

S. D. BASSFORD.  
 WAGON BOX LIFT.  
 APPLICATION FILED AUG. 9, 1911.

1,014,743.

Patented Jan. 16, 1912.

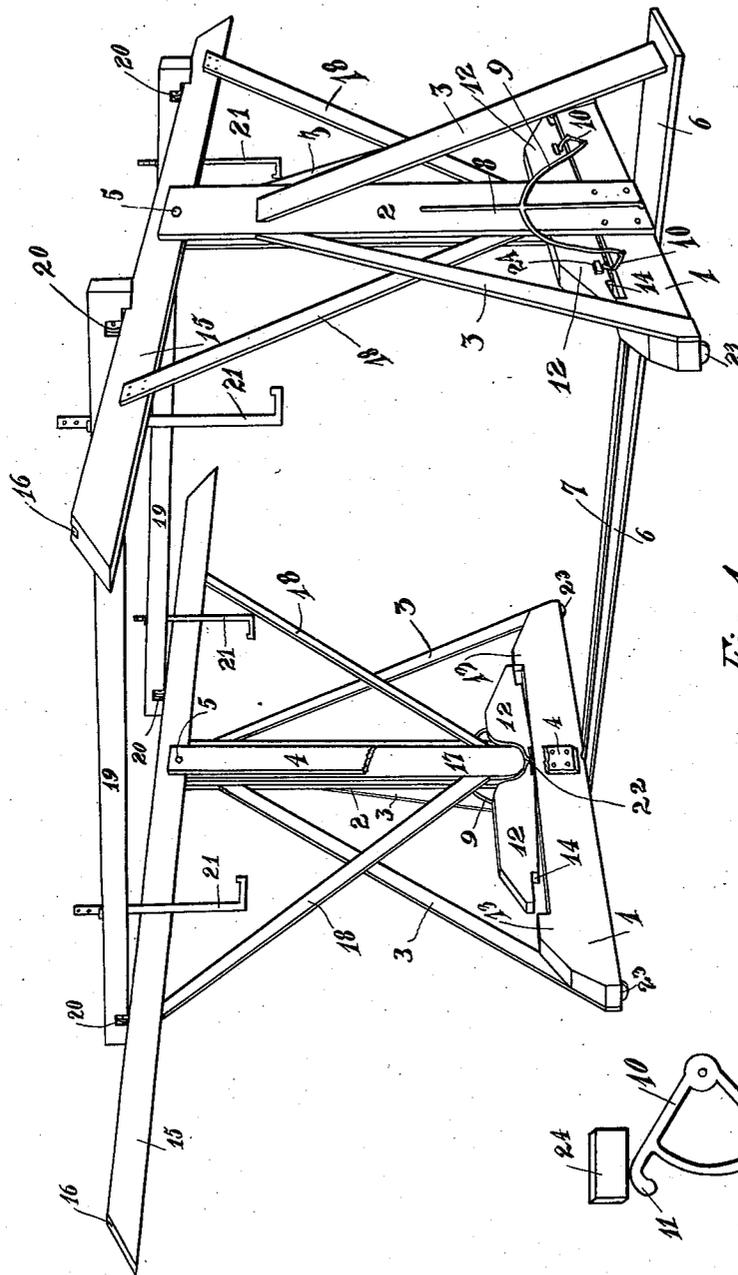


Fig. 1.

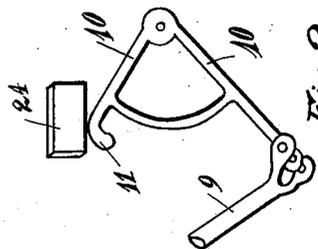


Fig. 2.

Witnesses.  
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# UNITED STATES PATENT OFFICE.

SAMUEL D. BASSFORD, OF TOOELE, UTAH.

## WAGON-BOX LIFT.

1,014,743.

Specification of Letters Patent.

Patented Jan. 16, 1912.

Application filed August 9, 1911. Serial No. 643,234.

*To all whom it may concern:*

Be it known that I, SAMUEL D. BASSFORD, a citizen of the United States, residing at Tooele, in the county of Tooele and State of Utah, have invented certain new and useful Improvements in Wagon-Box Lifts, of which the following is a specification.

The purpose of my invention is to provide a device with which to lift the box from and return it to the running gears of a wagon, by the power of the team, and one that will lift a rack, tank or any form of wagon box; and one that may be moved to different positions on the ground as desired. These objects I accomplish by the device illustrated in the accompanying drawings, in which similar letters of reference indicate like parts throughout the several figures.

Figure 1, is a perspective view of the lift. Fig. 2, is an enlarged detail of one of the trip levers.

My device consists of two sills or plates 1, to each of which is bolted a vertical standard 2, which standards are braced on three sides by the braces 3. A standard 4 is also bolted to each of said sills, parallel and spaced apart from said standards 2, to form a bearing for one end of the pivot pins 5, which pins are carried by said standards 2 and 4, in their upper portions. Said sills are fastened together by the cross sill 6, which sill 6 carries thereon a rocking shaft 7, having two ascending arms 8, which arms are positioned normally parallel with said standards 2. To each of said arms 8 is rigidly secured a semicircular member 9, and to the ends of each of said members 9 is hingedly attached a bell crank lever 10. Said levers are fulcrumed to the said sills 1, and have one arm of each formed as a trip 11. Slidably carried on said sills 1, are the detents 12, which detents have limited longitudinal movement and are hinged together by the hinges 22, one pair on each side. Said detents have their outer ends formed with a shoulder 14, to engage the stop blocks 13. The hinged connection allows either of said detents to have their outer ends raised by means of one of said members 9 and bell crank lever 10, with its trip end 11, so that said outer end will pass the stop block 13 and engage the shoulder 14, when the said detents are moved longitudinally. Secured on the outer side of each of said detents is a trip block 24, against which the trip 11

slides, to raise that end of said detent over the said block 13. A rack is pivotally suspended on said pins 5. Said rack consists of two normally horizontal rails 15, each of which has a longitudinal channel 16 cut in its upper surface; and a depending arm 17 secured to each of said rails 15, and braced by the stays 18. Said rack is carried by the said pins 5, so that the lower end of each of said depending arms 17 is fitted between the hinged ends of the detents 12. The purpose being that when said detents are moved longitudinally, the said arms are moved laterally and said rack is tilted at an angle. Said arms 17 are thus made to move between the standards 2 and 4, which standards act as guides for said arms. Carried on said rails 15 are the two cross bars 19, which bars have secured to their under side the wheels 20. Said wheels 20 are made to roll in the said longitudinal channels 16 provided in said rails 15. Each of said cross bars 19 have vertical holes therethrough and carried in said holes are the adjustable hooks 21. The purpose of said hooks is to engage the wagon box or rack to be lifted, on its end or side, and to thus suspend the said box or rack by said hooks. The said cross bars are removable that the wagon may be drawn between the said standards 2, and one of said cross bars with said hooks therein engage the front end of the wagon box or rack to be lifted. The team with the wagon, is then driven forward, which will cause the front end of the box as the said cross bar slides upon the rails 15, to be raised off of the running gears, and when the rear end of the box reaches the rear end of the rails, the other cross bar 19, with its hooks 21 is made to engage the rear end of the box, and the forward movement of the team continued; which forward movement will raise the rear end of the box from off the running gears and suspend the box entirely on said rack. The rack with its load—the wagon box—is then righted or made to assume a horizontal position by moving the said arms 8 to a vertical position, or this may be accomplished by the weight of the wagon box, if it is pulled by the team more to the front than to the rear of said pins 5. When the rack is made to assume a horizontal position, the outer ends of the detents will engage the stop blocks 13, and hold the said arms 8 in a vertical position, and the tilting rack with its load in a horizontal posi-

tion. To return the wagon box on the running gears, the said gears are run beneath the wagon box and the front end of the said rack with its load is tilted, by pulling either  
 5 of the arms 8 to the rear when the weight of the box will lower the front end of the wagon box until it rests on the said running gears and the front cross bar may be removed. Then by moving the team forward  
 10 with the running gears the box will draw the rear cross bar forward down the incline of said rack and allow the rear end of the box to settle into position on said gears.

To facilitate the moving of the lift to different positions on the ground I have provided a truck wheel 23, under each end of each of said sills 1, with the axle of each  
 15 wheel 23 placed parallel with said sills.

Having thus described my invention I desire to secure by Letters Patent and claim:  
 20 In a wagon box lift the combination of

two sills parallel and spaced apart by another sill secured transversely thereto, vertical standards attached to said first mentioned sills, two detents hinged together and  
 25 adapted to slide upon each of said first mentioned sills, a shoulder on each of said detents adapted to engage a stop block on the sill adjacent, a lever having a semi-circular member secured thereto, bell crank levers  
 30 pivoted to one of said first mentioned sills and hinged to said semi-circular member and adapted to contact with a lug on said detent, and a wagon box rack pivoted to  
 35 said standards.

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

SAMUEL D. BASSFORD.

Witnesses:

SAM RANEY,  
 W. R. WILLIAMS.

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