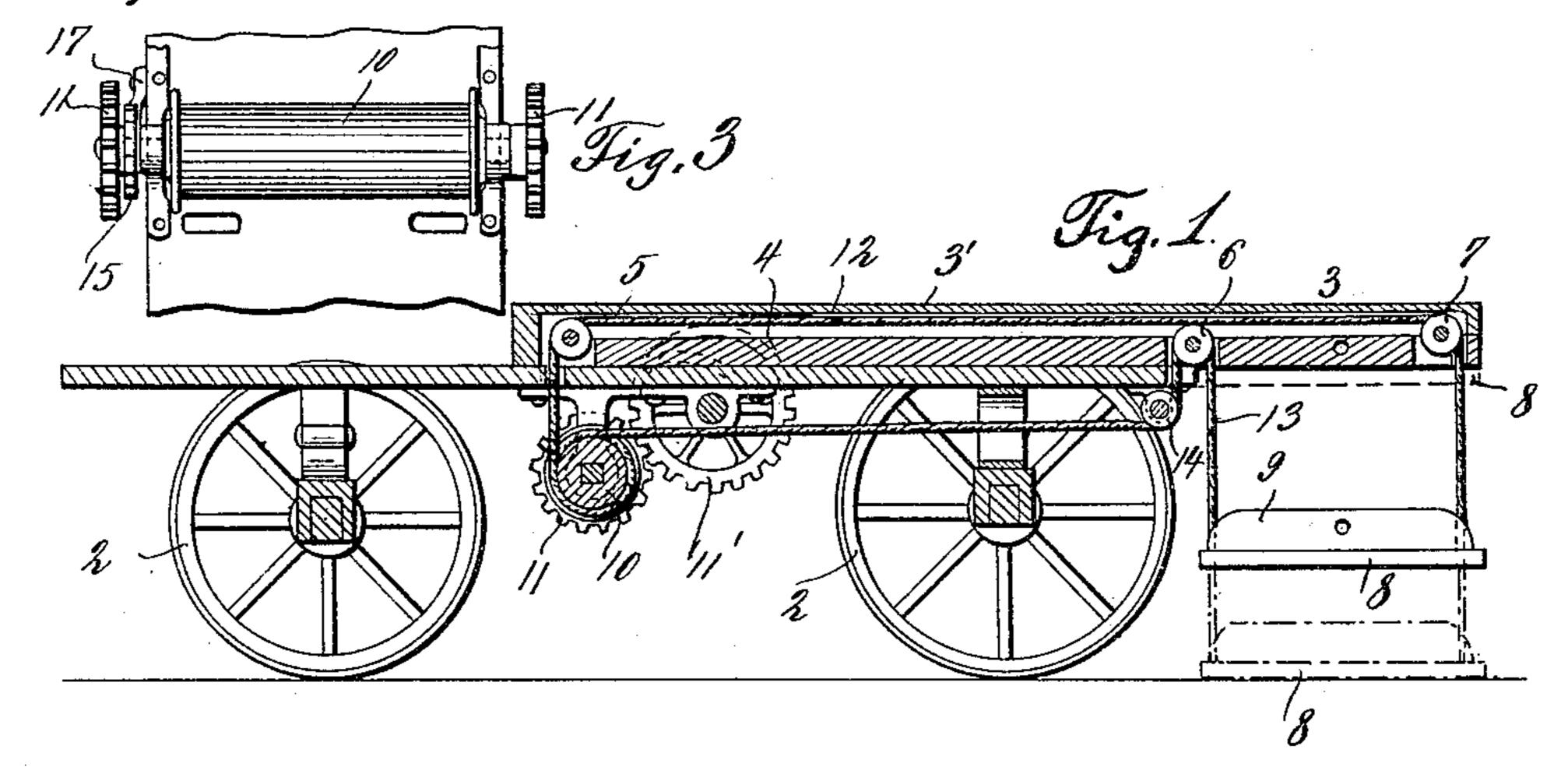
## W. HALL & J. WENTZER.

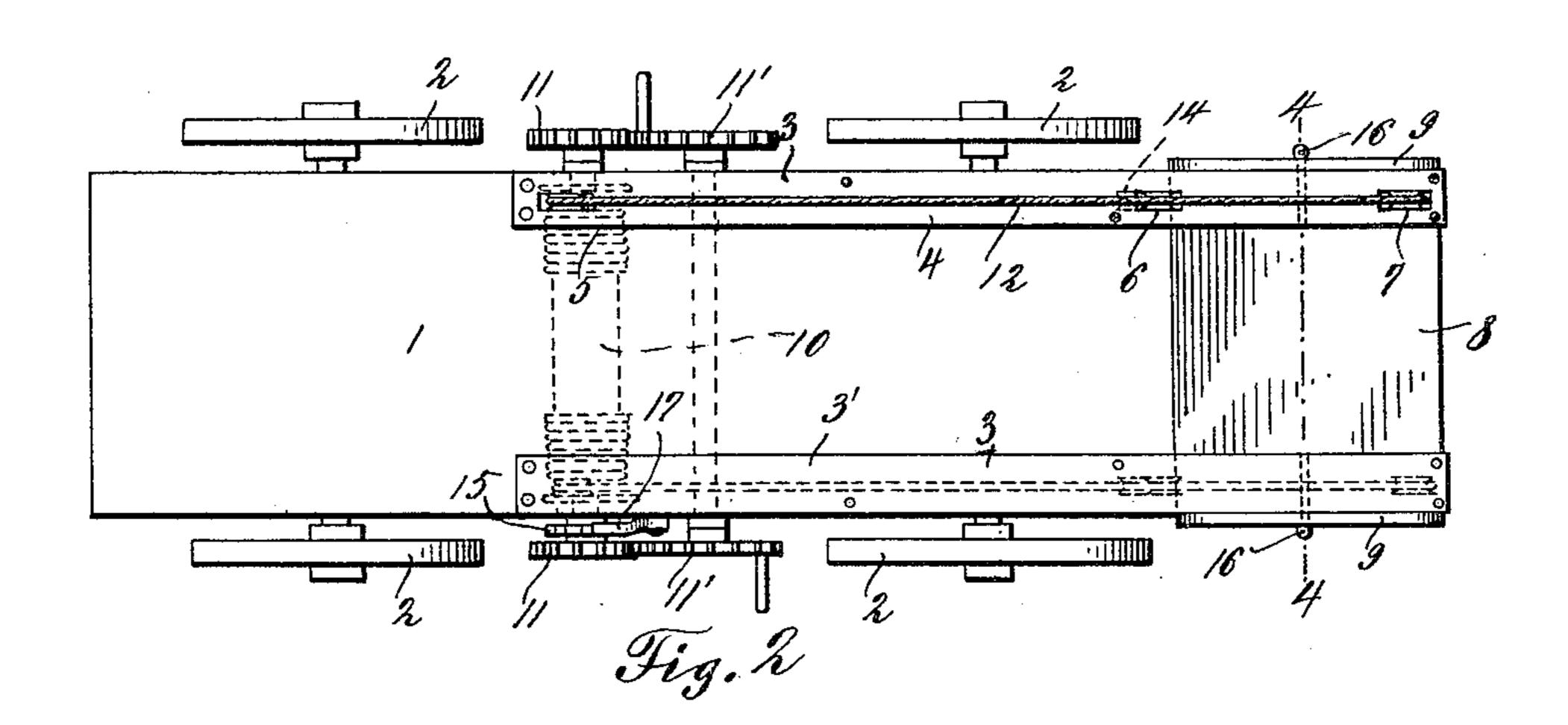
## LOADING ATTACHMENT FOR WAGONS.

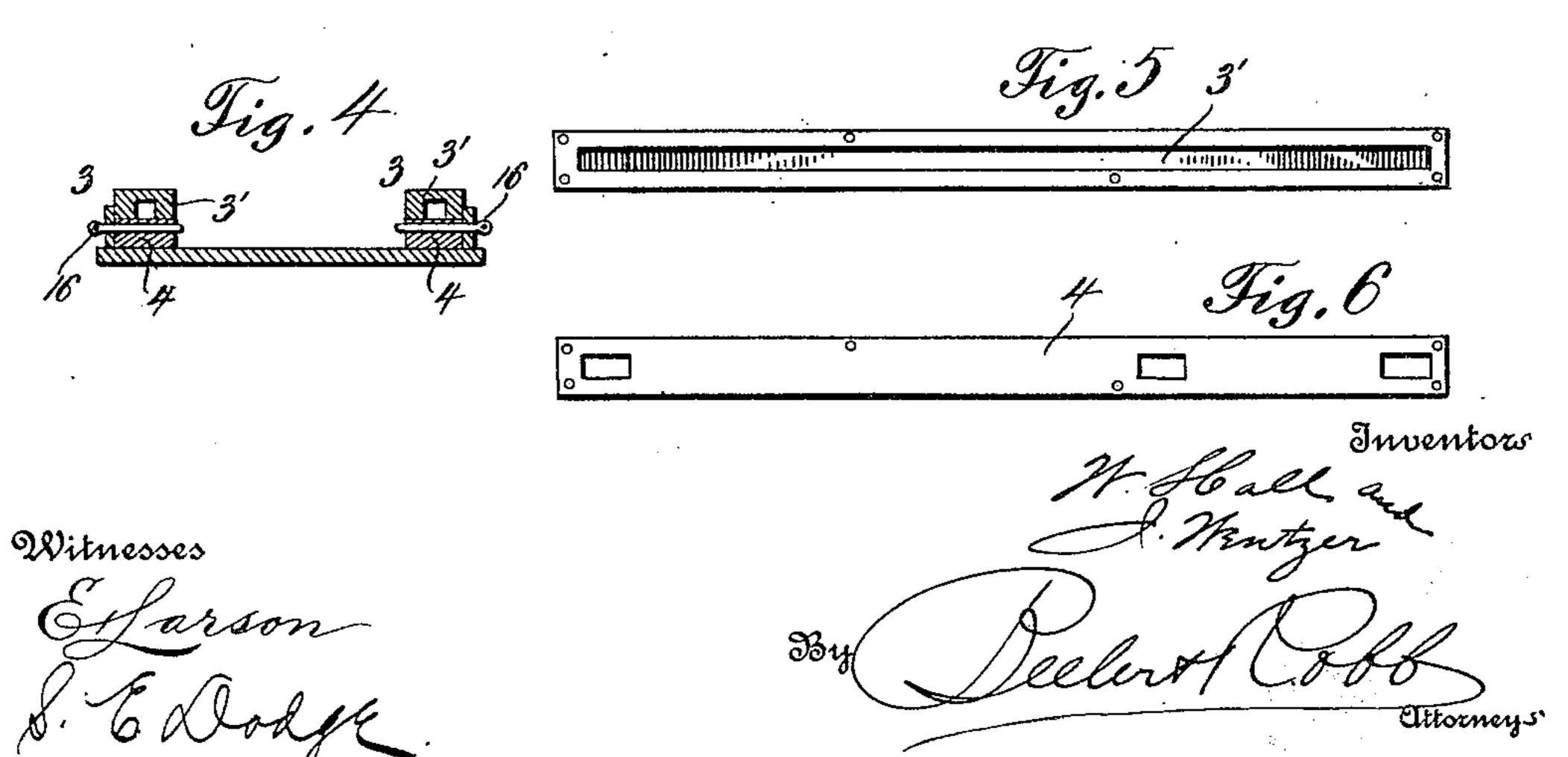
APPLICATION FILED OCT. 7, 1910.

999,163.

Patented July 25, 1911.







COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

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## UNITED STATES PATENT OFFICE.

WALDEMAR HALL AND JENS WENTZER, OF MINNEAPOLIS, MINNESOTA.

LOADING ATTACHMENT FOR WAGONS.

999,163.

Specification of Letters Patent. Patented July 25, 1911.

Application filed October 7, 1910. Serial No. 585,878.

To all whom it may concern:

Be it known that we, Waldemar Hall and Jens Wentzer, a subject of the King of Sweden and a citizen of the United 5 States, respectively, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Loading Attachments for Wagons, of which the following is 10 a specification.

This invention resides in certain means particularly adapted for facilitating the

loading of vehicles.

In its preferred form the invention com-15 prises an attachment adapted to be secured to an ordinary wagon, or similar vehicle. The attachment includes a platform and operating means for moving said platform from the position on the ground where it is 20 loaded to a position in horizontal alinement with the bottom of the wagon, whereupon the load on the platform may be readily transferred to the wagon.

For a full understanding of the present 25 invention, reference is to be had to the following detail description and to the accom-

panying drawings, in which—

Figure 1 is a sectional view showing the invention applied to a vehicle; Fig. 2 is a 30 top plan view, the covering of one of the casings secured to the base or bottom of the wagon body being removable; Fig. 3 is a detail bottom plan view of the windlass; Fig. 4 is a section taken on the line 4—4 of 35 Fig. 2; Fig. 5 is a detail bottom plan view of the casing cover and Fig. 6 is a similar view of the bottom of said casing.

Throughout the following detail description and on the several figures of the draw-40 ings, similar parts are referred to by like

reference characters.

In the drawings 1 denotes the vehicle which may be of any conventional type provided with suitable wheels 2. The body of 45 the vehicle has secured to its opposite side portions a pair of casings 3, each casing comprising a bottom 4 and a covering 3', the bottom 4 virtually consisting of a lon-50 intervals three pulleys 5, 6, and 7. At the rear end of the vehicle is a vertical movable platform 8 provided with flanges 9 adapted to move into contact with the outer sides of the outermost ends of the casings 3, the <sup>55</sup> latter projecting some distance beyond the rear end of the body 1.

On the under side of the body of the vehicle is journaled a drum 10 operable by the gears 11 and 11' at its opposite ends, said drum being connected by a pair of 60 ropes, cables or similar connections 12 with the outer end of the platform 8, a pair of other ropes or cables 13 connecting the drum with the inner end of the platform 8. The cables 12 pass around the pulleys 5 and 7 65 whereas the cables 13 pass from the drum 10 under the pulleys 14 secured to the under side of the wagon body at its rear end, thence over the pulleys 6, before mentioned. to the point of attachment with the inner 70

end of the platform 8.

It will be obvious, that by operating the windlass comprising the drum and the connecting cables above described, the platform 8 may be raised and lowered with respect 75 to the ground. When the platform is on the ground it may be readily loaded whereupon the windlass is turned and said platform hoisted until level with the body of the wagon whereupon the load may be readily 80 transferred to the latter. A ratchet 15 is mounted on the drum whereby the platform 8 may be retained in any position by the engagement of the pawl 17 with said ratchet.

When the loading means above described 85 is in use, it is preferred to insert pins 16 through openings in the flanges 9 to the platform so as to enter openings in the bottom of the casing 3 whereby the platform

is rigidly held from movement.

The covering 3' on each casing 3 may be secured by suitable fastenings; furthermore should it be desired said cover may be pivoted or hinged to the inner end of the bottom 4 of the casing and provided with an 95 opening in its outer end in which the pin 16 may enter when the platform 8 is elevated to lock the platform in its upper position and simultaneously lock the cover of the casing down.

Having thus described the invention, what is claimed as new is:

1. In combination with a vehicle comprising a body, a platform movable vergitudinal beam on which are mounted at | tically from the ground to a position in 105 which it is substantially in horizontal alinement with said body, a pair of casings secured to opposite sides of the body and projecting from one end of the vehicle body and hoisting means connected with said cas- 110 ings and the platform to raise and lower the latter.

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2. In combination with a vehicle comprising a body, a platform movable vertically from the ground to a position in which it is substantially in horizontal aline-5 ment with said body, a pair of casings secured to opposite sides of the body and projecting from one end of the vehicle body, hoisting means connected with said casings and the platform to raise and lower the 10 latter, said platform having flanges movable into positions adjacent to the sides of the casings, and members for detachably connecting the flanges and the casings adapted to pass through the flanges.

3. In combination, a vehicle body, a pair of casings at opposite side portions of said body and having end portions thereof projecting beyond one end of the body, said casings comprising bottom portions secured to the body, detachable covers, a windlass comprising a drum mounted on the underside

of the vehicle body, pulleys situated at intervals in the length of the bottom of each casing, cables passing from the drum through the casing, connecting with the 25 drum and passing through the casing, other cables connecting with the drum and passing beneath the vehicle body around certain of the pulleys of the casings, and a platform movable vertically beneath the project- 30 ing end portions of the casings, the first mentioned cables being connected with the outer end of said platform, the last mentioned cables being connected with the inner end of said platform.

In testimony whereof we affix our signatures in presence of two witnesses.

WALDEMAR HALL. JENS WENTZER.

Witnesses:

M. P. Petersen; LARS M. BRONSALL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."