Hagan atty

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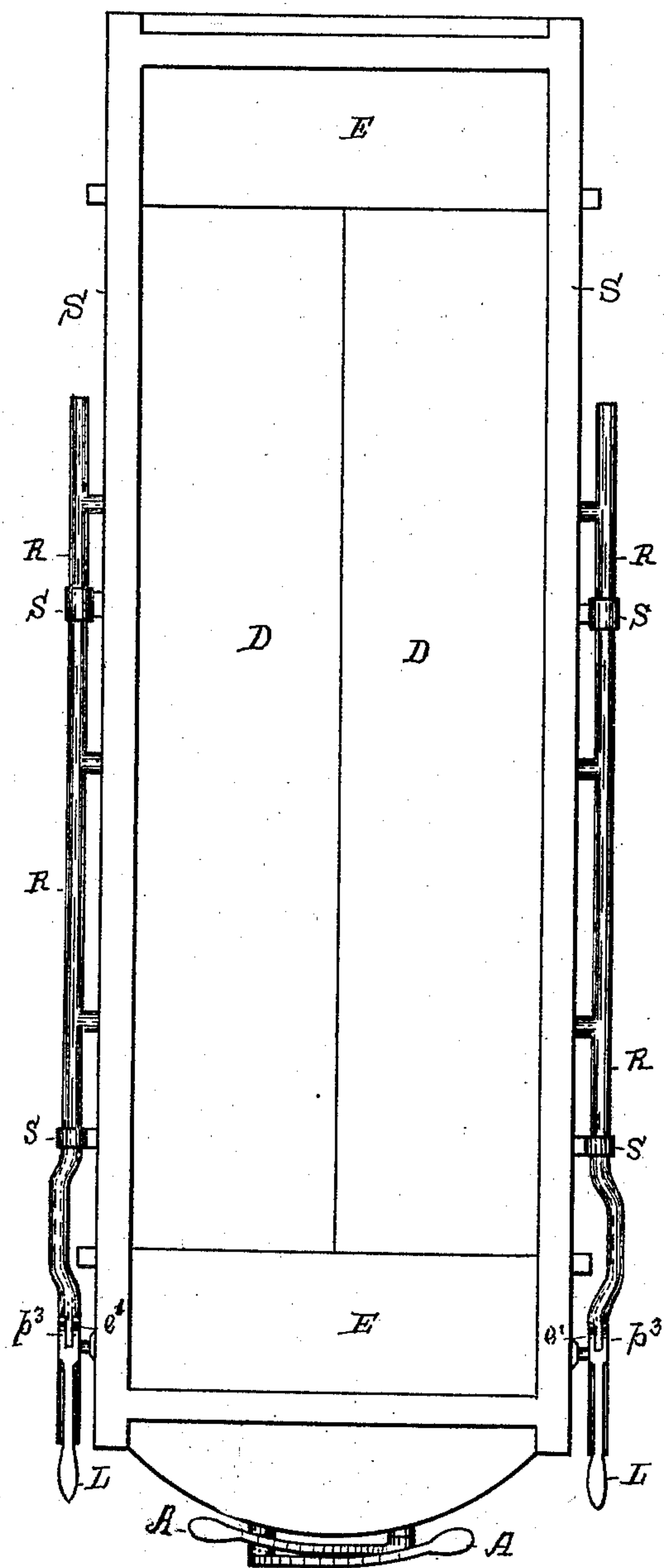
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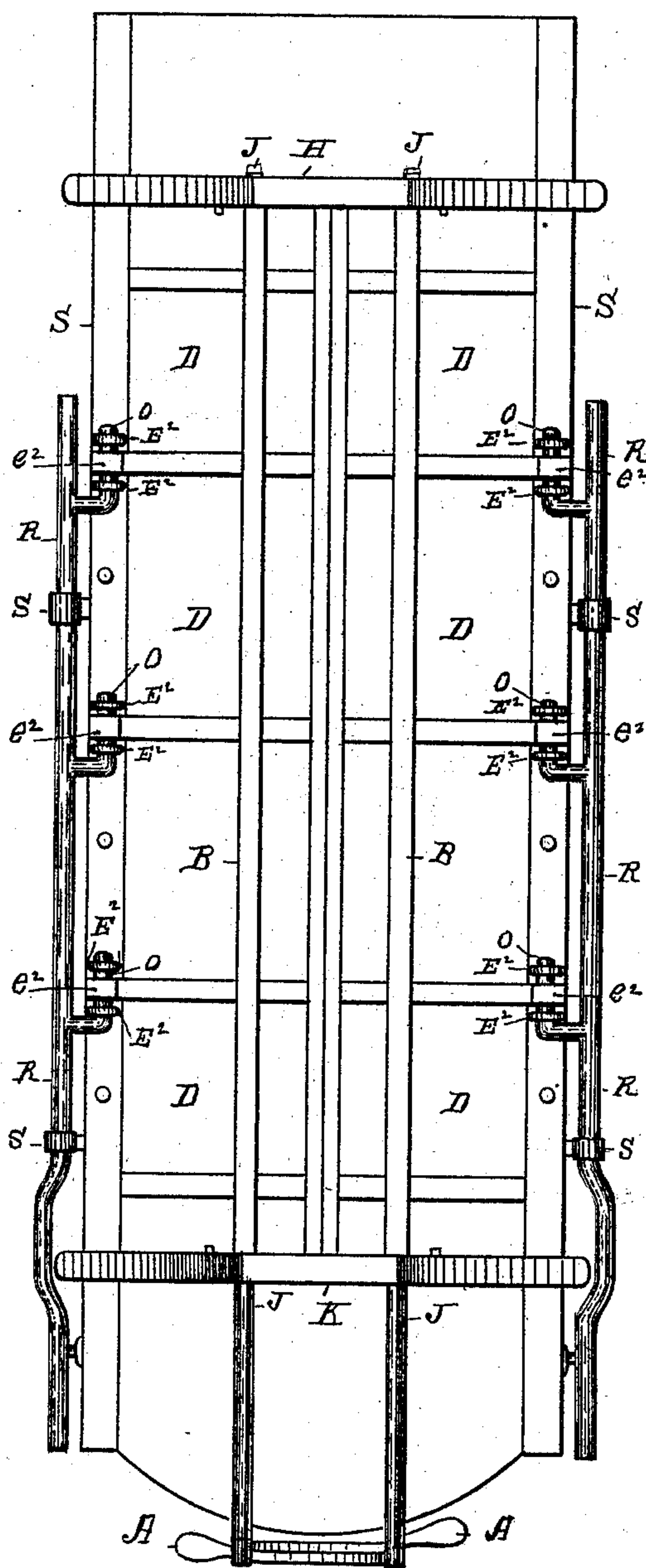
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# UNITED STATES PATENT OFFICE.

WILLIAM H. LONG, OF TROY, ASSIGNOR OF ONE-HALF TO THEODORE D. ROBINSON, OF BRUNSWICK, NEW YORK.

## DUMPING-WAGON.

SPECIFICATION forming part of Letters Patent No. 418,338, dated December 31, 1889.

Application filed April 5, 1889. Serial No. 306,080. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. LONG, of the city of Troy, county of Rensselaer, and State of New York, have invented new and useful Improvements in Dumping-Wagons, of which the following is a specification.

My invention relates to improvements upon that class of wagon-boxes that are made with hinged bottoms that are adapted to be dropped down on their hinged connections to empty their contents; and the object and purpose of my invention are the better adaptation and construction of this class of wagon-boxes for the uses for which they are designed.

Accompanying this specification to form a part of it there are two plates of drawings containing five figures illustrating my invention, with the same designation of parts by letter reference used in all of them.

Of the illustrations, Figure 1 is a side elevation of a wagon-box containing my invention. Fig. 2 is a front end elevation of the same. Fig. 3 is a cross-section. Fig. 4 is a top view of the wagon-box. Fig. 5 is a view of the under side of the wagon-box.

The several parts of the apparatus thus illustrated are designated by letter reference, and the function of the parts is described as follows:

The letters S designate the sides of the wagon-box, and these are preferably made about vertical.

The letters E designate the ends of the wagon-box, which are preferably made to slope inwardly as extended downwardly.

The letters D D designate two dump-doors running from front to rear of the box, and which, when up and in position, form the bottom of the box. These doors are each mounted on and supported by a bar B, attached to the under side thereof throughout their length, and the letters J' designate journal ends formed on each of these bars, those at the front having bearings *b*, made in the front head-block K, and those of said journals J' at the rear having their bearings in the hind axle-block H. Each of these bars B, which supports one of the doors D, is attached to the under side of the latter, nearer to the inner edge of the doors than the outer edge thereof,

and so that the bulk of the load sustained on each of them will be greater at their outer edges to facilitate their dumping. Each of these bars B at its front end, where outside of its journals thereat, is provided with a lever-arm A, and so arranged that when the dumping-doors are down the driver or person operating the wagon, by pressing his feet on the levers A and putting his weight thereon, can raise them so that the doors will be turned up to again close the bottom of the box.

To hold the doors D D in position, so as to retain the load, a locking-rod is used, which is indicated at R, and it is extended rearwardly along the sides of the box, so as to be moved back and forth in the loop-form slides S, arranged in the lower ends of the bars *b*<sup>2</sup>, which are downwardly projected from the sides of the wagon-box. These rods are adapted to be moved rearwardly to lock and frontwardly to unlock the doors, (when the latter are turned up,) by means of the hand-levers L L, each of which is pivoted at *p*<sup>3</sup> to the wagon-box side, and at its lower end *e*' each of said levers is divided, so as to straddle one of the rods R and be connected thereat pivotally at *p*<sup>4</sup>.

The letters E<sup>2</sup> designate staple-eyes that are downwardly projected from the bottom of the wagon-box at each of its side edges, and O offset bars or bolts arranged on the rod R, so as to project therefrom by an offset bend and then extend rearwardly from the bend to be parallel with the body part of the rod R, and so that when the latter is moved rearwardly by the lever L these offset bars or bolts O, as moving with the rods R, will pass through each two of the staple-eyes E<sup>2</sup>, arranged on the bottom of the box side edge.

The letters *e*<sup>2</sup> designate staple-eyes that are downwardly projected from the bottom outside edge of each of the doors, and so arranged that when the doors D are up each of the staple-eyes *e*<sup>2</sup> thereon will align with and be between each two of the staple-eyes E<sup>2</sup> on the box-sides, and so that when the rod R is moved to the rear its offset bolts or bars O will pass through these staple-eyes E<sup>2</sup>, and also one of the intermediately-placed staple-eyes *e*<sup>2</sup> of the doors D, to lock and hold the



same in place so that they will sustain the load.

When the wagon is loaded and it is desired to dump the contents, the lever L is pulled rearwardly, which draws the offset bars O from out the staple-eyes  $E^2$  of the wagon-box and the intermediate staple-eyes  $e^2$  of the door. When this has been done, the greater weight of the load held by the doors on their outer edges causes them to drop or turn down on their journals to discharge the load. To raise the doors, the driver presses on the foot-levers A, which causes the doors to turn back to place, and by pushing out the upper end of the lever L the doors are locked, as has been before described. As thus made and arranged, the wagon may be unloaded without stopping the team that draws it and put in a condition to be loaded without having the driver leave his seat.

I am aware that a dump-wagon provided with bottom doors that were hinged to the wagon-reaches outside of their longitudinal center is an old and well-known construction. This older method of constructing a dump-wagon necessitated setting the wagon back from the head-block on the reaches to allow the front wheels the necessary space in turning the wagon. By my improvement the doors are hinged to the head-block and rear axle-block, and independently of the reach, and the doors of my wagon are hung with their journals inside of their longitudinal center of the doors, instead of outside thereof, as in the older constructions, which improvement allows a wagon-box of greater capacity to be used.

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

1. The combination, with a wagon-box con-

structed with the sides S and ends E, and having the head-block K and rear axle-block H, and provided with doors D D, journaled onto the said head-block and rear axle-block, of staple-eyes  $e^2$ , downwardly projected from the outer edge of said doors, staple-eyes  $E^2$ , downwardly projected from the bottom of the box-sides to be in alignment with the staple-eyes of the dump-doors, and the rod R, having offset bars adapted to enter said eyes on the doors and box, and a lever on the end of said rod, constructed and arranged to operate substantially as and for the purposes set forth.

2. In a dump-wagon box, the combination of a box having vertical sides with staple-eyes downwardly projected therefrom and having inwardly and downwardly tapering ends, and a head-block and hind axle-block, two dump-doors, which at their ends are journaled into the head-block and rear axle-block inside of their longitudinal center, a foot-lever on the front end of each of said journals where extended beyond their bearings, with staple-eyes downwardly projected from the outer edges of said doors to be in alignment with the staple-eyes on the bottom of the box-sides, a rod having slideways at each side of the box and constructed with a pivoted lever at its front end, said rod having offset bars or bolts adapted to pass through the staple-eyes on the box-sides, and the staple-eyes on the bottom outer edge of the dump-doors, substantially in the manner as and for the purposes set forth.

Signed at Troy, New York, this 9th day of March, 1889, and in the presence of the two witnesses whose names are hereto written.

WILLIAM H. LONG.

Witnesses:

N. E. HAGAN,

CHARLES S. BRINTNALL.