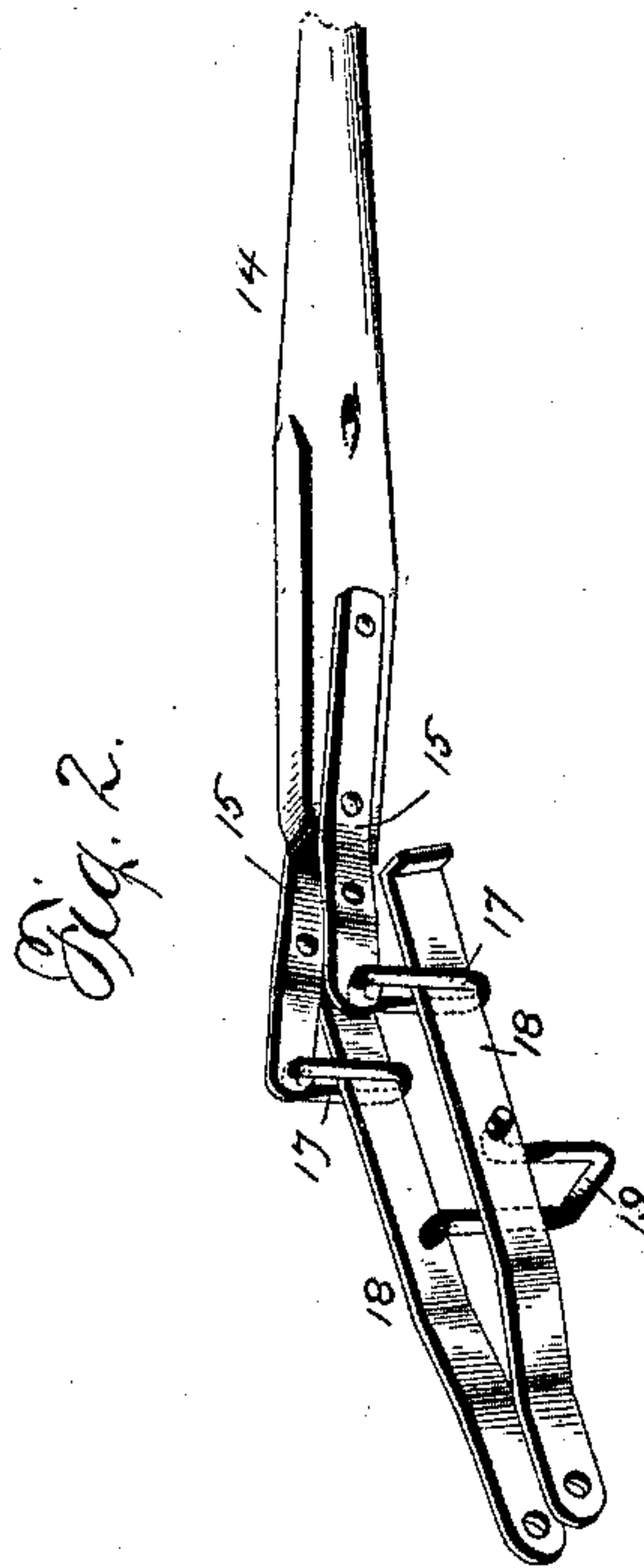
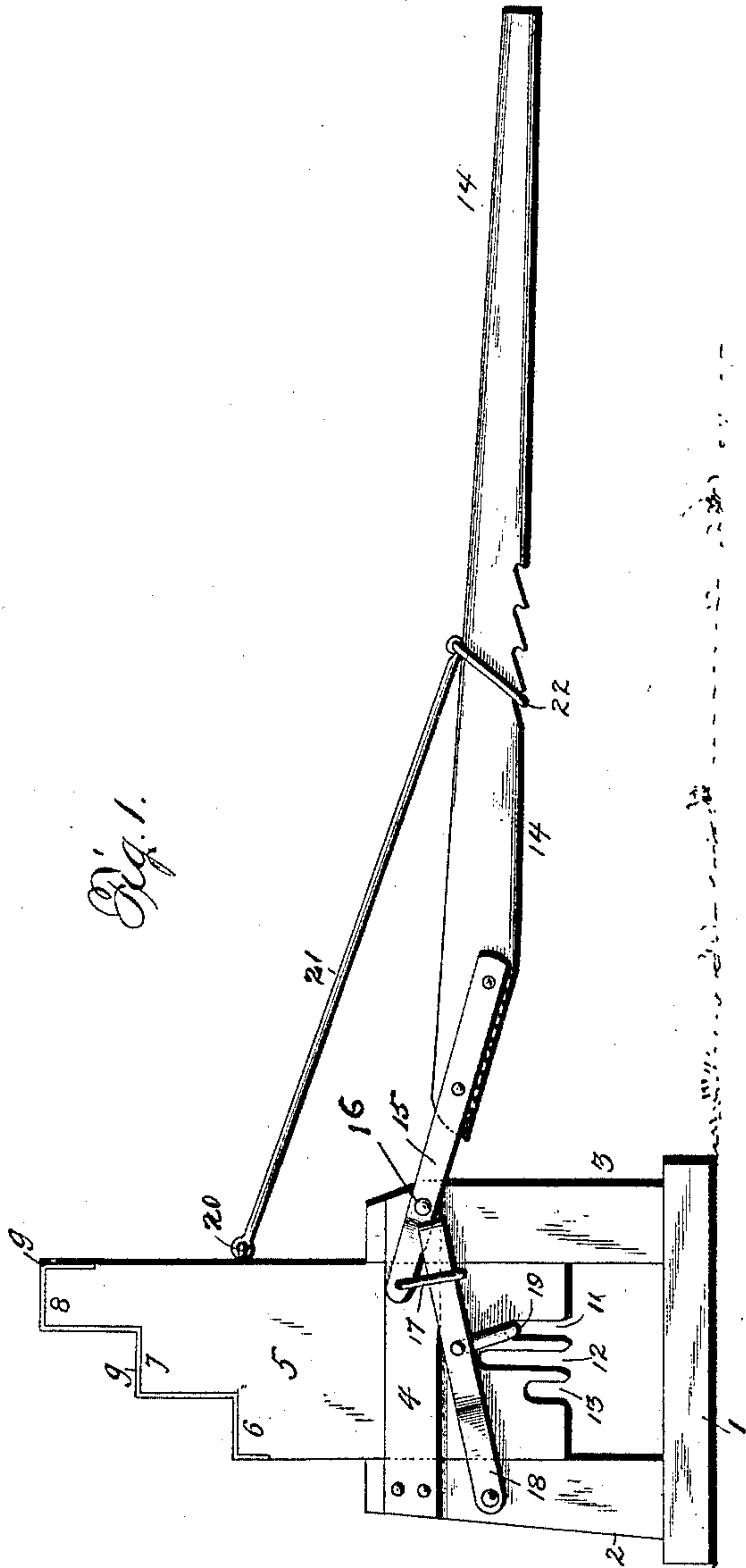


(No Model.)

R. H. WILSON.
WAGON JACK.

No. 440,678.

Patented Nov. 18, 1890.



Witnesses
Chas. Williamson
E. E. Hart

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UNITED STATES PATENT OFFICE.

ROBERT H. WILSON, OF LAY, COLORADO.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 440,678, dated November 18, 1890.

Application filed August 8, 1890. Serial No. 361,466. (No model.)

To all whom it may concern:

Be it known that I, ROBERT H. WILSON, a citizen of the United States, residing at Lay, 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 ap-
10 pertains 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.

This invention relates to certain new and
15 useful improvements in wagon-jacks; and it has for its object to provide a simple, cheap, and powerful device of the character mentioned.

The device embraces rigid guide-standards,
20 a lifting-bar, a system of compound levers, and a movable loop for engaging a series of notches at the bottom of the plate to adapt the jack to operate upon objects unusually low down, and adapting it also for use upon
25 objects above the usual height of wagon-axles.

The improvement further consists in the various details and combinations of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then spe-
30 cifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the figures of reference marked thereon, form a part of this specification, like figures of reference
35 indicating like parts throughout the several views, and in which drawings—

Figure 1 is a side elevation of the device with the lever down and the lifting-bar at the extremity of its upward throw. Fig. 2 is a
40 perspective view of the compound lever and pivoted loop for elevating the lifting-bar.

Reference now being had to the details of the drawings, 1 is the base, from which rise the rigid standards 2 and 3, suitably braced
45 at the top by metal strips 4. Between the standards and bracing-strips is mounted for vertical reciprocation the lifting-bar 5, provided at its upper end with a series of receding steps 6, 7, and 8. The body of the lifting-
50 bar is made, preferably, of wood, and the steps which engage the wagon-axle are shod with

metal, as shown at 9. At its lower end the lifting-bar is provided with a series of notches 11, 12, and 13, of varying depths, for a purpose to be hereinafter described. The hand-
55 lever 14 is provided with rigid side plates 15, pivoted at 16 to the standard 3, and the side plates which form the bifurcated end of the hand-lever 14 carry at their inner ends loops
60 17, which engage the moving ends of the secondary levers 18, which are pivoted upon the standard 2.

19 is a swinging loop pivoted at its extremities in the secondary levers 18, and adapted to engage whichever one of the notches 11, 12, 65 or 13 is desired. As ordinarily used with medium-sized wagons the loop will engage the notch 11. When the axle or other object to be lifted is too low to be engaged by the jack with the loop in notch 11, the lifting-bar
70 will be raised and the loop swing on its pivots until made to engage with the deeper notch 12. Upon the other hand, if the object is unusually high the notch will be made to engage the shallow notch 10. In this way the
75 device can be easily and readily adjusted as required.

Pivoted at 20 is an arm 21, which at its other end carries a loop 22, surrounding the hand-lever 14. Upon the under side of the
80 hand-lever is a series of serrations or notches with which the loop engages to hold the object operated upon at any desired elevation.

Having thus described my invention, what I claim to be new, and desire to secure by Let-
85 ters Patent, is—

1. In a wagon-jack, the combination of the lifting-bar with the hand-lever pivoted to the standard 3, the secondary levers pivoted to the opposite standard 2 and engaged at their
90 free ends by the loops 17, and the loop 19, carried by the secondary levers and adapted to engage the lower end of the lifting-bar, substantially as described, and for the purpose specified.
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2. In a wagon-jack, the combination of the lifting-bar provided at its lower end with a series of notches of varying depths, with the hand-lever pivoted to the standard 3, the secondary levers pivoted to the opposite stand-
100 ard 2 and engaged at their free ends by the loops 17, and the loop 19, carried by the sec-

ondary levers and adapted to engage with the notches in the lower end of the lifting-bar, substantially as and for the purpose specified.

3. The combination, with the lifting-bar
5 provided at its lower end with a series of notches of varying depth, of the hand-lever pivoted to the standard 3, the secondary levers pivoted to the standard 2 and engaged at their free ends by the loops 17, the loop 19,
10 carried by the secondary levers and adapted to engage the notches in the lower end of the lifting-bar, and the arm 21, pivoted at one of

its ends to the lifting-bar and at its opposite end provided with a loop adapted to surround the operating-lever and engage with notches upon the underside of the lever, substantially as shown, and for the purpose specified.

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

ROBERT H. WILSON.

Witnesses:

JOHN S. LEDFORD,
C. E. CASTLE.