W. W. BELL.

LIFTING JACK.

APPLICATION FILED NOV. 19, 1912.

**1,068,205.** Patented July 22, 1913.

Fig. 1.

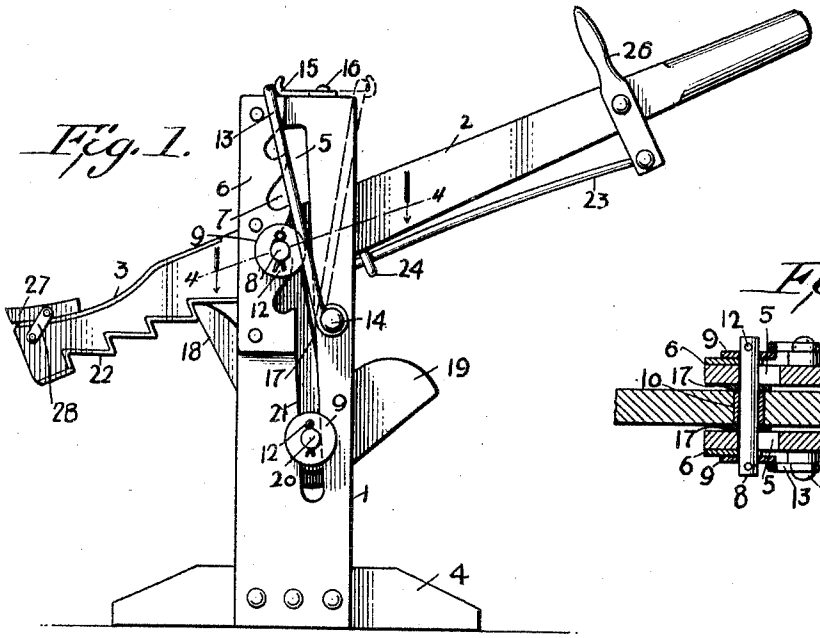



Fig. 4.




Fig. 2.

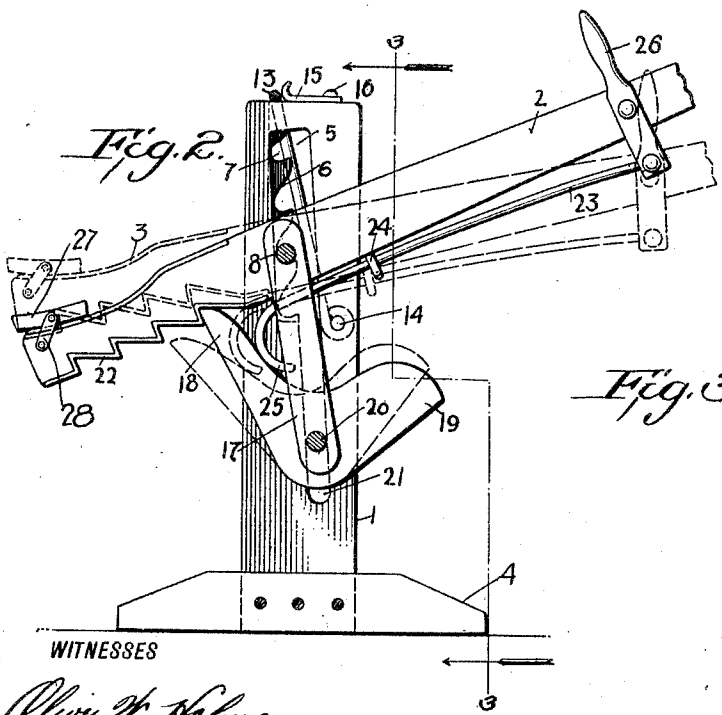
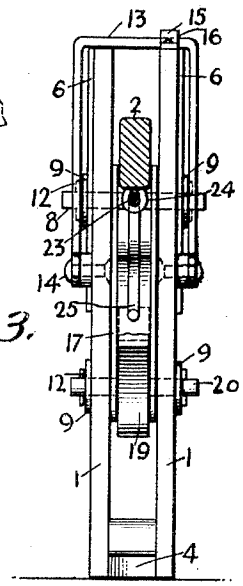



Fig. 3.




WITNESSES

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# UNITED STATES PATENT OFFICE.

WILLIAM W. BELL, OF BEAVER CREEK, MINNESOTA.

## LIFTING-JACK.

1,068,205. Specification of Letters Patent. Patented July 22, 1913.

Application filed November 19, 1912. Serial No. 732,240.

*To all whom it may concern:*

Be it known that I, WILLIAM W. BELL, a citizen of the United States, and a resident of Beaver Creek, in the county of Rock and State of Minnesota, have invented a new and Improved Lifting-Jack, of which the following is a full, clear, and exact description.

My invention relates to an improvement in lifting jacks, and the object thereof is to produce a jack designed for the purpose of lifting wagons and the like, which is simple of construction and easy to operate and capable of adjustment to suit all varying conditions they are met with in actual practice.

Reference is to be had to the accompanying drawings forming a part of this specification in which the same characters of reference indicate the same parts in all the views.

Figure 1 is a side elevation of my lifting jack; Fig. 2 is a vertical section thereof taken in the plane of the handle; Fig. 3 is a sectional view on the line 3—3 of Fig. 2; and Fig. 4 is a sectional view on the line 4—4 of Fig. 1.

My jack comprises a suitable support consisting of uprights 1, between which is pivotally mounted a handle or lifting lever 2 having a concave plate 3 at one end to engage the axle of the wagon and raise the same when removal or replacement of a wheel becomes necessary. These uprights 1 are secured to a base 4 and have longitudinal slots 5, along one edge of which are secured plates 6. These plates 6 have notches 7 forming bearings which engage the fulcrum bolt 8 on which the lever 2 is carried. By moving this bolt up and down in the slot 5 and causing the bolt 8 to engage with different notches 7, the vertical adjustment of the lever 2 is regulated to suit the size of the wagon or the diameter of the wheel on the axle that is to be engaged.

The pivot bolt 8 is provided with washers 9 at its opposite ends, and located on the outside of the plate 6, and it also carries a sleeve 10 which serves as a bushing for the bore through the lever 2. Pins 12 passing through the outer ends of this bolt prevent the displacement thereof and hold the washers 9 in place.

The bolt is held in position in any pair of horizontally alined notches 7 by means of a strap 13 which is U-shaped in form and pivoted to the uprights 1 by means of bolts 14. This strap passes over the upper ends of the uprights 1 and is engaged by a catch 15 pivoted at 16. When this strap slants upward to the left, as shown in Fig. 1, it will engage the washers 9 or the outer ends of the bolt 8, so as to prevent the bolt from getting displaced from the notches, and when the lever is to be adjusted up or down the catch 15 is turned to the dotted line position, as shown in Fig. 1, and the strap swung over to the right so as to allow the bolt to move sidewise and thus be slipped from one pair of notches into another.

Mounted to swing upon the pivot bolt 8 and located inside of the uprights 1 are links 17 which serve as a hanger for a catch 18. This catch 18 is approximately L-shaped in form, its upper end being pointed and its lower arm being weighted, as shown at 19, and it is hung upon the links 17 by means of a transverse bolt 20. This bolt passes through the uprights 1 by means of slots 21 forming a downward extension of the openings 5. The upper pointed end of this catch engages notches 22 in the bottom of the lever 2, below the plate 3, and braces this end against the weight of the wagon which it supports.

Carried below the lever 2 is a rod 23, which passes through a staple 24 and has a down-turned end 25 to engage the catch 18. This rod is actuated by means of a handle 26 mounted upon the lever 2.

When using the jack the lever 2 is adjusted to the proper height; the strip 13 is moved to the left and locked by means of the catch 15, and the handle 26 is moved to the right to advance the bar 23 and swing the pointed end of the catch 18 to the left in position to engage the farthest notch 22. The jack is then put in place under the wagon axle and the right end of the lever depressed to raise the wagon body. As soon as the weight of the wagon comes on the plate 3 the lever 26 is released, and when the right end of the lever 2 is depressed for the purpose of lifting the wagon, the catch slips into engagement with the catches 22 in succession, owing to the weighted end 19. The wagon is thus raised by degrees and the operation is made quick and easy. When the wagon is to be released and lowered, the

right end of the lever 2 is depressed a little farther, so as to release the upper end of the catch 18, and the handle 26 manipulated to force the upper end of this catch to the left to release the notches in the adjacent end of the lever 2. The weight of the wagon now depresses the left end of the lever 2 and allows the wheels to sink once more to earth. I may also utilize a block 27 on the end of the lever carrying the plate 3. This block will be attached to the lever by means of links 28, so that it can be swung over on top of the lever or swung down over the end thereof. The function of this block is to increase the facility of adjustment of my lifting jack when circumstances require it.

From the above description it will be seen that my lifting jack is extremely simple in construction and easy to operate and readily affords all the adjustment that is needed.

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

1. In a lifting jack, the combination of a support having a longitudinal slot therein, a notched plate secured to said support adjacent one edge of said slot, a lever, a pivot bolt or journal carried by the lever to engage one of said notches and support the lever, a pivoted member carried by the support and movable to hold the journal or bolt in engagement with said notches, and a catch for locking said pivoted member.

2. A lifting jack comprising a support, a slot in said support, an operating lever carried by said support and adjustable by means of said slot, a link carried by said lever, and a catch suspended upon said link, said lever having notches to be engaged by the catch, said support preventing pivotal movement of said link.

3. In a machine of the kind described, the combination of a pair of slotted uprights having recessed plates secured thereto along the edges of said slots, a pivot bolt for supporting said lever to be engaged by the recesses in said plates, means for locking said pivot bolt in said recesses, a movable catch supported by said lever, means for engaging said catch and said support to permit the catch to move up and down with the lever but prevent the catch from moving laterally with respect to said support, said lever having notches to be engaged by the catch, and an attachment carried by the lever to move the catch out of operative position.

4. In a lifting jack, the combination of a support having a notch, a lever having a pivot bolt to engage said notch and support the lever, and means carried by said support and movable into engagement with the bolt to hold said bolt in engagement with said notch.

5. A lifting jack comprising a support, an operating lever pivotally carried thereby, a link suspended from said lever, and a catch carried by said link, said lever being shaped to be engaged by the catch, said support engaging the link to prevent pivotal movement thereof.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM W. BELL.

Witnesses:
H. C. HETLAND,
J. B. MACK.

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