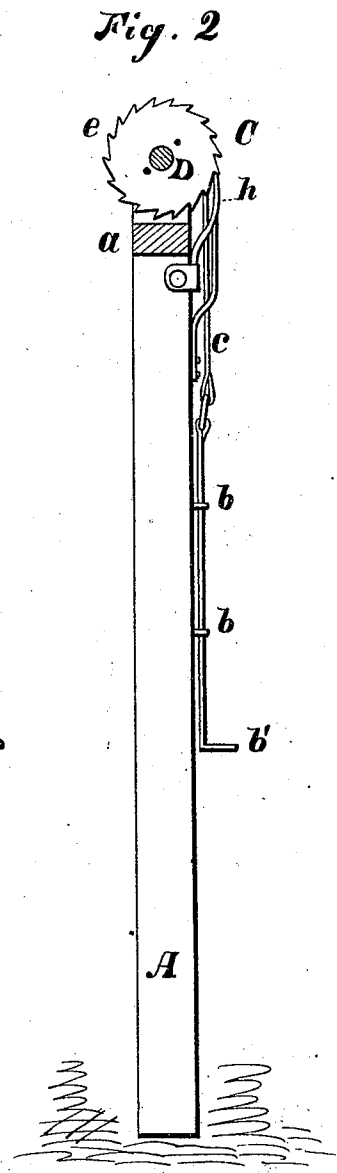
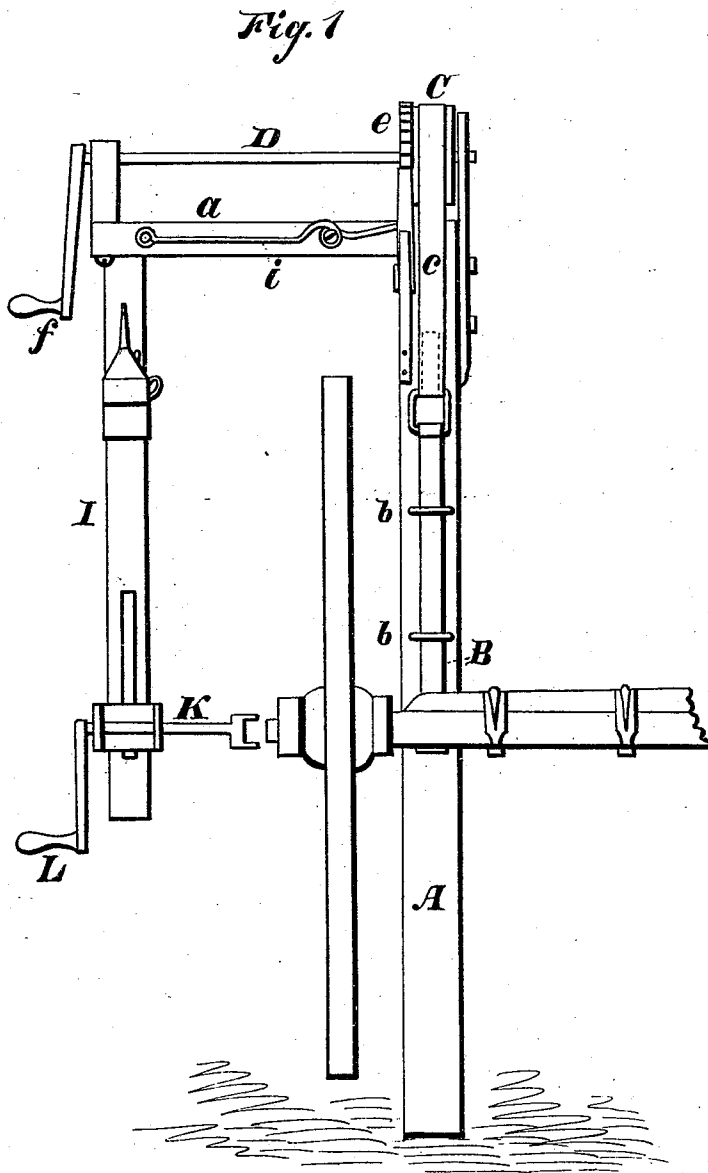


A. J. TSCHANTZ.  
CARRIAGE-JACK.

No. 186,696.

Patented Jan. 30, 1877.



WITNESSES;

Edwin Blackburn  
E. A. Corrie

INVENTOR;

Abraham J. Tschantz  
By Chas B. Mann  
Attorney

# UNITED STATES PATENT OFFICE.

ABRAHAM J. TSCHANTZ, OF ORRVILLE, OHIO.

## IMPROVEMENT IN CARRIAGE-JACKS.

Specification forming part of Letters Patent No. **186,696**, dated January 30, 1877; application filed January 9, 1877.

*To all whom it may concern:*

Be it known that I, ABRAHAM J. TSCHANTZ, of Orrville, in the county of Wayne and State of Ohio, have invented a new and useful Improvement in Carriage-Lifters, as fully set forth in the following specification and accompanying drawing, in which—

Figure 1 is a side view of my improved lifter or jack applied to the wheel of a carriage. Fig. 2 is a transverse view of the jack.

The object of my invention is to provide a carriage lifter or jack that can be readily operated by a person from the outer side of the wheel, standing in a position for conveniently removing the nut and wheel and replacing the same, lowering the wheel and removing the jack, all without having to pass around to the inner side of the wheel.

A represents a wooden standard, to which the arm *a* is rigidly secured. The sliding lifter B works up and down on the standard in two staples, *b*. Attached to the lifter is a leather strap, *c*, which winds on the drum C, which, with the ratchet-wheel *e* and crank *f*, are secured to the shaft D. The pawl *h*, in connection with the ratchet, prevents the strap from unwinding. *i* is a pivoted lever to release the pawl. The lug *b'* supports the axle. These constitute the operating parts of the lifting-jack; but for convenience of removing the nut that retains the carriage-wheel, a strip or rod, I, is pivoted at the end of arm *a*, and suspends on the outer side of the wheel, and has

attached a wrench, K, and crank L, which is arranged to slide up and down on the strip or rod, so as to be adjusted to the nut that retains the wheel.

My lifter can be readily used to remove the wheels of either high or low carriages without the trouble of adjusting special parts to adapt it to said varying heights, as required in many carriage-jacks.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The standard A, lifter B, strap *c*, arranged substantially as shown, and a winding-drum, ratchet-wheel, pawl, and crank, all operating together for the purpose described.

2. A carriage-jack consisting of a standard, A, extended arm *a*, lifter B, strap *c*, drum C, shaft D, and a crank, ratchet-wheel, and pawl, substantially as shown and described, by which an operator is enabled to stand on the outer side of wheel while raising, removing, replacing, and lowering the same.

3. In a carriage-jack having an arm extending over the wheel, the strip or rod I, pivoted to the arm, and suspending to outer side of wheel, with a combined wrench and crank adjustable vertically, for the purpose of removing the nut that retains the wheel.

ABRAHAM J. TSCHANTZ.

Witnesses:

JAS. B. TAYLOR,  
C. D. SWAN.