(No Model.)

W. R. WILCOX.

WAGON JACK.

No. 568,468. Patented Sept. 29, 1896.

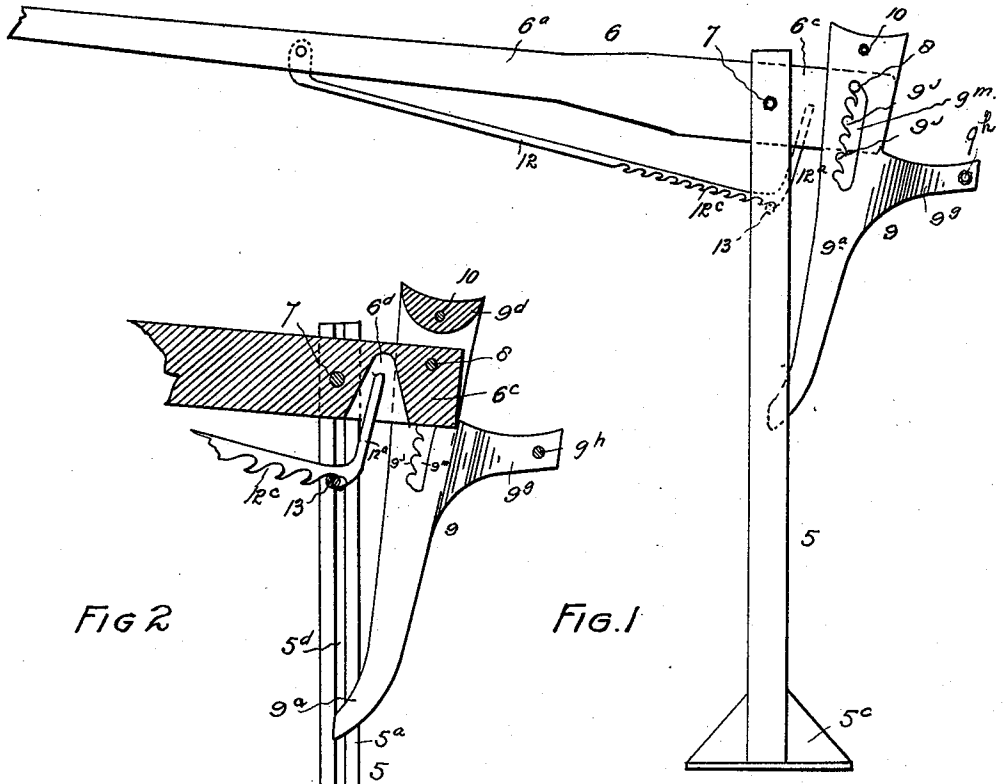

FIG. 1

FIG 2

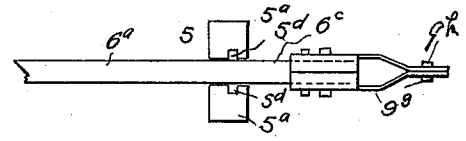

FIG. 3

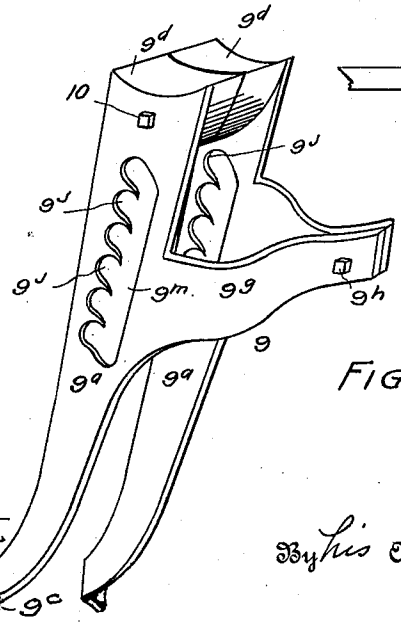

FIG. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM R. WILCOX, OF STEAMBOAT SPRINGS, COLORADO.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 568,468, dated September 29, 1896.

Application filed March 2, 1896. Serial No. 581,610. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RILEY WILCOX, a citizen of the United States of America, residing at Steamboat Springs, in the county of Routt and State of Colorado, have invented certain new and useful Improvements in Wagon-Jacks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in wagon-jacks; and it consists of the features hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawings, in which is illustrated an embodiment thereof.

In the drawings, Figure 1 is a side elevation of my improved device. Fig. 2 is a fragmentary vertical section taken through the center of the device, cutting the lever. Fig. 3 is a fragmentary top or plan view of the device. Fig. 4 is a perspective view of the vertically-movable lifting-jaw shown on a larger scale.

Similar reference-characters indicate corresponding parts in the views.

Let the numeral 5 designate a suitable upright frame or standard which, as shown in the drawings, is composed of two vertical bars 5^a, connected at the bottom by a suitable base 5^c. The bars 5^a of the standard are provided with vertical guide-grooves 5^d, formed on their inner or adjacent surfaces.

The lever 6 is fulcrumed on the standard 5 by means of a pin 7, which passes through coinciding apertures formed in the lever and the bars 5^a, the lever being located intermediate the bars. To the short arm 6^c of the lever, or that shown to the right of the standard in the drawings, is attached the lifting-jaw 9 by means of a pin 8. This jaw, as shown in the drawings, is composed of two twin parts 9^a, having laterally-projecting lips 9^c, formed on their lower extremities. Their upper extremities are provided with interiorly-projecting lugs or webs 9^d, which meet midway between the two jaw parts, which are connected by a bolt 10, passing through said lugs. Each twin part of the jaw 9 is provided with a projection 9^g. These two projections meet and are suitably connected, as by a rivet 9^h. The projections 9^g form a nose located at a suitable distance below the top of the jaw. This distance is supposed to equal the difference in height between the front and rear axles of the wagon, since the nose is intended to engage the front axle and the top of the jaw the rear axle when the device is in use. The short arm 6^c of the lever passes between the twin parts of the jaw, which are sufficiently separated for the purpose.

The pin 8 is adapted to engage a series of notches 9^j, formed in the parts 9^a of the jaw. To one side of these notches is formed a slot 9^m, of sufficient width to permit the pin 8 to pass easily from one notch to another during the operation of adjustment. The object of this adjustment is to adapt the device to wagons of different sizes or having their axles located at various heights from the ground or surface upon which the device is placed. The lips 9^c of the jaw engage the vertical grooves 5^d, formed in the bars 5^a of the standard.

During the use of the jack, as in lifting a wagon, the jaw is locked in the desired position by means of a rod 12, having one extremity pivoted on the long arm of the lever, while the other extremity is hook-shaped, as shown at 12^a, and enters a recess 6^d, formed in the short arm of the lever. This rod is provided with ratchet-teeth 12^c, so formed as to engage a pin 13, fast in the standard, and lock the jaw against downward movement under the pressure of the load. This ratchet-rod performs its locking function automatically, since it acts by gravity. To unlock the jaw, the rod is raised sufficiently to disengage the ratchet-teeth 12^c from the pin 13, when the jaw may be lowered at pleasure. The recess 6^d is deep enough to allow the raising of the rod for the purpose stated.

In using the device, the lever is first raised and the jaw lowered to bring the top or the nose, as the case may be, beneath the axle of the vehicle, the ratchet-rod being raised to disengage it from the pin 13. The lever is then moved downward until the axle is raised to the desired position. The ratchet of the rod then engages the pin 13 and locks the jaw and the load in the said position. As the jaw 9 moves up and down it is guided by the

lips 9^c, which engage the grooves 5^d of the standard.

It must be understood that I do not limit the invention to the specific construction shown and described in this application, as I am aware that many modifications may be made without materially changing the function or departing from the operating principles of the mechanism set forth.

Having thus described my invention, what I claim is—

1. In a wagon-jack, the combination of a suitable standard composed of two separated parts having vertical guide-grooves, the movable lifting-jaw having lips engaging the guide-grooves of the standard, the lever fulcrumed on the standard and having its short arm connected with the lifting-jaw, a ratchet-rod attached to the lever, and a suitable stop attached to the standard and adapted to engage the teeth of the ratchet-rod, substantially as described.

2. In a wagon-jack, the combination of a suitable standard having vertical guide-grooves, the lifting-jaw having lips engaging the guide-grooves of the standard, said jaw having a top bearing and a nose forming another bearing located below the top, the lever fulcrumed on the standard and having its short arm attached to the lifting-jaw, and suitable means for locking the jaw in any desired position of adjustment, substantially as described.

3. In a wagon-jack, the combination of the grooved standard, the lifting-jaw having lips engaging the guide-grooves of the standard, said jaw having a top bearing and a nose forming a bearing below the top, the lever fulcrumed on the standard and having its short arm attached to the lifting-jaw, the ratchet-rod movably attached to the lever at one extremity, its opposite extremity being hook-shaped and adapted to enter a recess formed in the lever, and a stop attached to the standard and adapted to engage the teeth of the ratchet-rod, substantially as described.

4. In a wagon-jack, the combination with a suitable standard and the lever fulcrumed thereon, of the lifting-jaw provided with a number of notches adapted to be engaged by a pin attached to the lever, a slot being formed to one side of the notches and of sufficient width to allow the pin to pass from one notch to another, the jaw being provided with a top bearing and a nose forming a bearing below the top, and suitable means for locking the jaw and its load against downward movement, substantially as described.

5. The combination with the standard and the operating-lever fulcrumed thereon, of the lifting-jaw comprising the two parts having lips at their outer extremities, interiorly-projecting lugs meeting at their upper extremities where they are connected, the nose composed of a projection from each twin part, the two parts being suitably separated to receive the operating-lever, to which they are attached, substantially as described.

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

WILLIAM R. WILCOX.

Witnesses:

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H. F. STURDEVANT.