

(No Model.)

O. W. BOWEN.
CARRIAGE JACK.

No. 524,701.

Patented Aug. 21, 1894.

Fig. 1.

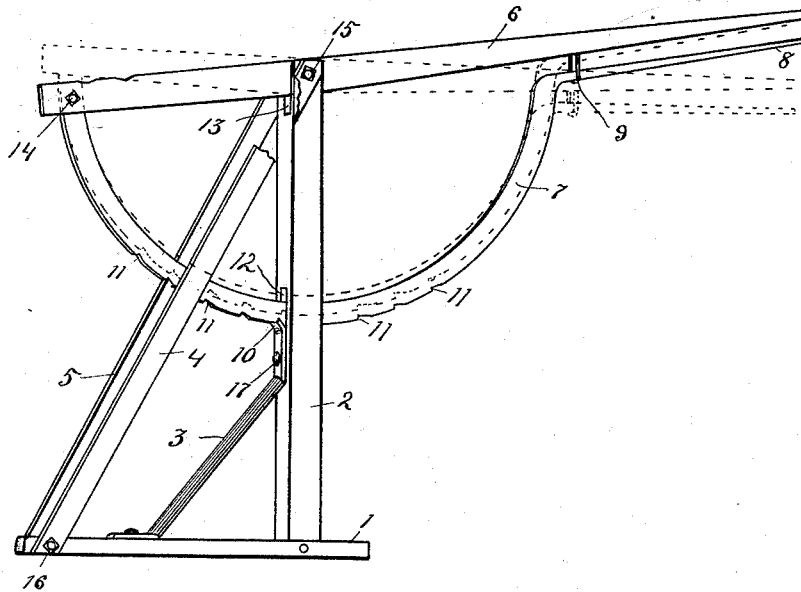
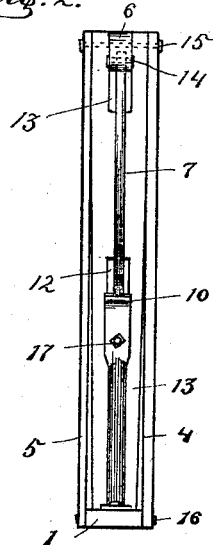


Fig. 2.



WITNESSES:

Stall. G. Burns.
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Owen W. Bowen INVENTOR:

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UNITED STATES PATENT OFFICE.

OWEN W. BOWEN, OF ALBION, INDIANA.

CARRIAGE-JACK.

SPECIFICATION forming part of Letters Patent No. 524,701, dated August 21, 1894.

Application filed February 2, 1894. Serial No. 498,840. (No model.)

To all whom it may concern:

Be it known that I, OWEN W. BOWEN, a citizen of the United States, residing at Albion, in the county of Noble, in the State of Indiana, have invented certain new and useful Improvements in Carriage-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in wagon or carriage jacks, and is specially adapted for use as a carriage-jack.

The object of my invention is accomplished by the mechanism illustrated in the accompanying drawings in which similar figures of reference indicate corresponding parts throughout the different views.

Figure 1 is a view in perspective of my improvement showing the relative arrangement of the different parts and the manner in which the retaining pawl engages the semicircular rack-bar. Fig. 2 is a front view in elevation of the same, showing the central slot and the bifurcated head of the vertical standard and also the arrangement of the parallel oblique braces adapted to stay the said standard.

The upright standard 2, of any suitable material, preferably of wood, and of proper height and strength, is rigidly mounted in any proper manner upon one end of the base or base-plate 1, at right angles thereto, and is firmly secured in such position by the parallel oblique braces 4 and 5, which are properly secured at one end to the top of the said standard and at the other end to the forward end of the said base-plate 1. The said vertical standard 2 is further strengthened in its upright position by the metallic oblique brace 3, secured at one end to the front face thereof and at the other end to the said base-plate. The upper end of the said brace 3 is bent or curved forward from the standard to which it is secured, as seen in Fig. 1, and provided with a sharpened pawl 10 adapted for engagement with the convex perimeter of the semicircular rack-bar hereinafter described.

The upright standard 2 is provided at its

upper end with a bifurcated head in which is pivotally mounted the hand-lever 6, on the pivot 15, being preferably made to pass through the upper ends of the parallel braces 4 and 5, as seen in Fig. 2.

The hand-lever 6, preferably of wood to secure lightness, and of any desired form, has a rearwardly projecting handle and is provided with a suitable guide or staple 9 for the purpose hereinafter mentioned.

The semicircular rack-bar 7, preferably of metal, is loosely mounted in a vertical slot 12 in the upright standard 2, with its forward end pivotally secured in a proper manner to the forward end of the hand-lever 6, and the other end mounted in a guide or retaining staple 9. The said rack-bar 7 has a radial rearwardly projecting portion or handle 8 substantially parallel to the handle of the said hand-lever, and has its convex perimeter provided with a series of notches 11 adapted for a locking engagement with the retaining pawl 10 on the brace 3. The notches 11 are so constructed and arranged that the pawl 10 passes over them readily when the operating handle is being lowered, as in elevating the axle, but they form a locking engagement with said pawl when the said operating handle is being raised, or a weight is placed upon the forward end of the operating lever 6, thereby rigidly sustaining the said lever in any desired position.

The parallel braces 4 and 5 are secured at one end to the forward end of the base plate 1 and at the other end to the top of the said vertical standard 2. It is evident that the said parallel braces may be entirely omitted, though I prefer the construction shown, as they give strength and rigidity to the said standard.

The manner of using and the mode of operation of my invention thus described are as follows: When the operator desires to elevate a wagon or carriage axle for the purpose of removing the wheel to grease the spindle or for repairs, he grasps my improved jack by the handle with one hand, inclosing in said hand at the same time the rearwardly extended portion 8 of the said rack-bar thereby freeing the said rack-bar from its engagement with the holding pawl 10, and when thus disengaged the vertical standard with its base-

plate and strengthening braces will be free to swing into any desired position relative to the hand-lever on the pivot 15. The operator then releases his hold upon the handle of the rack-bar, permitting it to rest upon the pawl 10, thereby holding the desired position, he can then readily and conveniently place my improvement in position with the forward end of the hand-lever 6 beneath the axle.

10 The holding pawl 10 will then automatically engage the nearest forward notch 11 and be firmly and securely held in that position by the weight of the said axle. When the wagon or carriage axle is to be lowered and the jack removed, the operator again grasps the hand-lever with one hand inclosing in said hand at the same time the rearward portion 8 of the rack-bar, then by bearing down on the lever he releases the said rack-bar of its weight,

20 and by closing the hand frees it from its engagement with the holding pawl 10. The operator then completes the operation by permitting the rear end of the said lever to rise. All of which may be easily done by reaching over the wheel instead of being obliged to go between the wheels as in the jacks now in use.

25 It is evident that the manipulation of my invention, thus described, can all be readily accomplished by one hand of the operator, thus leaving the other hand free to steady or handle the wheel.

30 The guide or staple 9 may be entirely omitted without affecting the character of my invention, though I prefer its use, as it serves to keep the said handle of the said rack-bar

35 to keep the said handle of the said rack-bar

immediately below and parallel with the hand-lever at all times.

It is apparent that the pawl 10 may be entirely separate and detached from the said oblique brace 3, though it is preferably integral therewith, as shown.

Having thus described my invention and the manner in which the same is to be applied, what I claim as new and useful, and desire to secure by Letters Patent, is—

45 In a carriage jack a vertical standard 2 having a bifurcated head, as shown, in which the operating lever is mounted, and a central vertical slot 12 for the rack-bar, the said standard being rigidly mounted upon a base 1 and stayed by the oblique braces 4 and 5, in combination with a hand-lever 6 pivotally mounted in the bifurcated head of the said standard, as described, a semicircular rack-bar 7 having upon its convex perimeter a series of holding notches, having one end pivotally mounted in the forward end of the said hand lever, and having upon its other end an integral rearwardly projecting handle 8 for operating the same, and the oblique brace 3 whose upper end is adapted to engage the said notches upon the said rack-bar 7, all substantially as described.

Signed by me, at Albion, Noble county, State of Indiana, this 29th day of January, 1894.

OWEN W. BOWEN.

Witnesses:

L. W. WELKER,
WILLIAM TRUMP.