No. 750,320. PATENTED JAN. 26, 1904.

J. A. TAYLOR.

LIFTING APPARATUS.

APPLICATION FILED SEPT. 16, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

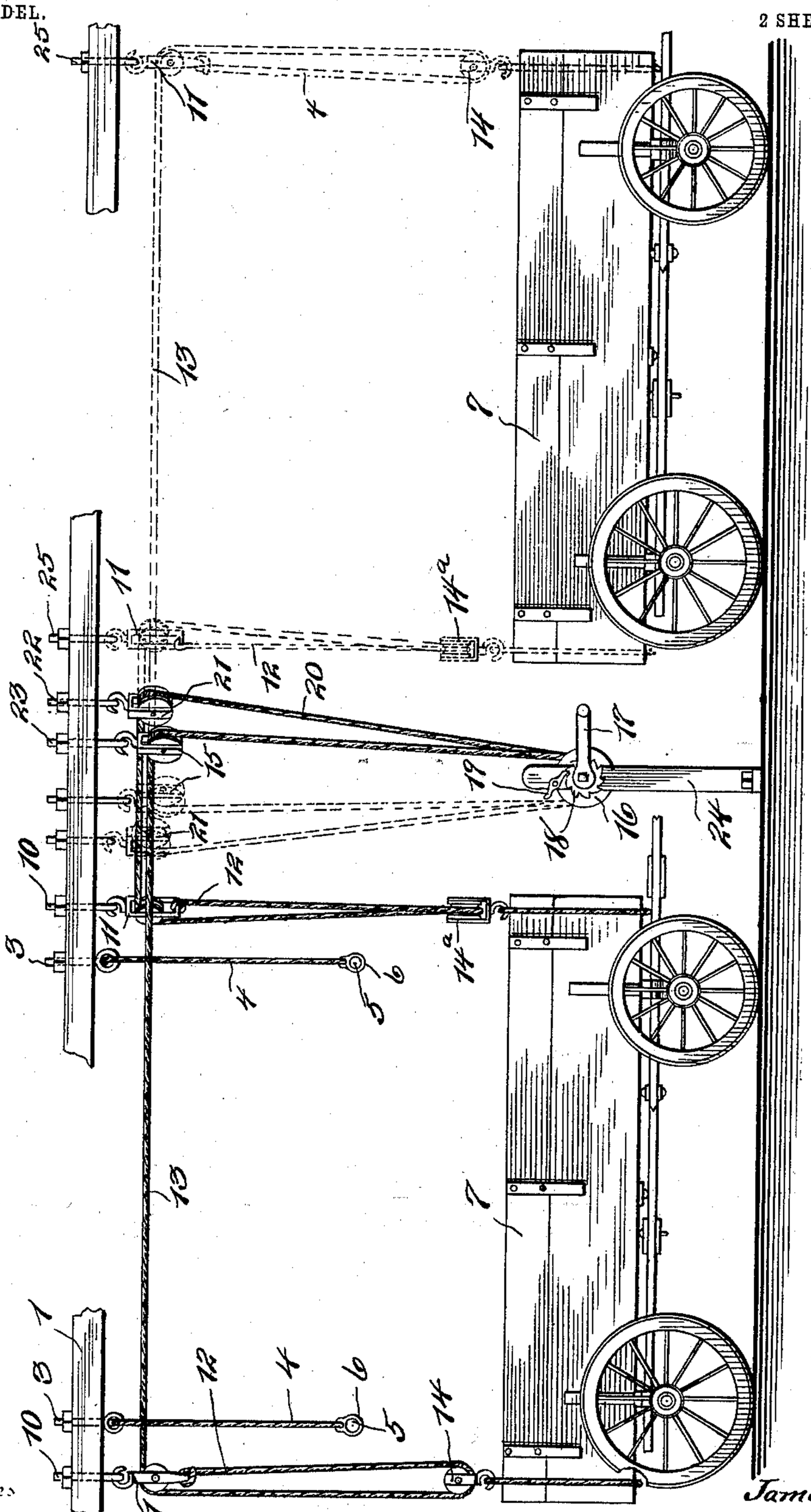

Fig. 1.

Witnesses:

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

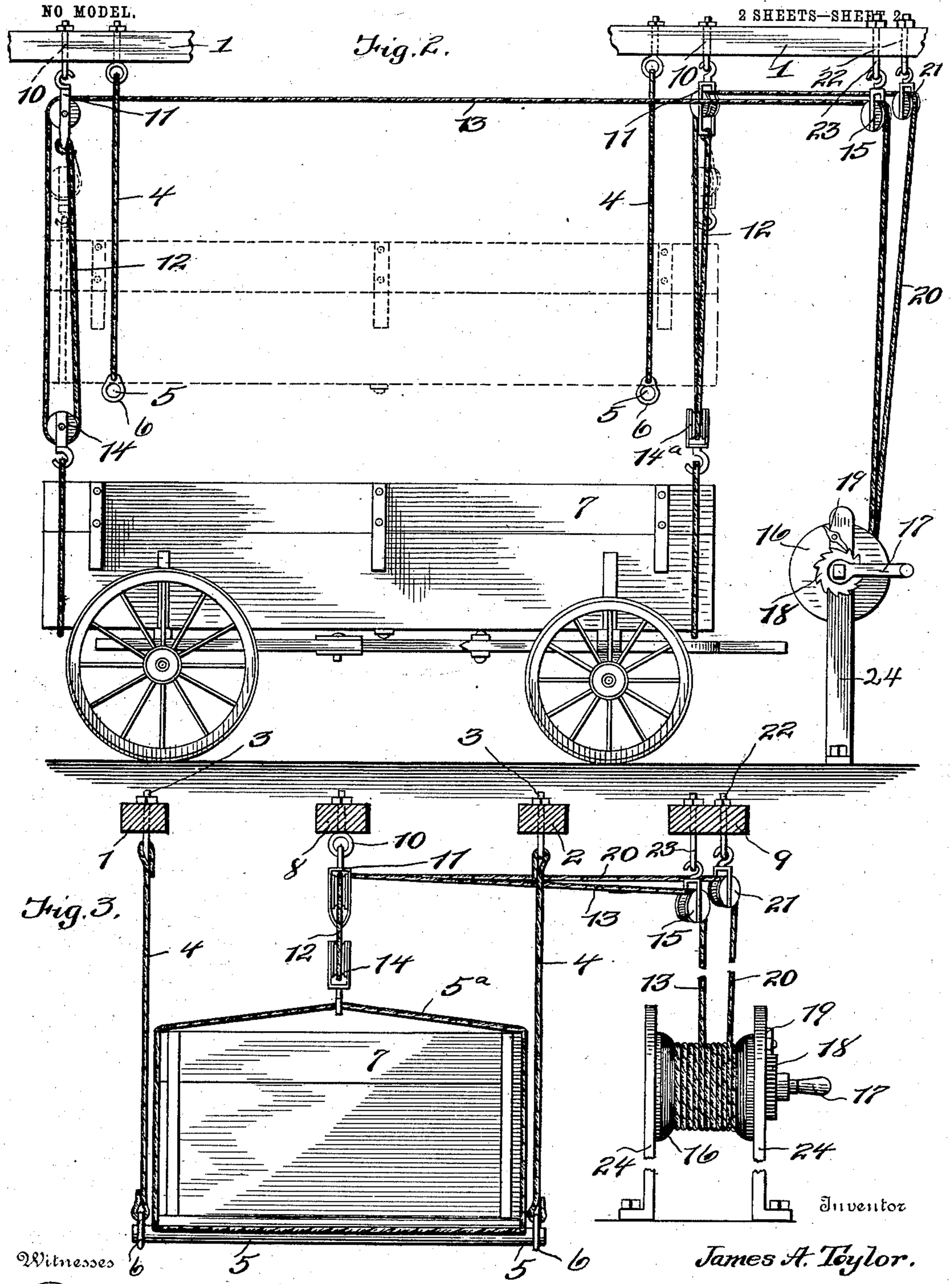

Fig. 3.

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No. 750,320. Patented January 26, 1904.

UNITED STATES PATENT OFFICE.

JAMES A. TAYLOR, OF WABASH, INDIANA.

LIFTING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 750,320, dated January 26, 1904.

Application filed September 16, 1903. Serial No. 173,459. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. TAYLOR, a citizen of the United States, residing at Wabash, in the county of Wabash and State of Indiana, have invented certain new and useful Improvements in Lifting Apparatuses; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a lifting apparatus whereby a wagon-box, hay-rack, or the like may be expeditiously lifted from the wagon proper with the greatest ease by a single person and at the expense of a minimum amount of labor; and my invention consists of certain novel features of combination and construction of parts, as will be hereinafter clearly set forth, and pointed out in the claim.

The object of my invention, among others, is to provide a lifting apparatus of simplified character of consequent cheap construction which will reliably perform its office of raising the wagon-bed or the like from the wagon and hold the same suspended out of the way, whereby the wagon proper may be used for other purposes without said bed.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, which are made a part of this application, and in which—

Figure 1 shows a side elevation of my invention complete, illustrating by dotted lines how the same apparatus may be readily readjusted for engagement with another wagon. Fig. 2 is a similar view showing the lifting apparatus properly adjusted ready to begin the operation of lifting and indicating by dotted lines the wagon-bed as having been suspended. Fig. 3 is an end elevation of the position occupied by the wagon-bed after it has been lifted and suspended.

Designating-numerals will be employed for referring to the various details and coöperating accessories of my invention, the same numeral applying to a similar part throughout the several views.

In carrying out my invention I provide in the wagon-shed or other building a plurality of eyebolts, as clearly shown in Fig. 1, said eyebolts being extended through a conveniently-located beam or beams or other part of the framework of the building. The said beams are preferably parallel with the longitudinal plane of the wagon-bed to be lifted.

Referring to the numerals on the drawings, 1 and 2 indicate beams in a convenient position for locating the eyebolts 3, which are designed to sustain the sling, which latter is formed by ropes, cables, chains 4, or the like, extending down into engagement with the cross-bar 5, and secured thereto in any preferred way, or, if preferred, the lower ends of the cables 4 may be provided with a ring-like terminal or member 6, through which the ends of a bar properly shaped may be extended, and it is obvious that when the wagon-bed 7 has been elevated a sufficient height to enable the cross-bars 5 to be located in position thereunder said bed will be sustained in an elevated position and permitting the wagon proper to be withdrawn. I also provide the supporting-beam 8, disposed directly over the central portion of the wagon, and I furthermore provide the beam 9 upon one side of the wagon-shed, and to the beam 8 I secure the eyebolts 10, each of which is designed to support a pulley-block 11, to the lower end of which is permanently connected the terminal 12 of the main or lifting-cable 13, said cable 13 being extended through the pulley-blocks 11 and around the wheels 14 and 15 and thence to the winding-drum 16, which latter is provided with a controlling-handle 17. I also provide the ratchet 18 and a coöperating pawl 19 therefor, whereby the winding-drum may be secured in any desired position. The auxiliary cable 20 is designed to supplement the cable 13, having its end connected to the winding-drum, whereby the cables 20 and 13 will be simultaneously wound thereon. The cable 20 after passing over the pulley 21 is extended around the pulley 11 and thence downward around the pulley 14^a and thence up and secured at its end 12, as hereinbefore stated, to the lower end of the pulley block or frame 11, as is common. I also provide a rope, cable, or the like 5^a, the ends of which are joined together, so as to

enable the rope to be loosely extended around the end of the wagon-bed. The hooks of the pulley-blocks 14 and 14ª may thus be readily engaged with or hooked around the cable-loops and the wagon-bed lifted sufficiently high to allow the bars 5 to be inserted in the supporting-rings 6. If preferred, the rope or cable members 5ª may be permanently connected with each its respective pulley-block 14 or 14ª, thus enabling the operator to readily make connection with the end of the wagon-bed to be lifted.

The cable 20 is extended around the pulley-block 21, which latter is supported by the eye-bolt 22, which is secured in the beam 9, while the pulley-block 15 is supported by the eye-bolt 23, carried by the beam 9, as hereinbefore stated. The winding-drum 16 is made of any desired size deemed suitable for accommodating the cables 13 and 20 and supported in suitable bearings provided in the standards 24, directed at a convenient point upon one side of the wagon-shed, and it is therefore obvious from the foregoing description that a simple rotation of the winding-drum through the mediation of the controlling-handle 17 will bring the force of such rotation to bear upon the cables 13 and 20, which pass over their respective pulleys and will elevate the wagon-bed to a sufficient height to readily permit the supporting-bars 5 to be entered, so that the ends thereof will each pass into its respective ring 6 upon the lower end of the supporting-cables 4.

In Fig. 1 I have shown by means of dotted lines that a ready readjustment of the lifting-cables may be quickly made, inasmuch as the supporting-eyebolts 10 may be duplicated by means of the eyebolts, as indicated by the numeral 25, when the pulley-blocks 11 may be simply unhooked from the eyebolts 10 and engaged by the eyebolts 25, thus enabling another wagon-bed to be engaged and lifted by the lifting mechanism.

By duplicating the eyebolts 10, as hereinbefore stated, and also the supporting-slings comprising the members 4 and the cross-bar 5, it is obvious that the one winding apparatus will accomplish the work of lifting two separate wagon-beds.

It will be understood that the parts of my invention may be very cheaply and expeditiously manufactured of any desired material deemed most suitable for the purpose and readily assembled each in its respective place and that the complete lifting apparatus will prove a great labor-saving invention, inasmuch as even a small boy or person of comparatively limited strength may easily elevate a heavy wagon-bed even though wholly or partially loaded and hold said bed in an elevated position until it is again desired to replace the same upon the wagon proper.

Believing that the advantages and manner of constructing and using my improved lifting apparatus for wagon-beds or the like have thus been made fully apparent, further description is deemed unnecessary.

What I claim as new, and desire to secure by Letters Patent, is—

The combination with suitable supporting-beams of a plurality of eyebolts each located in its proper relative position substantially as set forth, and a pair of complementary cables 13 and 20, pulley-blocks engaging with said eyebolts and additional pulley-blocks engaging the wagon-bed, a winding-drum engaging the ends of said cables and suitable means to hold the drum in an adjusted position whereby the wagon-bed may be sustained as elevated or may be again lowered in position upon the wagon proper, all substantially as specified and for the purpose set forth,

In testimony whereof I affix my signature in presence of two witnesses.

JAMES A. TAYLOR.

Witnesses:
JOHN H. BICHEN,
FANNIE MALLOCH.