

(No Model.)

D. A. McTAVISH.
WAGON JACK.

No. 465,386.

Patented Dec. 15, 1891.

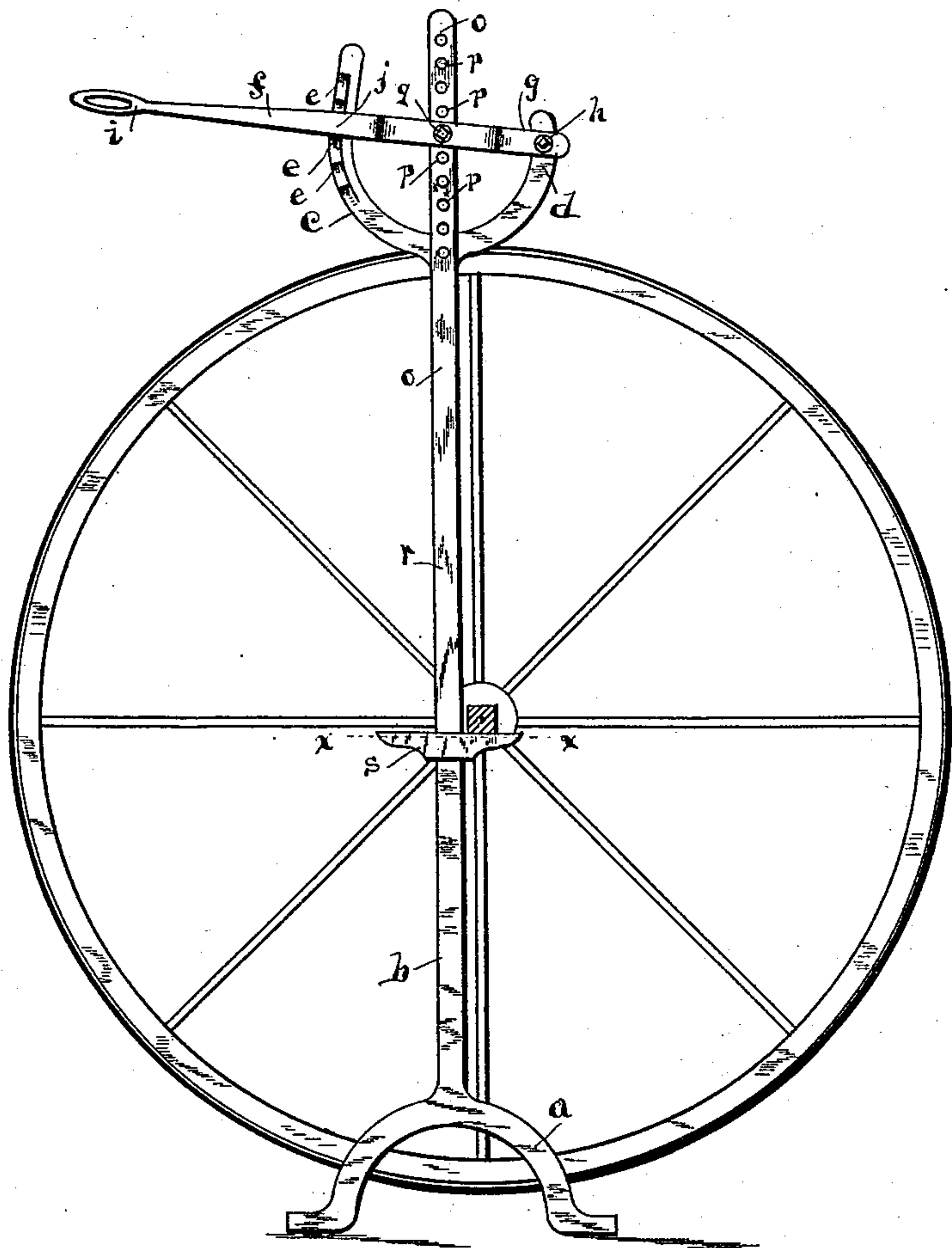


Fig. 1.

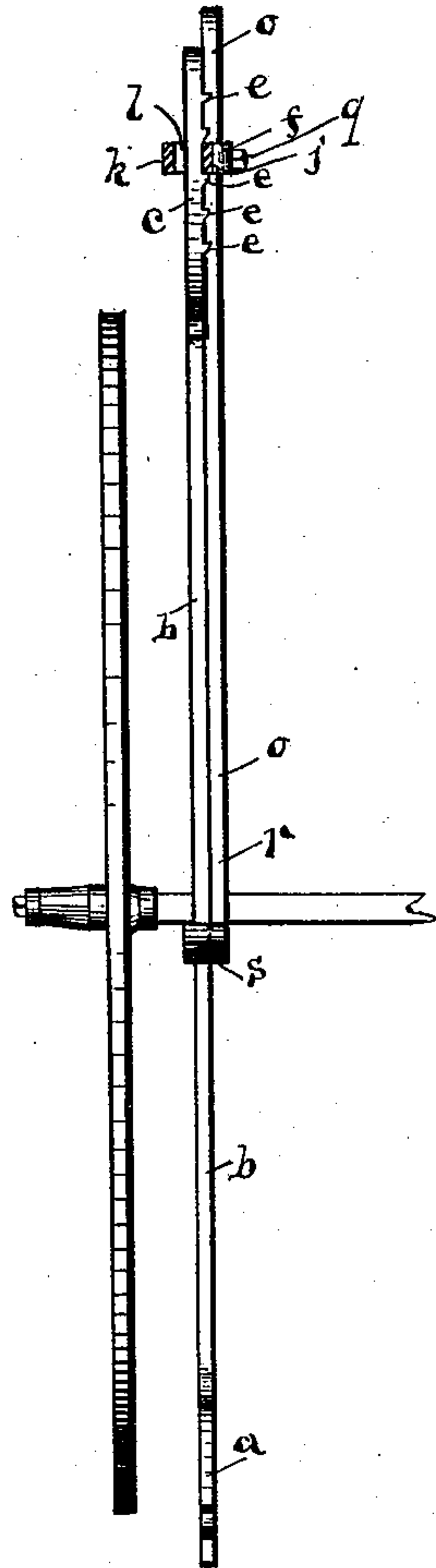


Fig. 2.

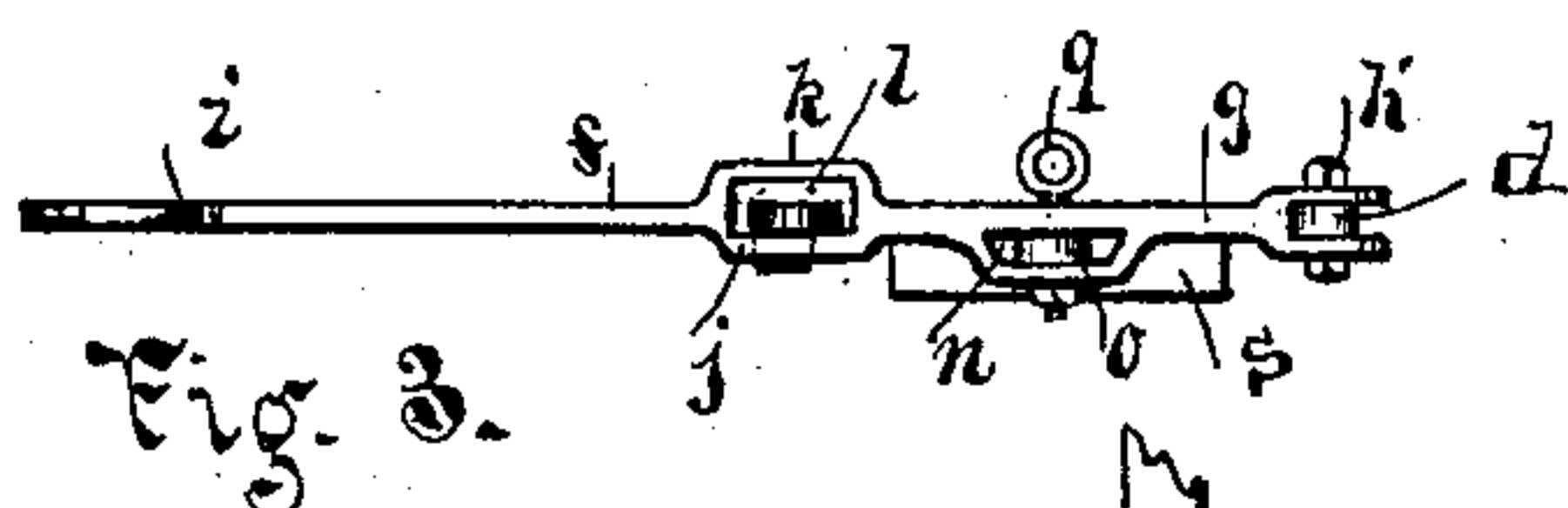


Fig. 3.

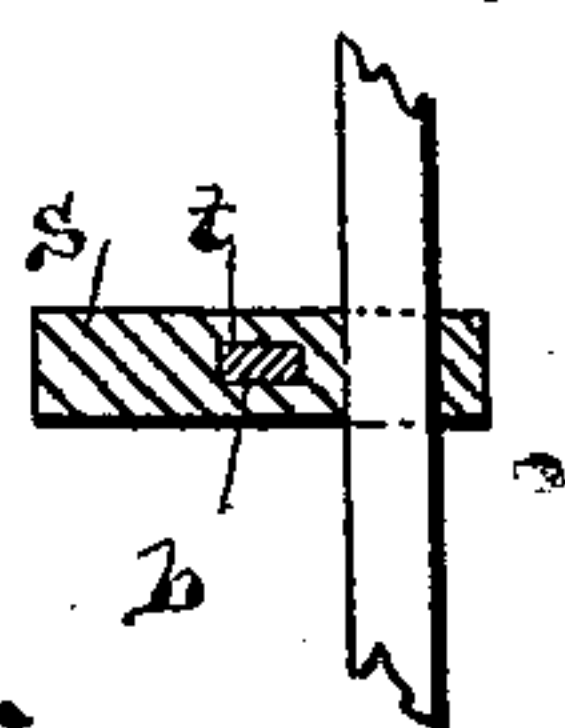


Fig. 4.

Attest:
Geo. P. Thomas.
J. M. Maxon.

Inventor:
Duncan A. McTavish.
By Jas E. Thomas Atty.

UNITED STATES PATENT OFFICE.

DUNCAN A. MCTAVISH, OF WEST BAY CITY, MICHIGAN, ASSIGNOR OF ONE-HALF TO JOHN A. GREGG, OF SAME PLACE.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 465,386, dated December 15, 1891.

Application filed May 11, 1891. Serial No. 392,317. (No model.)

To all whom it may concern:

Be it known that I, DUNCAN A. MCTAVISH, a citizen of the United States, residing at West Bay City, in the county of Bay and State of Michigan, have invented certain new and useful Improvements in Wagon-Jacks, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to improvements in wagon-jacks; and it consists in the combination, arrangement, and construction of the parts with the object of producing a device for lifting wagons which can be used by a person standing at the outer side of the wheel, whereby the trouble of passing behind the wheel for adjusting and operating the jack is avoided.

Another object of the invention is to construct a light and durable wagon-jack which, while being effective and easy of operation, is at the same time cheap and simple in its adjustment and operation.

My improved wagon-jack is illustrated in the accompanying drawings, in which the same letters of reference will be found indicating the same parts or elements throughout the several views.

Figure 1 represents a lateral side view in elevation of my improved wagon-jack, showing the parts in position when lifting a wheel and with the axle in transverse section. Fig. 2 is a rear side view of the same. Fig. 3 is a top or plan view of the same. Fig. 4 is a section of Fig. 1, taken at $x x$.

35 a represents a foot-piece which rests upon the floor or ground, and b is a vertical standard with its lower end permanently secured to the foot-piece and to the upper end of the standard is permanently secured the front and rearwardly-extending arms c and d , the outer portions of the arms being also curved upwardly. The arm c is provided upon one side with ratchet teeth or notches e .

45 f is a lever with one end g pivoted to the upper end of the arm d by a bolt h , the end being provided with a fork which extends on both sides of the arm, while the opposite end of the lever, extending to a suitable distance beyond and beside the arm c , is provided with a handle i , while the portion j , passing the

arm c , is arranged to engage with the teeth e , and this part j is provided with a guard-piece k , which extends across the opposite side of the arm, leaving a sufficient opening l between the arm and the guard to allow the lever to pass the notches or teeth e , when required. The central portion of the lever between the arms c and d is provided with an elongated vertical opening n , and through this opening 60 is passed the upper end portion of a vertical bar o , which is provided with a series of openings p , and a pin q is passed through suitable openings in the lever, and also through one of the openings p for retaining the parts 65 in position. The lower portion r of the bar is extended downwardly beside the standard b , and is provided on its lower end with a transverse lifting-piece s , having a vertical opening t , through which passes the stand- 70 ard, the opening being arranged so that the piece will easily move upon the standard, but still be retained against lateral movement.

In operating the device the lever is released from the notches e and allowed to move downward until the inner side of the guard k rests upon the curve of the arm. The vertical bar o is then adjusted to bring the lifting-piece s beneath the axle carrying the wheel to be removed or operated upon. The pin q is then 80 passed through the required opening p , and the handle i is then raised, which also lifts the vertical bar and the piece s and the axle to the required height. The lever is then moved laterally and the portion j engaged 85 with the proper notch e , and the parts will then be retained for manipulating the wheel, as desired.

It will be noticed that the construction shown allows the parts to be operated by 90 reaching over the wheel, as the adjusting-pin q may be manipulated for adjusting the lifting-piece, as also may the lever be operated by raising or lowering the axle with great ease and rapidity by the workman stand- 95 ing upon the front side of the wheel, so that it is not necessary to pass behind the wheel in order to operate the jack, and, also, the jack may be placed between the axles, and then after operating upon one axle the jack 100 may be moved directly back and engaged with the other axle without removing the

jack from behind the wheels, whereby a great saving of time and labor is accomplished, besides making a device which is light and easily operated and which can be sold for a low price.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a wagon-jack, of the vertical standard having upon its lower end a foot-piece and provided upon its upper end with outwardly and upwardly extending arms *c* and *d*, the arm *c* being provided with ratchet-teeth *e* on its side face, a lever with one end pivoted to the said arm *d* and with its opposite end extending beyond the arm *c* and en-

gaging with the teeth *e* thereon and provided with a guard-piece *k* behind the arm, a vertical bar having its upper portion pivotally secured to the said lever between the arms and with its lower portion extended downwardly beside the standard and provided with a step or foot-piece *s*, having a vertical opening *t* for the standard, substantially as set forth.

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

DUNCAN A. MCTAVISH.

Witnesses.

JAS. E. THOMAS,
PEARL C. GREGG.