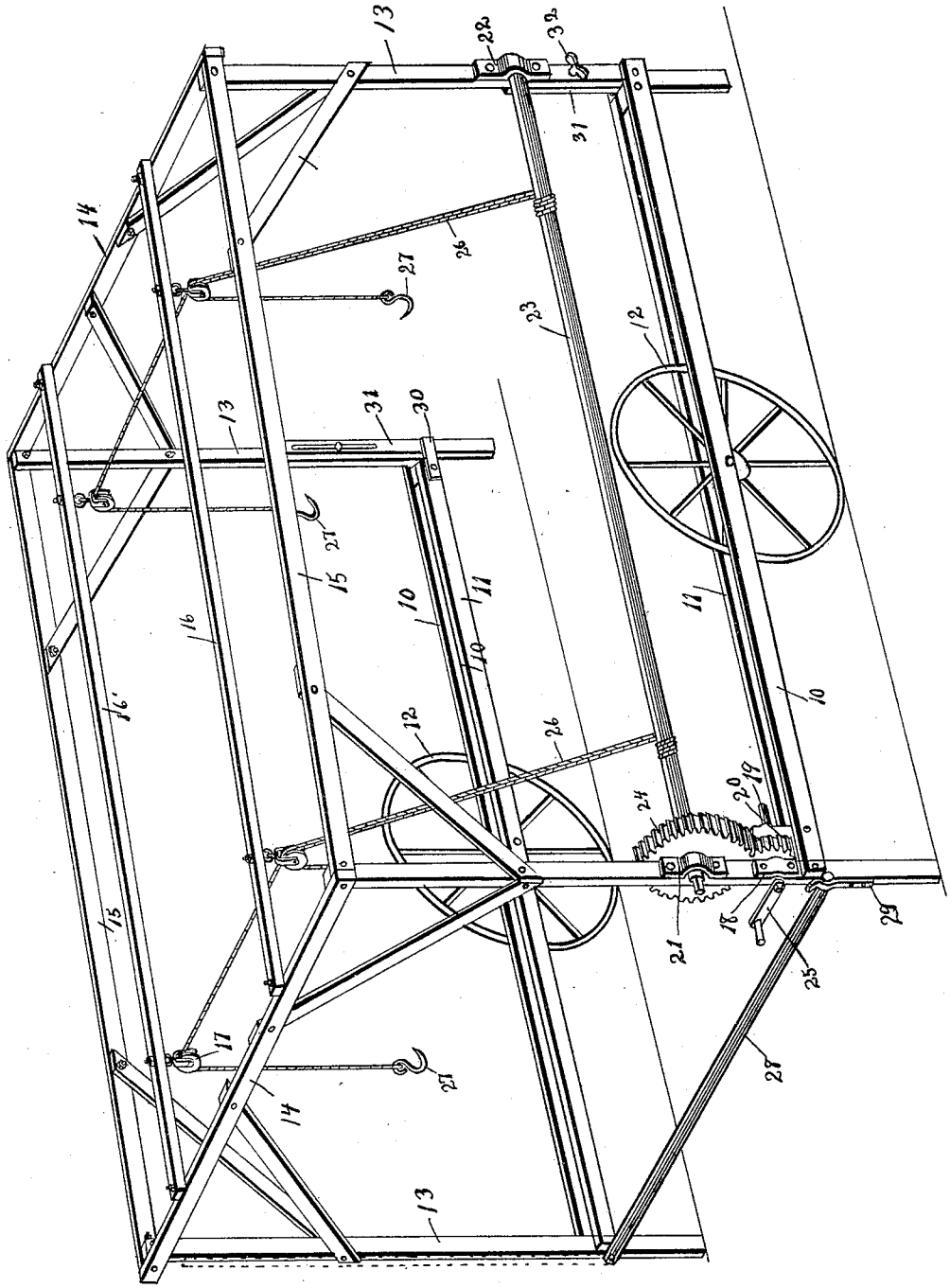
No. 821,954. PATENTED MAY 29, 1906.

J. McCORMICK.

PORTABLE DERRICK.

APPLICATION FILED JULY 31, 1905.



Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN McCORMICK, OF NORTHVILLE, SOUTH DAKOTA.

PORTABLE DERRICK.

No. 821,954. Specification of Letters Patent. Patented May 29, 1906.

Application filed July 31, 1905. Serial No. 271,962.

To all whom it may concern:

Be it known that I, JOHN McCORMICK, a citizen of the United States, residing at Northville, in the county of Spink and State of South Dakota, have invented a certain new and useful Portable Derrick, of which the following is a specification.

The object of my invention is to provide a portable derrick of simple, durable, and inexpensive construction that may be readily and easily pushed from place to place by the operator and that may be firmly supported at its corners, as well as on its supporting-wheels, when in position and by which a single operator may quickly and easily elevate a wagon-box or hay-rack from a wagon and then remove the entire derrick with its suspended weight and, further, to provide a portable derrick for general utility purposes.

My invention consists in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which—

The entire device is shown in perspective, the hinged handle being shown in its elevated position by dotted lines.

Referring to the accompanying drawing, the frame is composed of two base-pieces, each of which consists of an outer frame member 10 and an inner frame member 11, spaced apart to receive the supporting-wheels 12, which wheels are arranged slightly nearer to one end than the other. At the corners of the frame are the uprights 13, secured between the parts 10 and 11, and the tops of the uprights 13 are connected by the cross-pieces 14 and the longitudinal frame members 15. Arranged parallel with the longitudinal pieces 15 and spaced apart from them are the supporting-beams 16, with their ends resting on the cross-pieces 14. Each supporting-beam has near each end a pulley 17. Fixed to one of the uprights 13 are the brackets 18, in which the shaft 19 is rotatably mounted. Fixed to the shaft 19 is a small pinion. Above the bracket 18 is a bracket 21, and on the upright 13 at the other end of the frame is a bracket 22. These brackets support the rotatable shaft 23, upon which is mounted the large pinion 24 in mesh with the pinion 20. Both the shafts 19 and 23 have their ends shaped to receive a crank 25, by which they may be rotated by the operator. Near each end of the shaft 23 I have fixed two cables 26. These cables pass over the adjacent pulley 17, and one of them passes over the pulley 17 at the opposite side of the frame, and on the lower end of each cable is a hook 27. Pivoted to one of the uprights 13 at the end of the frame farthest away from the wheel 12 is a handle 28, and on the upright on the other corner at the same end of the frame is a bracket 29 to receive and hold the said handle. On each of the uprights 13 at the end of the machine opposite from the handle 28 are two brackets 30 to slidingly support the extension-uprights 21, and in each of said uprights is a set-screw 32, by which the extension-upright may be adjustably clamped to the upright 13. The uprights 13 at the end of the frame adjacent to the handle extend some distance below the parts 10 and 11, while those at the other end have their lower ends flush with the under surfaces of the parts 10 and 11.

In practical use and assuming that it is desired to remove the bed from the wagon that is standing still the operator elevates the extension-uprights 31 and then grasps the handle 13 and moves the entire derrick on its supporting-wheels 12 to position over the wagon. He then places each of the hooks 27 into engagement with a part of the wagon-bed. He then permits the extension-uprights 31 to drop and secures them in position by the set-screws 32. If the wagon-bed is relatively light, he places the crank 25 on the shaft 23, and then by rotating said shaft he quickly winds up the cables 26 on the shaft, and thus jointly elevates all of the hooks 27 with the wagon-bed. If the wagon-bed is relatively heavy, he places the crank on the shaft 19 and in this way gains an additional leverage and is thus enabled to elevate a greater weight. He may then raise the uprights 31 and move the entire derrick with the wagon-bed to a distant point. The object of pivoting the handle 28 in such manner that it may be swung upwardly is to provide a derrick of this class in which a wagon may be driven under the derrick and the wagon-bed removed and then the wagon driven on through the derrick without backing.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States therefor, is—

1. A derrick-frame designed to receive a wagon within it, two supporting-wheels at the sides thereof spaced apart from the cen-

ter, stationary legs at the corners of the frame farthest away from the supporting-wheels, adjustable legs at the other corners, pulleys at the top of the frame, cables passed over said pulleys, hooks on the cables and means connected with the frame for winding up said cables jointly.

2. A derrick-frame designed to receive a wagon within it, two supporting-wheels at the sides thereof spaced apart from the center, stationary legs at the corners of the frame farthest away from the supporting-wheels, adjustable legs at the other corners, pulleys at the top of the frame, cables passed over said pulleys, hooks on the cables and means connected with the frame for winding up said cables jointly and a handle extended across one end of the frame and capable of being withdrawn from said position.

3. In a portable derrick, the combination of two pairs of parallel side rails spaced apart, a supporting-wheel between each pair of rails, uprights at the ends of the rails, an elevated frame supported by said uprights, a handle extended across one end of the frame and capable of being withdrawn from said position, fixed legs at the end of the frame adjacent to the handle, adjustable legs at the other end of the frame, set-screws for securing said adjustable legs in position, four pulleys supported by the elevated frame, two cables at each end of the frame, both passed over one of the pulleys and one passed over the other pulley at said end, a hook on each cable, a rotatable shaft having said cables fixed thereto, a large pinion thereon, a small pinion in mesh with the large one and a crank capable of being connected with the shaft of either pinion.

Des Moines, Iowa, March 23, 1905.

JOHN McCORMICK.

Witnesses:

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