A. A. COON.

WAGON JACK.

APPLICATION FILED FEB. 3, 1909.

928,587. Patented July 20, 1909.

Fig. 1.

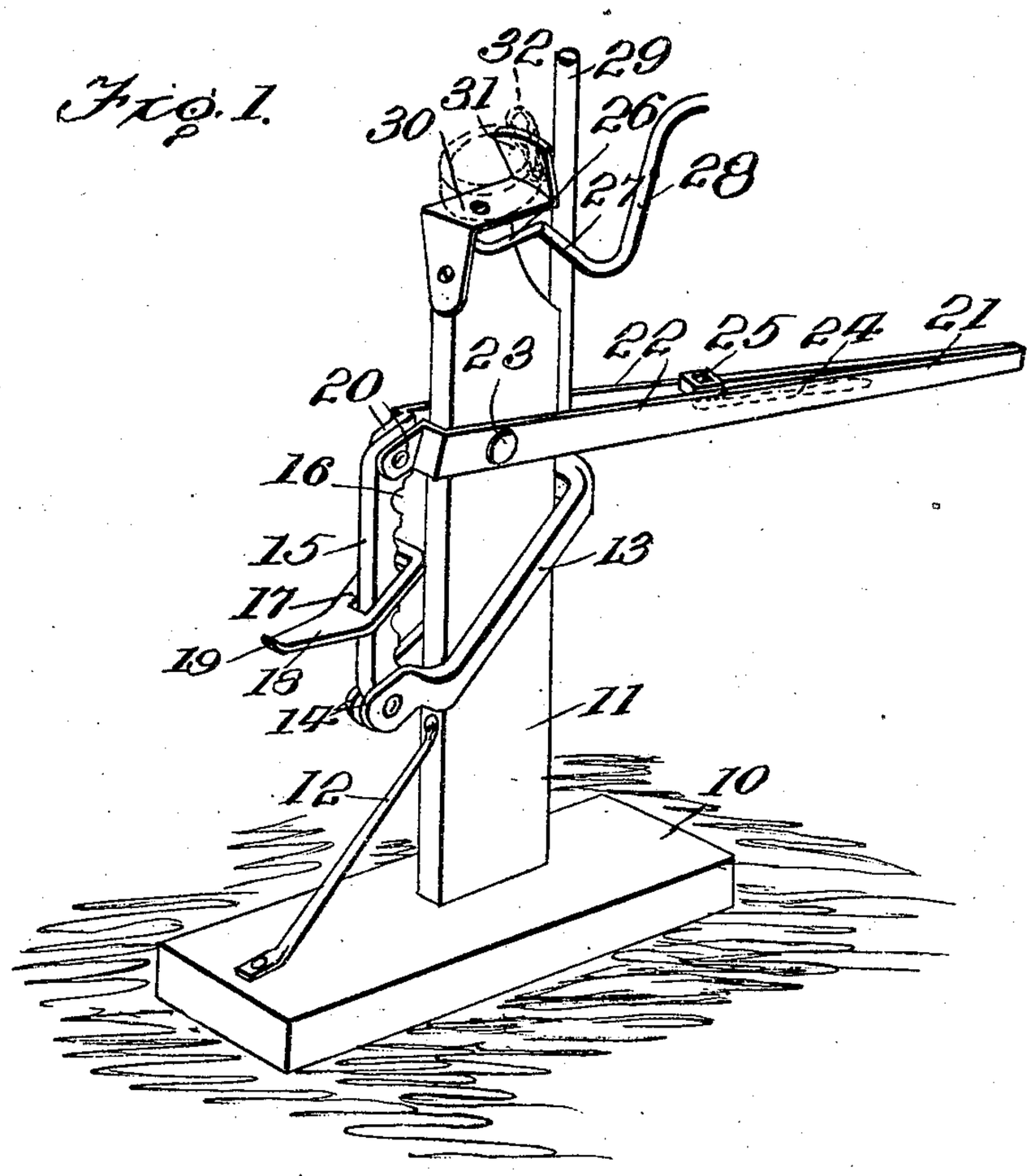


Fig. 2.

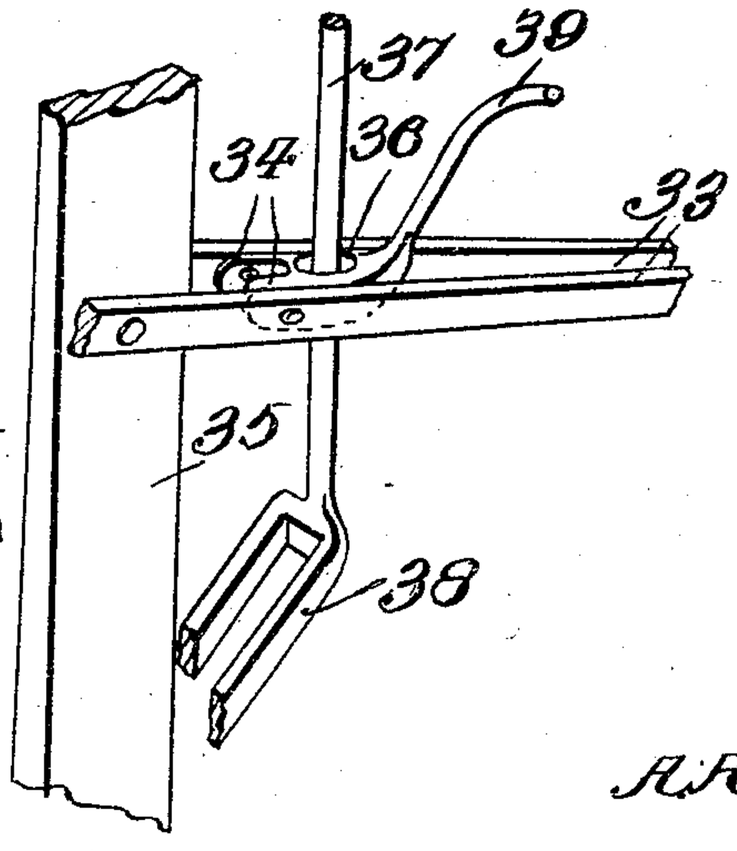
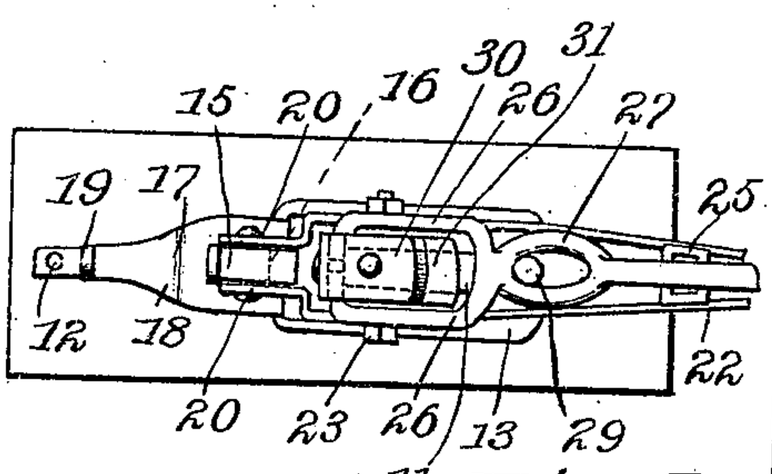


Fig. 3.



Witnesses

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WAGON-JACK.

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To all whom it may concern:

Be it known that I, ALBERT A. COON, citizen of the United States, residing at Hutsonville, in the county of Crawford and State of Illinois, have invented certain new and useful Improvements in Wagon-Jacks, of which the following is a specification.

This invention relates to hoisting apparatus and refers particularly to a hand operated jack.

An object of this invention is to provide a device which is to be employed particularly when it is desired to apply grease to wagon axles, and for this purpose the invention comprises a jack for raising the axle which is provided with an attachment thereto upon which a grease-pot is supported, and also a rack for supporting the wrench and the nut when the wheel of the vehicle is being removed.

Another object of this invention is to construct a jack which enables the operator to stand in an upright position thereby lessening the fatigue incident to operating devices of this character when a number of wheels are to be greased.

The invention further aims to produce a device of this character which is applicable to vehicles of different heights, as wagons, riding plows, cultivators and the like, and one which may be readily and quickly adjusted to accommodate the same to such conditions.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a perspective view of the complete device. Fig. 2 is a detailed view of the post and operative parts connected therewith disclosing a modified form of the gravity clutch. Fig. 3 is a top plan view of the complete device as disclosed in Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawings the numeral 10 designates a base upon which a post or standard 11 is positioned adjacent one end thereof and reinforced in such position by means of a brace 12 which is diagonally positioned between the opposite extremity of the base 10 and a point intermediate upon the adjacent edge of the post 11. The post 11 is provided with a binding link 13 which is disposed about the same and which is provided upon its forward extremity with ears 14 between which is pivotally secured the lower extremity of a lifting bar 15. The lifting bar 15 is provided with a plurality of notches 16 equidistantly spaced upon the inner edge thereof for the reception of a loop 17 which is disposed about the lifting bar 15 and which carries an outwardly extended foot 18 for engagement with the device to be raised. The foot 18 is disposed upwardly at an obtuse angle to the loop 17 and is provided upon its outer extremity with a flange 19 for the purpose of insuring a rigid engagement with the device to be raised. The upper extremity of the lifting bar 15 is pivotally supported between lugs 20 which are formed upon the forward extremity of a handle 21.

The handle 21 comprises a pair of levers 22 which are positioned in parallel and which are secured together at their rear extremities, the rear extremities being diverged forwardly to dispose the same upon the opposite sides of the post 11 where the same are pivotally mounted upon a bolt 23 and have their outer extremities converged and formed into the lugs 20. The levers 22 are provided intermediate of their length with a rest 24 which comprises a portion of metal bent U-shaped and secured at its opposite extremities against the inner faces of the levers 22 and which is adapted to receive the shank of a wrench 25 for the purpose of supporting the same in an operative position when not in use.

The upper extremity of the post 11 is provided with a gravity clutch which is pivotally disposed thereon and which comprises a fork 26, the extremities of the arms of which are pivotally disposed on the post 11 to support the clutch, the fork carrying upon its rear extremity an elongated link 27 and a handle 28 which is rearwardly and upwardly extended from the link 27. The elongated link 27 is disposed about the upper extremity of a rod 29 which is rigidly disposed upon the rear end of the binding link 13 and extended upwardly therefrom parallel to the post 11.

The upper extremity of the post 11 is provided with a bracket 30 which comprises a base portion positioned horizontally and provided at the rear end thereof with an arcuate flange 31 for the reception of a grease-pot of any desired formation, which in most cases is of cylindrical form, and which is secured upon the bracket 30 by means of a pin 32.

The pin 32 is formed of a portion of wire or sheet metal which is bent upon itself and looped at the bent portion in order to form resilient arms which are adapted to extend within the grease pot positioned upon the bracket 30 and upon the outer or rear face of the arcuate flange 31 respectively.

In the modification disclosed in the drawings the handle 33 is provided with a gravity clutch which comprises fork arms 34 secured against the inner faces of the levers which comprise the handle 33 adjacent the rear edge of the post 35, the fork arms 34 being terminated at their rear extremities in an elongated link 36 which is disposed about a rod 37 which is rigidly carried by a binding link 38 disposed upon the post 35. The elongated link 36 is provided with a handle 39 by means of which the same is adapted to be raised when it is desired to release the rod 37 to permit of the sliding of the binding link 38 downwardly upon the post 35.

The operation of the device is as follows:— The jack is positioned adjacent the axle of the vehicle or other devices to be raised when the foot 18 is raised to admit of the sliding of the loop 17 to enter in the notches 16 according to the height required in order to bring the foot 18 into proper adjustment beneath the axle. The handle 21 being normally in a raised position holds the lifting bar 15 downwardly and upon the depression of the rear extremity of the handle 21 the lifting bar 15 is raised and caused to impinge the foot 18 against the under face of the axle and upon further downward movement of the handle 21 the foot 18 is raised and caused to lift the axle therewith. When the desired height is obtained the handle 21 is released and the elongated link 27 is caused to bind upon the rod 29, as the rod 29 is carried upwardly through the medium of the binding link 13 in its upward sliding movement, permitting the link 27 to slidably and loosely move over the sides of the rod 29 by reason of the weight of the handle 28 attached thereto, and prevent the downward movement of the rod 29 and thereby swing the forward end of the binding link 13 against the forward edge of the post 11 and cause the same to bind thereagainst, thus securing the foot 18 rigidly in position. The nut is now removed from the axle by means of the wrench 25 and is held upon the handle 21 which is positioned substantially horizontally and the nut is thereby prevented from falling in dust and other foreign substances incident to the throwing of the same upon the ground.

The bracket 30 is adapted to support a grease pot from which the operator is enabled to remove grease to apply to the axle without the necessity of carrying the same separate within his hand.

When it is desired to release the foot 18 the handle 21 is slightly depressed when the elongated link 27 is permitted to be raised by the handle 28 and admit of the sliding of the rod 29 downwardly to disengage the binding link 13 from the post 11 and to thereby admit of the lowering of the lifting bar 15 by raising the handle 21.

Having thus described the invention what is claimed as new is:—

1. A device of the class described comprising a base, a post upwardly extended from said base, a brace diagonally positioned between said post and said base for supporting said post, a binding link loosely disposed about said post, a lifting bar pivotally secured to the forward extremity of said binding link and extended upwardly therefrom, a handle pivotally mounted adjacent its forward extremity on said post near the upper end thereof, said handle pivotally connected to the upper extremity of said lifting bar, a rod upwardly extended from the rear end of said binding link, and a gravity clutch pivotally disposed upon the upper end of said post and loosely connected to said rod for the purpose of engaging the same upon the downward movement of said rod.

2. A device as specified comprising a post, a binding link loosely disposed about said post and adapted for binding engagement with the same, a handle pivotally disposed on said post above said binding link, a lifting bar pivotally secured between the forward ends of said handle and said binding link, a foot adjustably positioned on said lifting bar, a rod upwardly extended upon the rear end of said binding link and a gravity clutch carried by said post for engagement with said rod to secure the same from downward movement.

3. A device as specified comprising a post, a handle pivotally disposed upon said post, a lifting bar pivotally supported at the forward end of said handle and depended therefrom, a foot adjustably positioned on said lifting bar, a binding link loosely disposed about said post adapted for binding at times upon the same, said binding link being pivotally connected to the lower extremity of said lifting bar, a rod rigidly and upwardly extended from the rear end of said binding link, fork arms pivotally disposed upon the upper extremity of said post and extended rearwardly therefrom, an elongated link carried by said arms and loosely mounted about said rod, and a handle carried by said link for the purpose of raising the same from binding engagement with said rod to permit of the downward movement of the same.

4. In a device as specified, the combination of a post, a binding link loosely disposed about said post, a handle pivotally supported on said post about said binding link, a rod rigidly carried by said binding link and extended upwardly from the rear end thereof,

an elongated link pivotally supported at the upper end of said post for engagement about said rod, a lifting bar pivotally disposed between the forward end of said handle and the forward end of said binding link and a foot adjustably carried by said lifting bar.

5. In a device of the class described, the combination of a post, a binding link engaged about said post, a lifting bar pivotally secured to the forward end of the binding link and upwardly extended therefrom, said lifting bar having a plurality of notches disposed upon the inner edge thereof, a foot carried by said lifting bar, a loop positioned upon said foot for engagement about said lifting bar to catch in said notches, a pair of levers pivotally disposed upon the opposite sides of said post and pivotally connected to the upper end of said lifting bar, a rod upwardly extended from said binding link and a gravity clutch supported upon said post for engagement at times with said rod.

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

ALBERT A. COON. [L. S.]

Witnesses:

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