

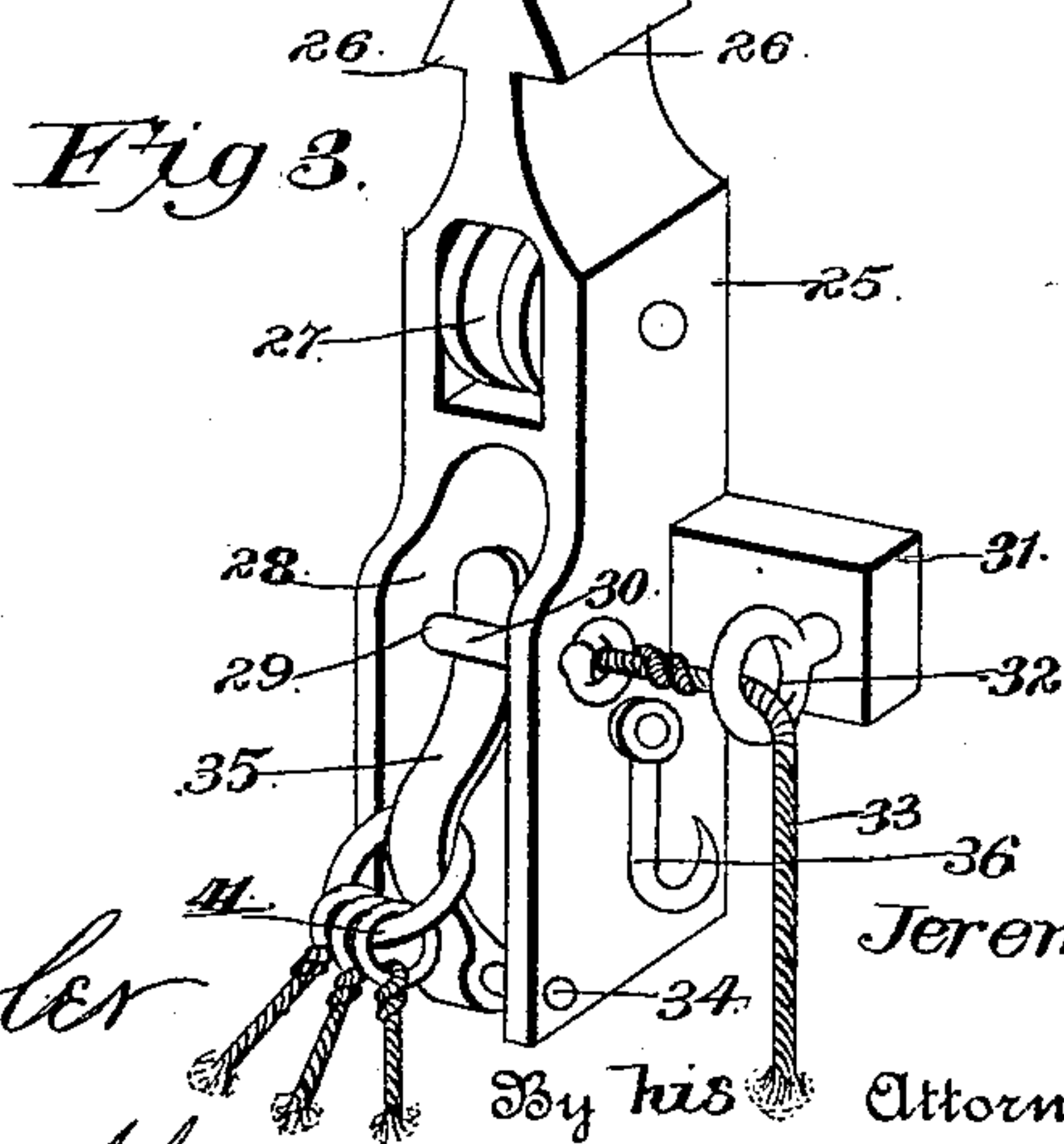
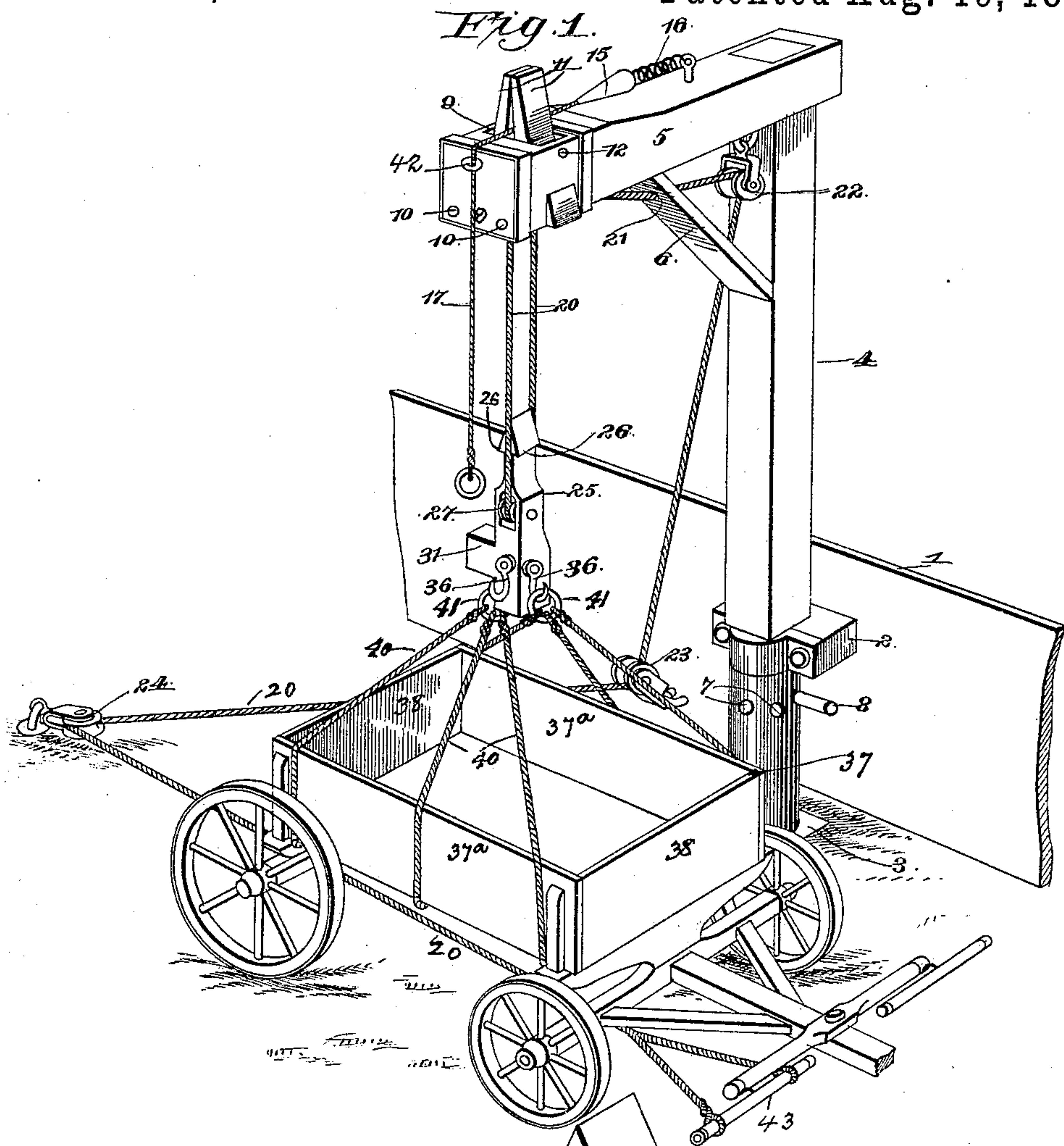
(No Model.)

2 Sheets—Sheet 1.

J. R. LAMKIN.
ELEVATING WAGON BEDS.

No. 434,637.

Patented Aug. 19, 1890.



Witnesses:

M. Fowler
W. S. Duwall

Inventor
Jeremiah R. Lamkin

By his Attorneys

C. A. Snow & Co.

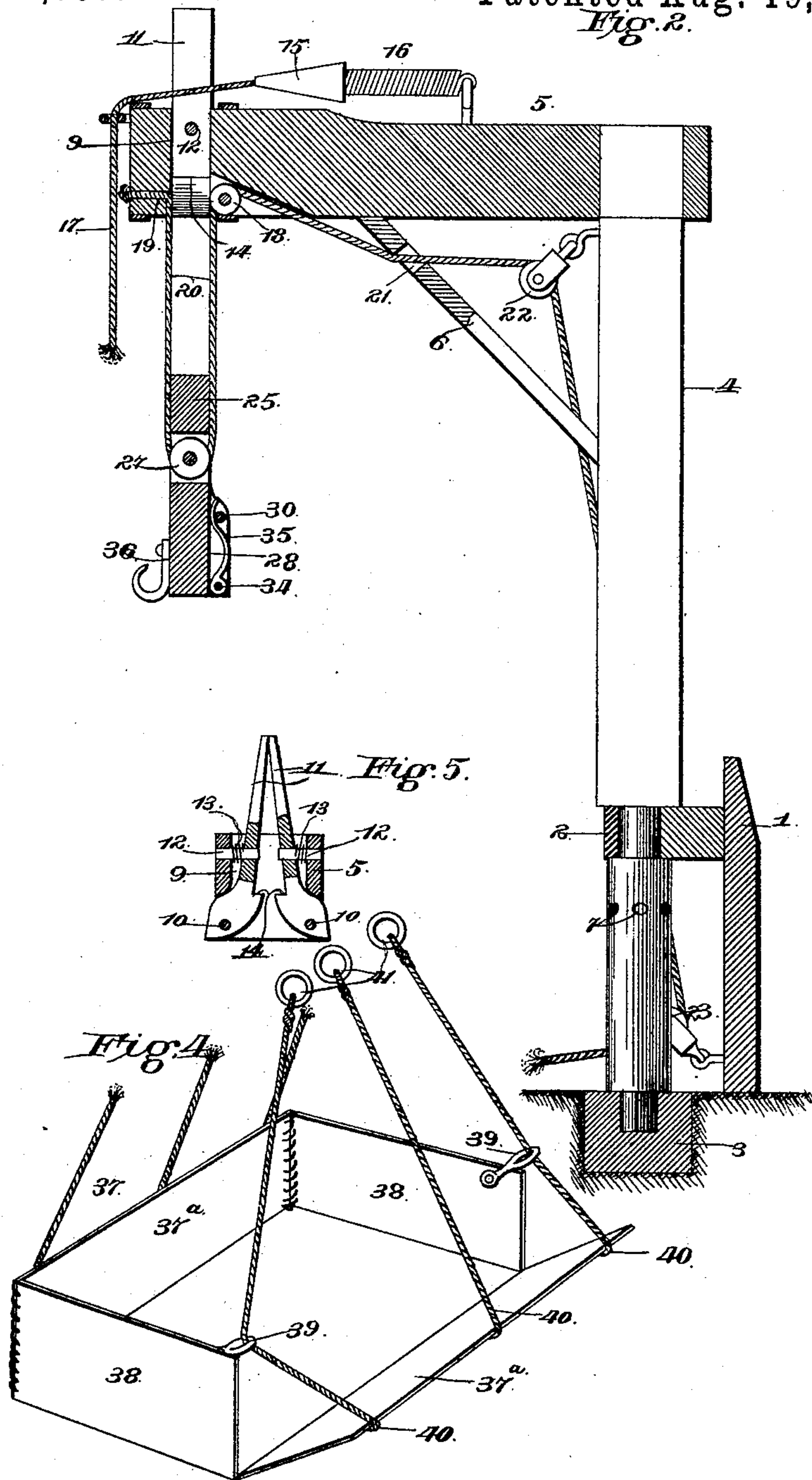
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UNITED STATES PATENT OFFICE.

JEREMIAH R. LAMKIN, OF SPRING HILL, KENTUCKY.

ELEVATING WAGON-BEDS.

SPECIFICATION forming part of Letters Patent No. 434,637, dated August 19, 1890.

Application filed March 15, 1890. Serial No. 344,006. (No model.)

To all whom it may concern:

Be it known that I, JEREMIAH R. LAMKIN, a citizen of the United States, residing at Spring Hill, in the county of Hickman and State of Kentucky, have invented a new and useful Crane for Elevating Wagon-Beds, of which the following is a specification.

This invention has relation to that class of cranes adapted for elevating wagon-beds for the purpose of unloading the same, more especially employed in the filling of corn-cribs; and among the objects in view are to provide a derrick or crane adapted to be operated by a team to elevate the wagon-bed and to provide a bed adapted to be elevated and when at a desired point discharge its cargo.

With the above and other minor objects in view, the invention consists in certain features of construction hereinafter specified, and particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a crane constructed in accordance with my invention. Fig. 2 is a transverse section through the crane-arm. Fig. 3 is a detail in perspective of the pulley-block. Fig. 4 is a detail in perspective of the preferred construction of bed. Fig. 5 is a detail in transverse section of the crane-arm immediately in front of the latches.

Like numerals of reference indicate like parts in all the figures of the drawings.

I have herein illustrated my invention as applied to an ordinary corn-crib, and therefore in the present instance 1 represents the side wall of the crib, from which there projects a bearing-bracket 2, and vertically below the same is a bearing-block 3 set in the ground, the bracket and block serving as bearings for the vertical crane 4, provided at its upper end with an outwardly-projecting crane-arm 5, braced to the crane by a diagonal brace 6. Below the bracket 2 the crane 4 is provided with a series of openings 7, in which are mounted laterally-projecting pegs 8. The forward end of the crane-arm 5 is provided with a vertical recess 9, in which are mounted bearing-pins 10 near each side wall of the recess, and upon said pins there are pivoted latches 11, the upper ends of which project through the recess and above the arm 5, and through the same pass transverse pins or bolts

12, upon which at the outer sides of the latches are coiled springs 13. The lower ends of the latches 11 are provided with engaging-shoulders 14 in their inner faces, and below the same said latches have their adjacent edges cut away or flared.

Upon the crane-arm 5 in rear of the latches there is mounted for sliding a wedge-shaped spreader 15, connected at its rear end to the crane-arm by means of a coiled retracting-spring 16. An operating-cord 17 is connected to the forward end of the spreader, passes between the latches and through suitable guide-eyes 42, and depends at the front end of the arm.

A pulley 18 is mounted in the rear end of the recess 9 of the crane-arm, and an opening 19 is formed in the front wall of the recess, and mounted over the pulley, depending through the recess, and having one end passed through the opening 19, is a rope 20, the front end of which depends a suitable distance from the front of the crane-arm, and the opposite end of which is passed through an opening 21 in the inclined brace 6, over guide-pulleys 22 and 23, the former arranged at the angle of the crane and the latter at the base of the same, and through a third guide-pulley 24 secured to the ground.

Upon that portion of the rope 20 intermediate the opening 19 and the pulley 18, which portion depends through the recess 9 in the form of a loop, is mounted the pulley-block 25, the upper end of which is arrow-shaped in cross-section, having opposite shoulders 26. Below said end there is mounted in the block a pulley 27, under which passes the cord 20. The pulley-block 25 is square in cross-section and has one of its faces recessed, as at 28, and provided with opposite perforations 29, formed in the walls of the recess for the reception of the removable pin 30. At one side of the block there is formed an arm 31, having an eye 32, and through the eye passes an operating-cord 33, depending from the block, the upper end of the cord being connected with the head of the removable pin, so that by drawing upon the cord the pin may be removed or withdrawn from the opening 29. The lower end of the recess 28 is provided with a bearing-pin 34, and upon the same is

mounted a swinging hook 35, the free end of which is adapted to be swung up within the recess and be maintained therein by the removable pin. The three remaining faces of the block 25 are each provided with suspension-hooks 36.

The bed 37 is formed of canvas or any suitable material and is of oblong shape, being provided with four diagonally-slitted corners forming opposite sides 37^a and ends 38, which are turned up, and one of the sides has its ends secured to the ends of the end pieces in a permanent manner. The opposite ends of the end pieces are provided with eyes 39, and arranged under the bed are three ropes 40, secured thereto and converging at their opposite ends and connected with eyes 41. The two side ropes at that side of the bed at which the eyes are located are passed through said eyes, so that when under tension said ropes act to draw the side of the bed to a closed or vertical position. The eyes are suspended over the pivoted hook 35 and the opposite hook 36 and the singletree 43 of a team connected to the cables 20. The team being started it will be apparent that the pulley-block and the bed will be elevated until the arrow-shaped head is engaged by the shoulders 14 of the latches 11. Now by slacking the cable 20 at its rear side and passing the same around one of the pins 8 and again starting the team the crane is swung laterally, so that the bed is elevated directly over the corn-crib. At this moment the cord 33 is given a pull, which withdraws the pin 30 from in front of the pivoted hook and permits one side of the bed to fall and dump its load into the crib. The freed side of the bed is that side provided with a swinging flap, and when thus released the rush of the cargo to that side of the bed serves to swing the flap down into a plane with the bottom, and thus a thorough dumping is secured. In a like manner may wagon-beds be elevated, ordinary suspension-loops being passed under the same, as is common. After the dumping has taken place and the crane swung around to its usual position the cord 17 is drawn upon, which serves to draw the wedge 15 between the upper ends of the latches 11, thus spreading the lower ends and serving to release the arrow-headed pulley-block. In this manner the bed is returned for another load. When not in use, the bed may be suspended in an elevated position as will be apparent.

Having thus described my invention, what I claim is—

1. The combination, with a crane and its arm, the latter provided with a recess in its front end, and with bearing-pins and opposite latches mounted thereon, which latches are provided with shoulders above their bearings, and springs for normally throwing said shoulders together, of a pulley-block and a supporting-cable arranged under the latches, said block having an arrow-shaped head and adapted for connection with the latches, and a spreading-wedge mounted on the crane, a retracting-spring connected with the same, and a cord leading from the wedge and passing between the latches, substantially as specified.

2. The combination, with the crane and the suspension-cord, of the pulley-block having the pulley at its upper end mounted on the cord and having one of its faces recessed and provided with a pivoted hook, the removable pin mounted over the hook, and a cord for withdrawing the pin, and its opposite side provided with a suspension-hook, substantially as specified.

3. The combination, with the bearings 2 and 3, the crane 4 and its arm 5, the latter provided with the recess 9, the latches 11, mounted on pins 10 within the recess and having shoulders 14, the transverse pin 12, having the opposite spring 14, the coiled spring 16, the wedge-shaped spreader 15 and the cord 17, the pulleys 24, 23, 22, and 21, the suspension-cable 20, passing under the pulleys and depending in a loop through the opening 9 and having its opposite end extending through the perforation 19, of the pulley-block 25, having its opposite shoulders 26, pulley 27, recess 28, pin 34, swinging hook 35, the removable pin 29, the laterally-projecting arm 32, the pin-operating cord 33, and the opposite converging series of cords terminating in eyes, one of which engages the swinging hook and the opposite of which the pivoted hook at the opposite side of the block, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JEREMIAH R. LAMKIN.

Witnesses:

THOMAS D. GADDIE,
RICHARD A. JEWELL.