No. 711,337. Patented Oct. 14, 1902.

C. W. NABB.

WAGON BODY LIFTER.

(Application filed Jan. 10, 1902.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

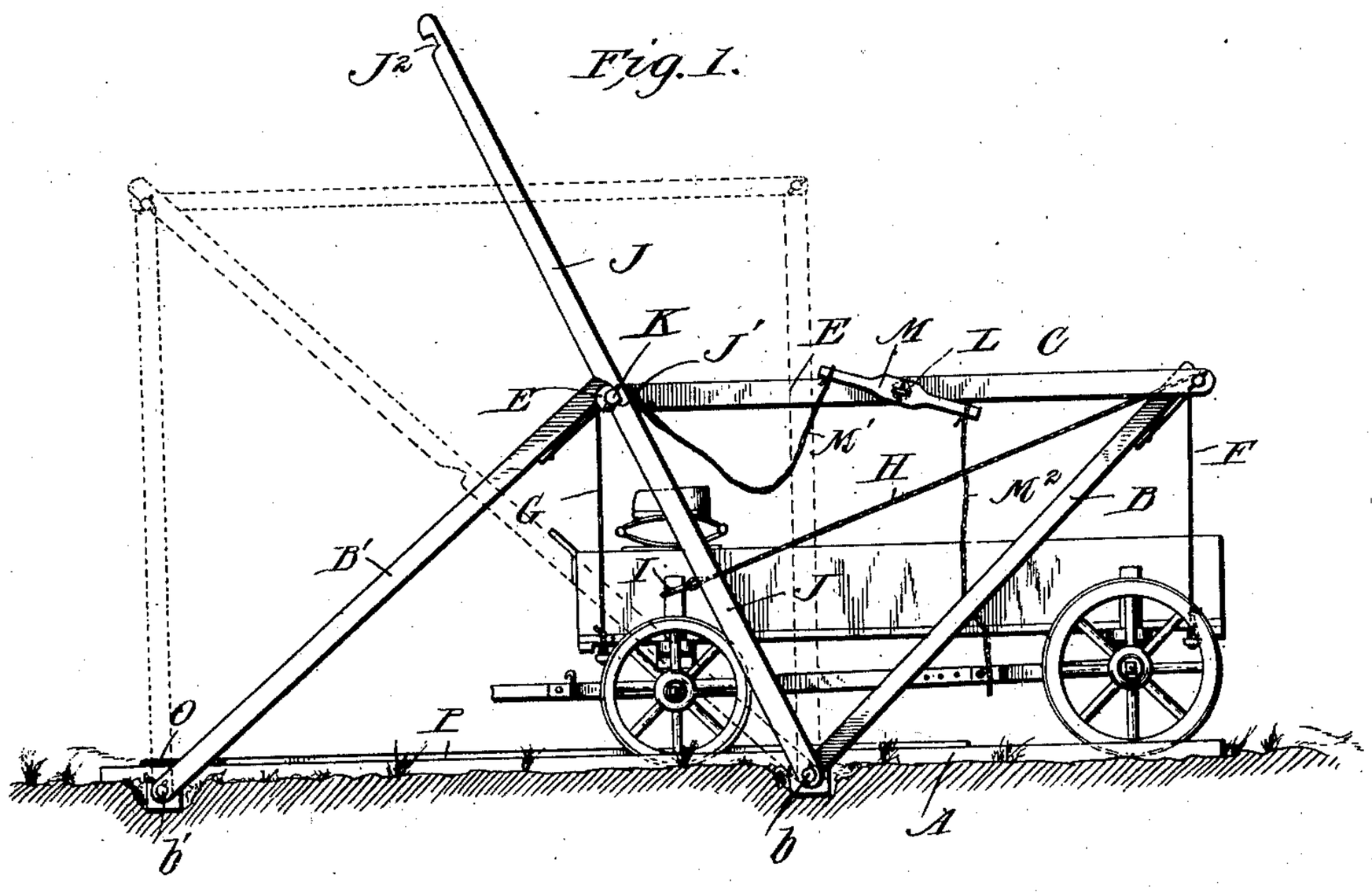

Fig. 2.

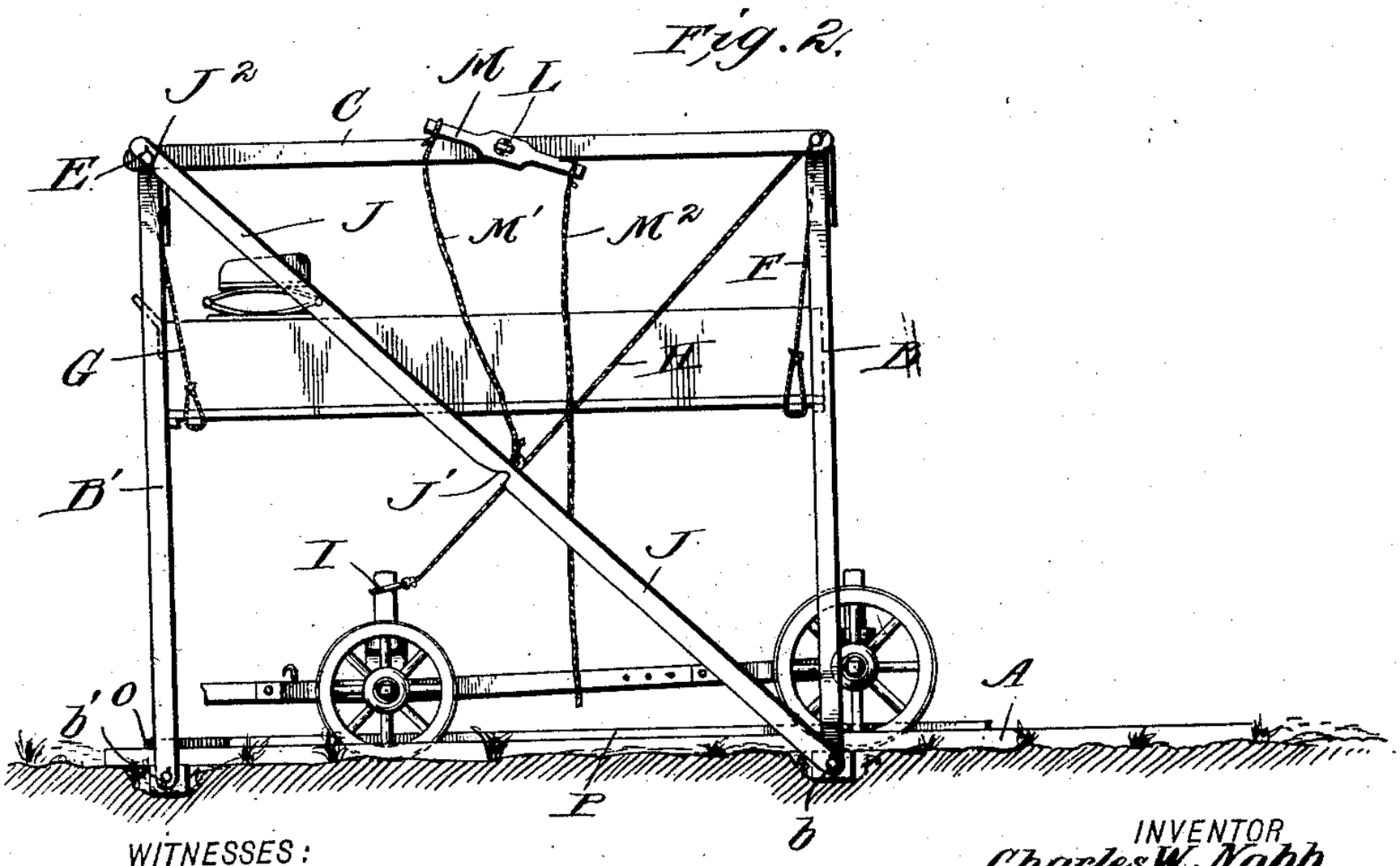

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Fig. 3.

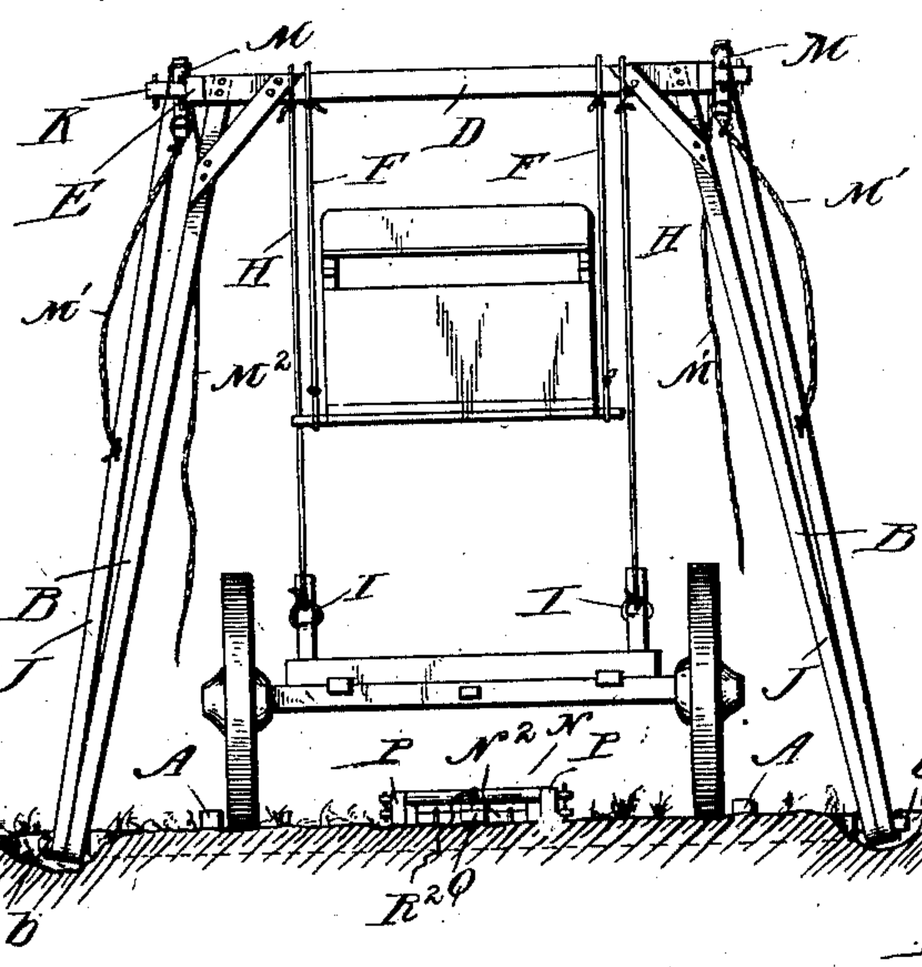


Fig. 6.

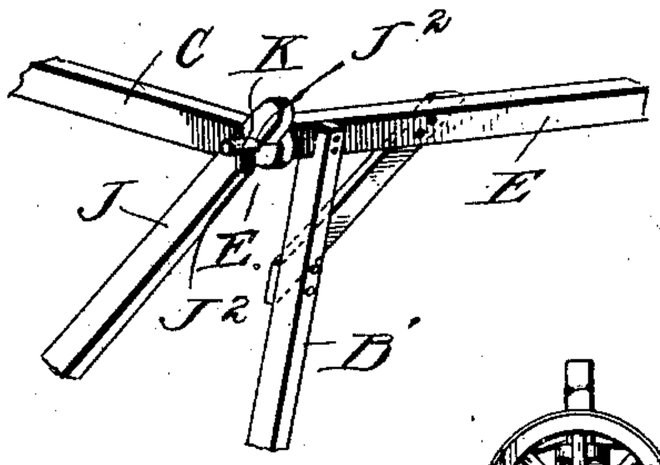
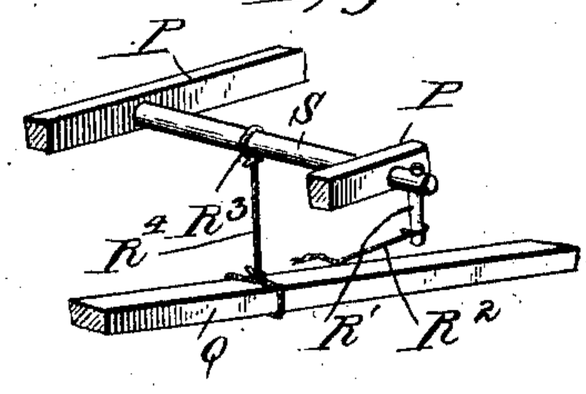


Fig. 4.

Fig. 7.



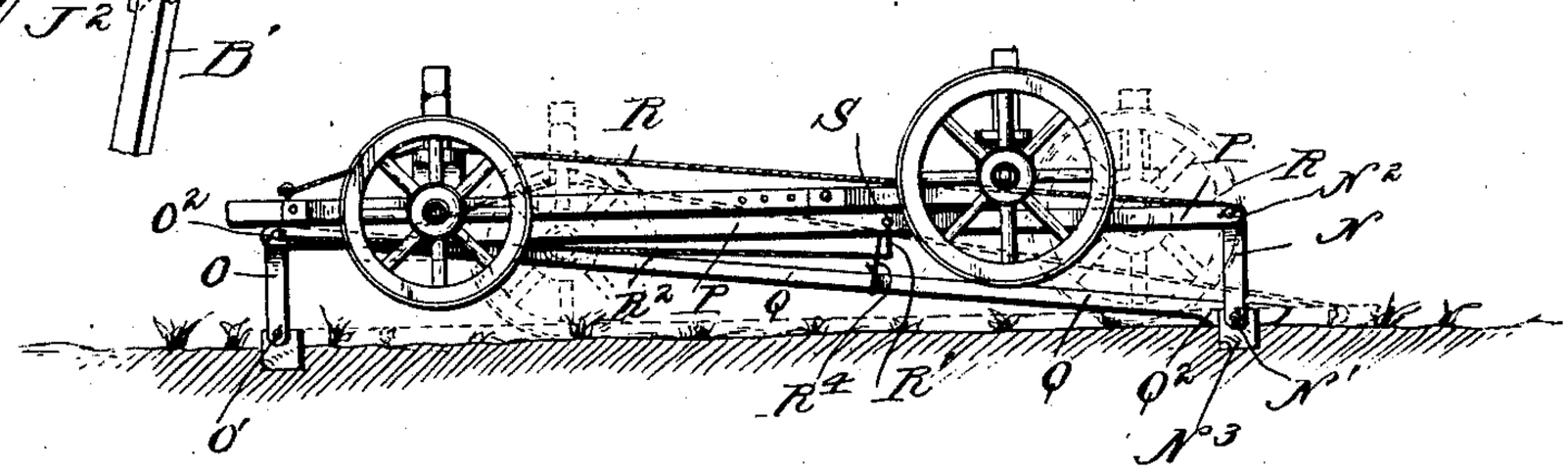
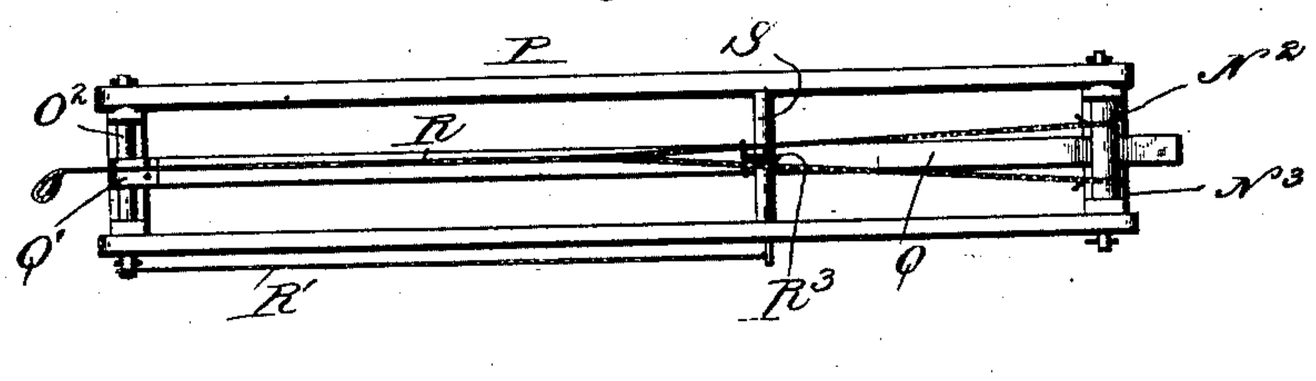


Fig. 5.



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WAGON-BODY LIFTER.

SPECIFICATION forming part of Letters Patent No. 711,337, dated October 14, 1902.

Application filed January 10, 1902. Serial No. 89,166. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. NABB, a citizen of the United States, residing at Charleston, in the county of Mississippi and State of Missouri, have made certain new and useful Improvements in Wagon-Body Lifters, of which the following is a specification.

My invention is an improvement in wagon-body lifters, and has for an object to provide simple novel constructions whereby to lift the wagon-body and subsequently to lift the running-gear; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of my invention ready for operation to lift the wagon-body. Fig. 2 is a similar view showing the wagon-body lifted. Fig. 3 is a rear view of the apparatus with the parts in the position shown in Fig. 2. Fig. 4 is a side elevation of the devices for lifting the running-gear, showing the latter lifted. Fig. 5 is a top plan view of the devices for lifting the running-gear, and Figs. 6 and 7 are detail perspective views.

In carrying out my invention I prefer to provide the several devices in such form and arrangement that most all of them can be made by a farmer from the timber at hand, thus avoiding the expense and inconvenience of securing dressed timber.

In order to guide the wagon into position for operation by the parts of the apparatus, I employ guide-rails A, which may be laid upon the ground or other suitable support and are of such gage as to guide the wagon accurately to position for operation by the lifting devices.

The wagon-body lifter comprises a lifting-frame composed of uprights B and B′, which are pivoted at their lower ends at *b* and *b′* and are connected at their upper ends by the beams C, these top beams C being arranged to connect the uprights B and B′ at the opposite sides of the lifter, and the opposite uprights B being connected by cross-beams D, and the uprights B′ being connected by the cross-beams E, as will be understood from Figs. 2 and 3. By the beams B and D and the beams B′ and E, I provide front and rear frames connected by the top beams C to form a complete lifting-frame, which will operate after the fashion of a parallel ruler, as will be understood from Figs. 1 and 2.

Slings F and G are suspended from the lifting-frame and adapted to be applied beneath the wagon-body at the ends thereof, as shown in Figs. 1, 2, and 3, to lift said body when the lifting-frame is adjusted from the position shown in Fig. 1 to that shown in Figs. 2 and 3 and indicated in dotted lines in Fig. 1. In operation the wagon is driven beneath the lifting-frame, as shown in Fig. 1, and a line H, secured to the lifting-frame at about the juncture of the beams B and C, is connected with one of the front standards of the wagon, as shown at I in Figs. 1 and 2, and the wagon is then moved forward and will operate to adjust the lifting-frame from the position shown in Fig. 1 to that shown in Fig. 2, thus lifting the wagon-body to the position shown in Figs. 2 and 3. When adjusted to this position, the lifting-frame will be held by means of the locking-bars J, which are pivoted at their lower ends and ride upon laterally-extending studs K, carried by the lifting-frame. These locking-bars J, of which I use one at each side, are provided at J′ and at J^2 with notches to receive the studs K, the notch J′ being in position to receive the stud K to support the lifting-frame in the position shown in Fig. 1 and the notch J^2 supporting said lifting-frame in elevated position, as shown in Fig. 2 and indicated in dotted lines in Fig. 1. It will be noticed that the notches J′ are sloped on their upper sides, so the lifting-frame can be elevated from the full-line position shown in Fig. 1 to the position indicated in dotted lines in said figure. To release the locking-bar from engagement with the stud K when the parts are in the position shown in Fig. 2, I provide a rock-shaft L, provided at its ends with lever-arms M, one of the ends of which is connected by ropes M′ with the locking-bars J, while their other arms are supplied with ropes M^2, leading to the ground, so the lock-bars can be released to permit the adjustment of the lifting-frame from the position shown in Fig. 2 to that shown in Fig. 1. It will be noticed that this releasing mechanism is carried by

the lifting-frame and is arranged for operation from the ground and enables the operator to easily release the lifting-frame, so it can be lowered to the position shown in Fig. 1, in which it will be supported by the locking-bars, as shown. When the running-gear has been moved to the position shown in Fig. 2, it overlies the lifting mechanism for the said running-gear, the construction of which is best shown in Figs. 3, 4, and 5, and includes end frames N and O, which are pivoted at N′ and O′, are connected at their upper ends by top beams P, and have cross-bars N^2 and O^2, a brace-sill N^3 being provided for engagement by the locking-bar Q, which is pivoted at Q′ and is notched at Q^2 to engage the brace-sill or other abutment, as will be understood from Figs. 4 and 5. In operation the parts N, O, and P constitute a lifting-frame, which may be adjusted from the position indicated in dotted lines in Fig. 4 to that indicated in full lines in said figure by means of a line R, secured to the running-gear, so the latter as it is moved forward from the position indicated in dotted lines, Fig. 4, to that indicated in full lines in said figure will adjust the lifting-frame to the full-line position in Fig. 4, wherein it will be secured by the locking-bar Q. For releasing the said locking-bar I provide a rocking device or shaft S, journaled to the top bars of the lifting-frame and having a crank-arm R′, by which it may be rocked, and affording at R^3 a drum-like surface to receive a rope R^4, by which it is connected with the locking-bar Q, so the shaft S may when turned operate to release the locking-bar. It will thus be noticed that in Figs. 3, 4, and 5 I illustrate a lifting-frame for use in connection with wagons, which lifting-frame is similar to that for lifting the body and before described to the extent that it includes, in connection with a lifting-frame adapted to operate after the fashion of a parallel ruler, a locking-bar for securing the lifting-frame when elevated and means for releasing said locking-bar including a rock-shaft carried by the lifting-frame and connected with the locking-bar and arranged when turned to release the said bar to permit the lifting-frame to lower. It will also be noticed that the body-lifting frame and the running-gear-lifting frame are so located, with the body-lifting frame lying above the lifting-frame for the running-gear, that the running-gear-lifting frame is arranged to operate upon the running-gear subsequent to the lifting of the wagon-body and by the movement of said gear beyond the position to which it is moved for lifting the body.

In practice it is preferred to incline the uprights B and B′ inwardly toward each other at their upper ends, as shown in Fig. 3, so they will brace each other, and there will be no tendency of the said uprights to swing out of position for use.

As before suggested, the construction is simple and can be readily constructed by a farmer or teamster from the material at hand.

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

1. The combination of the lifting-frame, a locking-bar supported independently of said frame and arranged to secure the same in elevated position, and devices whereby the locking-bar may be released from engagement with the lifting-frame, the lifting-frame being adapted to extend over and support a wagon-body, substantially as set forth.

2. The combination with the lifting-frame having pivoted upright bars and top bars connecting the same, of the locking-bars supported independently of the lifting-frame arranged to engage the lifting-frame and secure the same when elevated, a rock-shaft journaled to the top bars of the lifting-frame and having lever-arms, connections between one of said lever-arms and the lifting-bars whereby to release the same, substantially as set forth.

3. The combination in an apparatus substantially as described, of the lifting-frame arranged to be elevated by the movement of the vehicle, and a frame for lifting the running-gear and over which the running-gear may be moved to adjust said frame to elevated position, substantially as set forth.

4. The combination of the body-lifting frame having front and rear uprights, and cross-bars connecting the same, the locking-bars by which to secure the said lifting-frame in elevated position, a rock-shaft journaled to the lifting-frame and having crank-arms and cords connecting the same with the locking-bars and cords connected with the crank-arms of said rock-shaft and arranged for operation, substantially as described.

5. The combination in a wagon-body lifter, of the lifting-frame having front and rear frames and top bars connecting the same, slings carried by said front and rear frames for supporting the opposite ends of the wagon-body whereby the said body may be suspended within the lifting-frame, and means for locking the lifting-frame when elevated, substantially as set forth.

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Witnesses:
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S. L. HOWLETT.