No. 611,703. Patented Oct. 4, 1898.

W. H. NEWBILL.

LIFTING JACK.

(Application filed May 11, 1898.)

(No Model.)

Fig. 1.

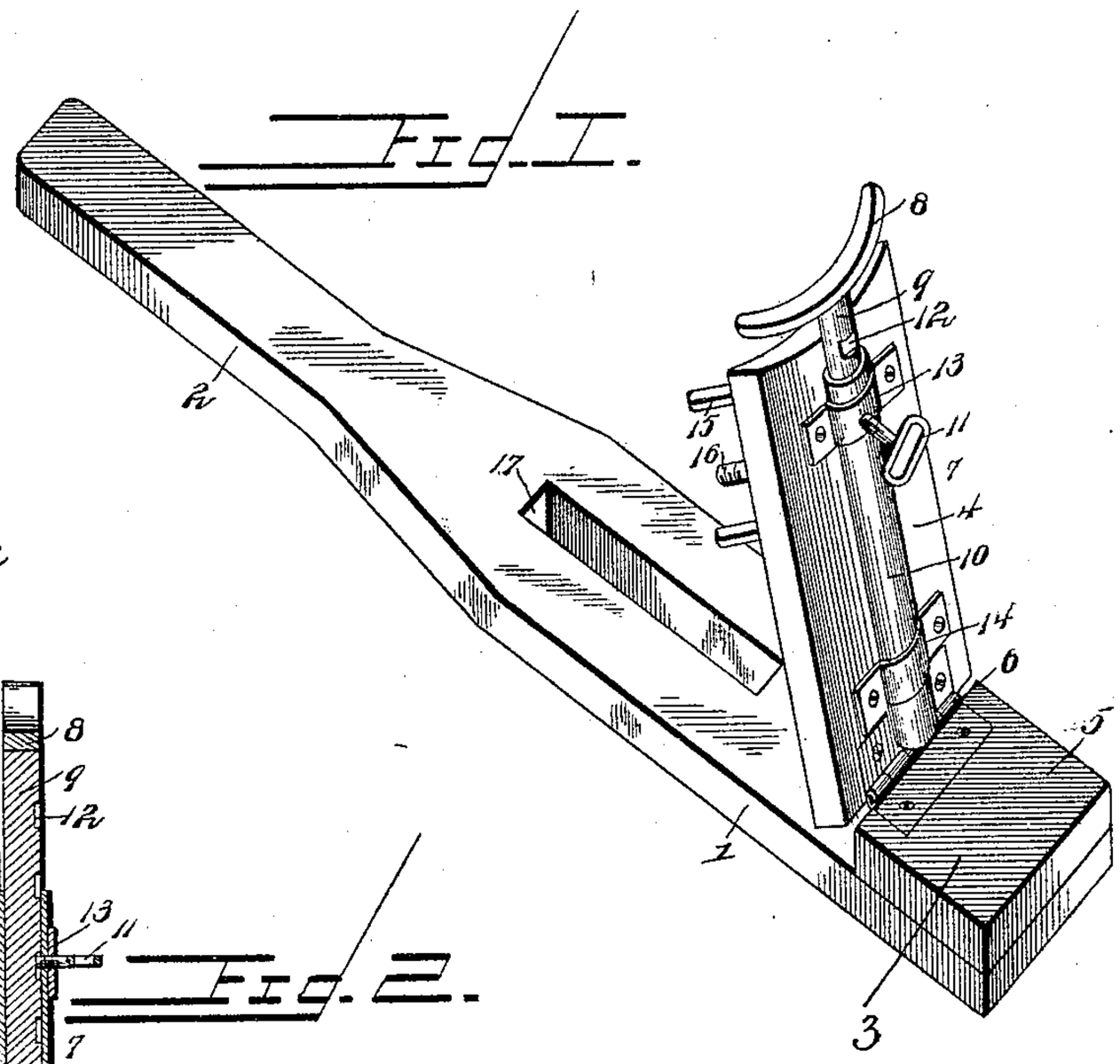


Fig. 2.

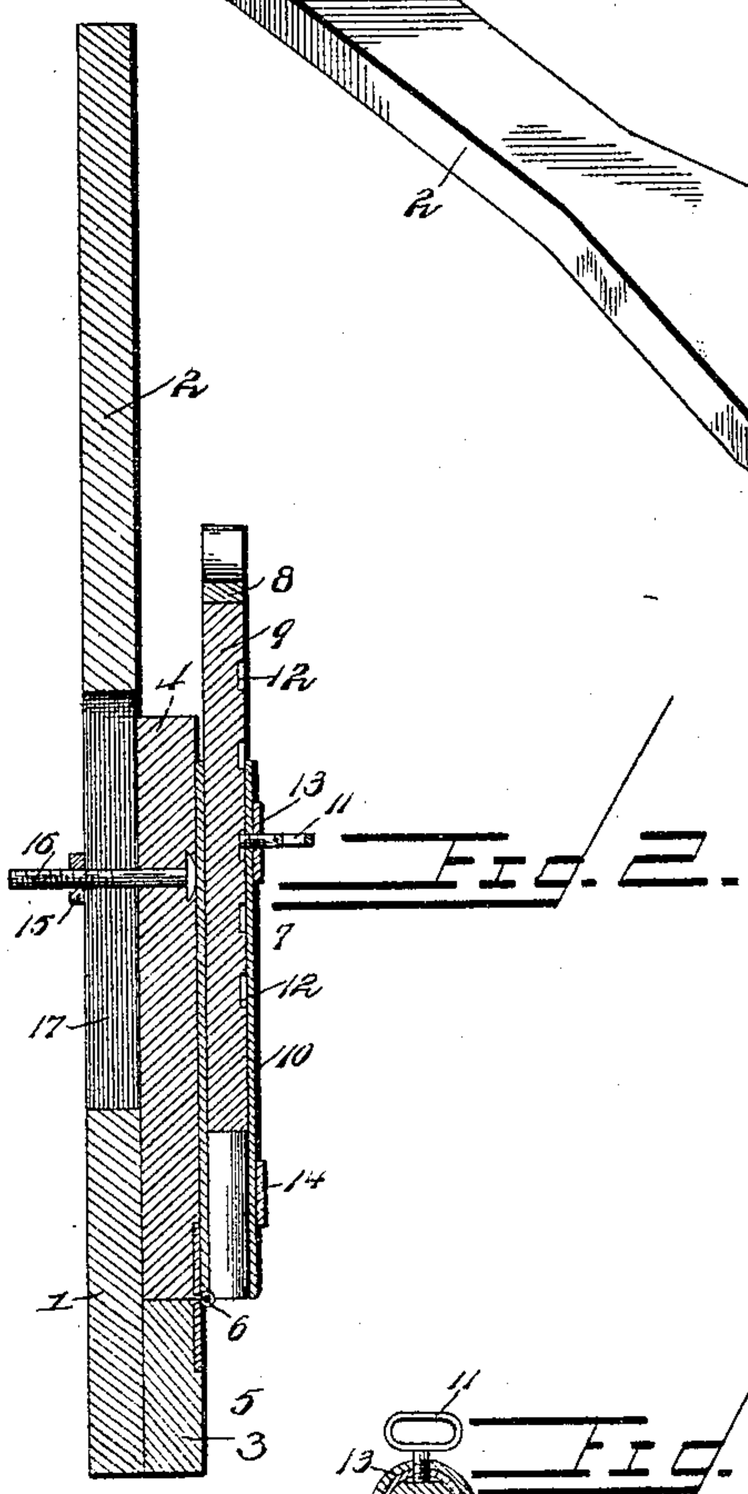


Fig. 3.

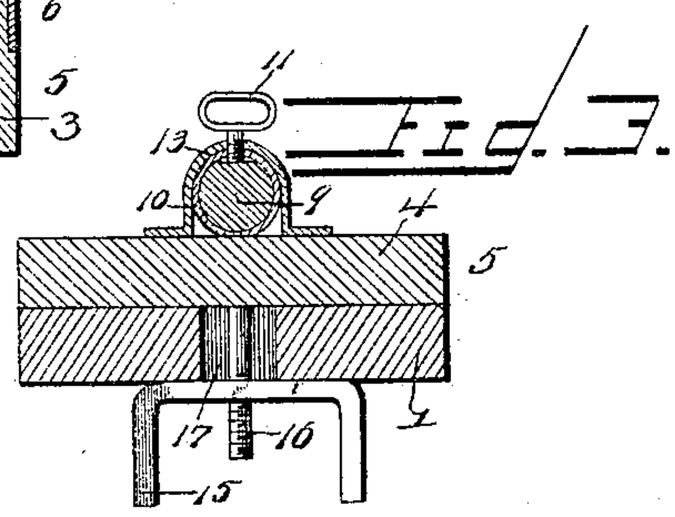
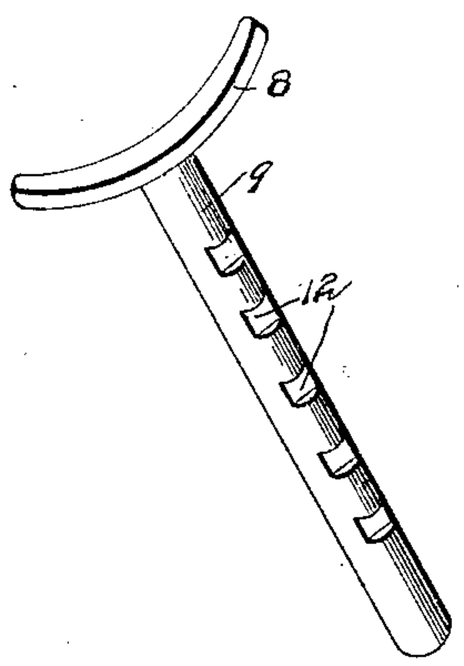


Fig. 4.



Witnesses
R. A. Shepard
T. F. J. Riley

William H. Newbill Inventor
By Their Attorneys,
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UNITED STATES PATENT OFFICE.

WILLIAM H. NEWBILL, OF TREZEVANT, TENNESSEE.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 611,703, dated October 4, 1898.

Application filed May 11, 1898. Serial No. 680,373. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. NEWBILL, a citizen of the United States, residing at Trezevant, in the county of Carroll and State of Tennessee, have invented a new and useful Lifting-Jack, of which the following is a specification.

The invention relates to improvements in lifting-jacks.

The object of the present invention is to improve the construction of lifting-jacks and to provide a simple, inexpensive, and efficient device adapted for enabling the wheels of wagons and other vehicles to be readily lifted and removed sufficiently for greasing an axle without necessitating the operator even taking hold of the wheel.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a lifting-jack constructed in accordance with this invention, the hinged standard being arranged at an angle to the lever. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the adjustable hub-support.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a lever having its upper portion 2 shaped to form a handle and provided at one side of its lower portion with a horizontal portion 3, to which is hinged a standard 4, adapted to receive the hub of a wheel when the lever is arranged at an angle to it, as illustrated in Fig. 1 of the accompanying drawings, whereby when the said lever is raised to a vertical position the wheel will be lifted clear of the ground. The horizontal shoulder 3 preferably consists of a block 5, secured to the lever at one side thereof; but it may be formed by any other suitable means.

The standard 4, which is connected at its outer face to the block 5 by a hinge 6, carries an adjustable hub-supporting device 7, consisting of a curved head or yoke 8 and a vertical rod or stem 9, arranged in a tubular guide 10 and secured at any desired adjustment by a clamping-screw 11. The shank or stem of the hub-support is provided at intervals with recesses 12, adapted to be engaged by the inner end of the clamping-screw, which is mounted in a perforation of an upper guide or strap 13. The tubular guide, which forms a housing for the stem or shank of the support, is secured to the standard by the upper strap 13 and a lower strap 14, and the upper strap and the guide are provided with a threaded perforation to receive the clamping-screw.

In lifting and partially removing a wheel for greasing the axle the axle-nut is first taken off and the standard is arranged at an angle to the lever, and the hub-support is adjusted to bring it beneath the hub of the wheel, which is lifted clear of the ground by swinging the lever to a vertical position. The lever is locked to the standard by a threaded button or nut 15, mounted on a threaded stem 16 and adapted to be turned transversely of a longitudinal slot 17 of the lever, as clearly shown in Fig. 3 of the accompanying drawings. The threaded stem or screw 16 extends horizontally from the standard when the latter is in a vertical position, and it may be mounted on the same in any suitable manner, and the slot, which extends longitudinally of the lever, is adapted to permit the threaded button or nut to pass through it and to be given a quarter-turn to lock the parts together. The button or nut is provided with a central opening to receive the screw or stem, and its terminals are bent outward at right angles to form arms whereby the nut or button may be readily grasped.

When the hub is arranged upon the support and the lever is in a vertical position, the latter is adapted to be drawn outward and will carry the wheel with it, so that the latter may be removed sufficiently to enable the axle to be readily grasped. The wheel may be moved outward and inward by the device without necessitating the operator touching the wheel.

The invention has the following advantages: The lifting-jack, which is simple and comparatively inexpensive in construction, possesses great strength and durability and

is capable of ready adjustment to accommodate the wheel to be operated on, and it will enable a wheel to be lifted clear of the ground and moved inward and outward sufficiently to grease the axle and replace the wheel without necessitating the operator touching the axle.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

What I claim is—

1. A device of the class described comprising a lever provided with a longitudinal slot, a standard hinged to the lever at a point between the ends thereof and adapted to receive a hub, and a pivoted button carried by the standard and arranged to extend through the slot of the lever and adapted to be turned transversely thereof, whereby the standard is secured to the lever, substantially as described.

2. A device of the class described, comprising a lever, a standard hinged to the lever, a tubular guide provided with straps and secured to the standard, a hub-supporting device having a stem or shank arranged in the tubular guide, said hub-supporting device having a concave upper face, and a clamping-screw mounted on the guide and engaging the stem or shank, substantially as described.

3. A device of the class described, comprising a lever provided with a longitudinal slot and having a block at one side forming a shoulder, a standard hinged to the upper edge of the block and adapted to support a hub, a threaded stem extending from the standard and adapted to project through the slot of the lever, and a threaded nut or button mounted on the stem and arranged to pass through the slot and adapted to be turned transversely of the same, substantially as described.

4. A device of the class described comprising a lever provided with a longitudinal slot, a standard adapted to support a hub and hinged to the lever between the ends thereof, a stem mounted on the standard and arranged to extend through the slot of the lever, and a button mounted on the stem and adapted to be turned transversely of the slot of the lever to engage the latter, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM H. NEWBILL.

Witnesses:

N. L. MONTGOMERY,

MORAN IRVINE.