

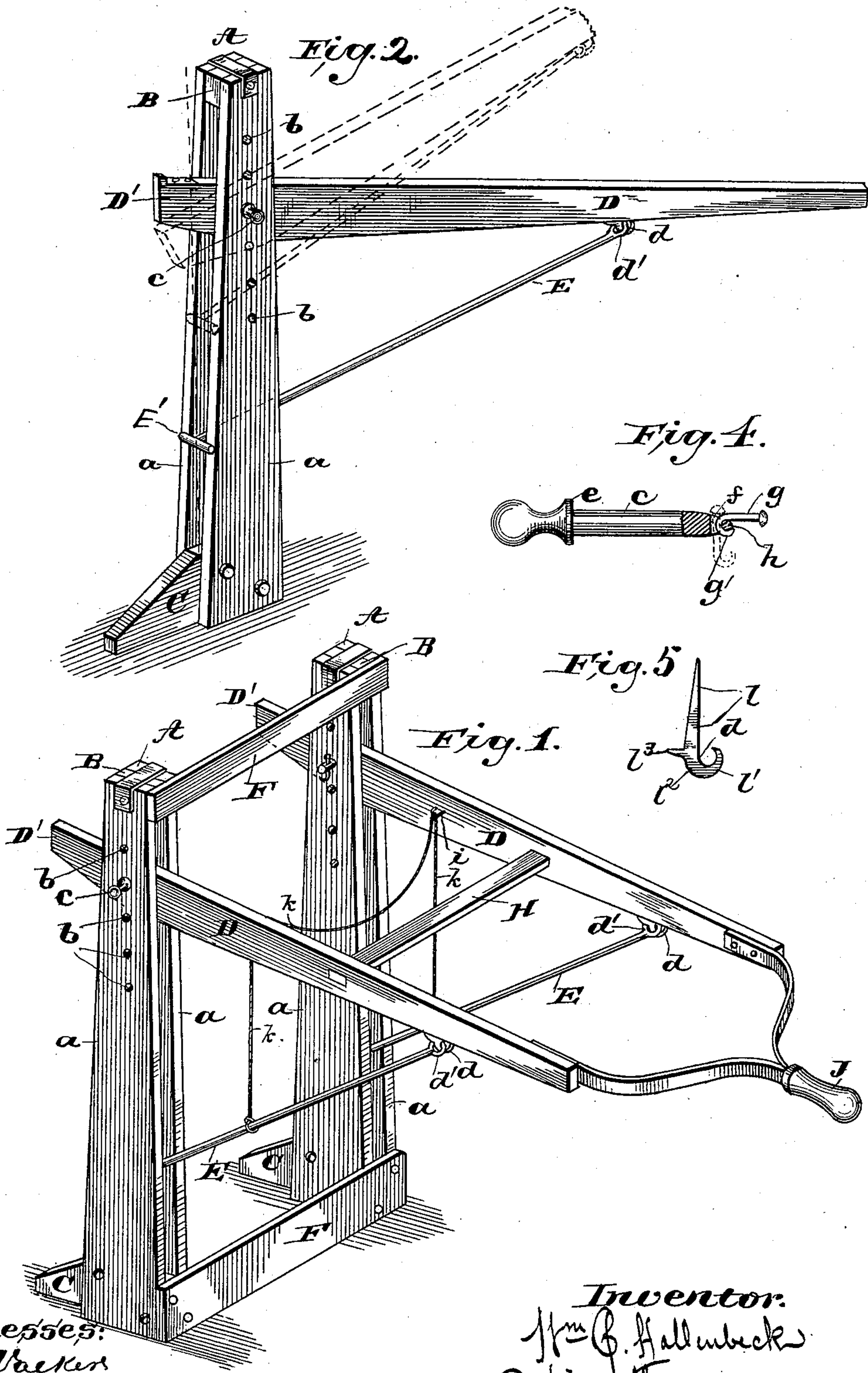
(No Model.)

2 Sheets—Sheet 1.

W. J. HOLLENBECK.
WAGON JACK.

No. 407,529.

Patented July 23, 1889.



Witnesses:
E. W. Baker
S. W. Pitkin

Inventor.
Wm. J. Hollenbeck
By his atty
Whitaker & French

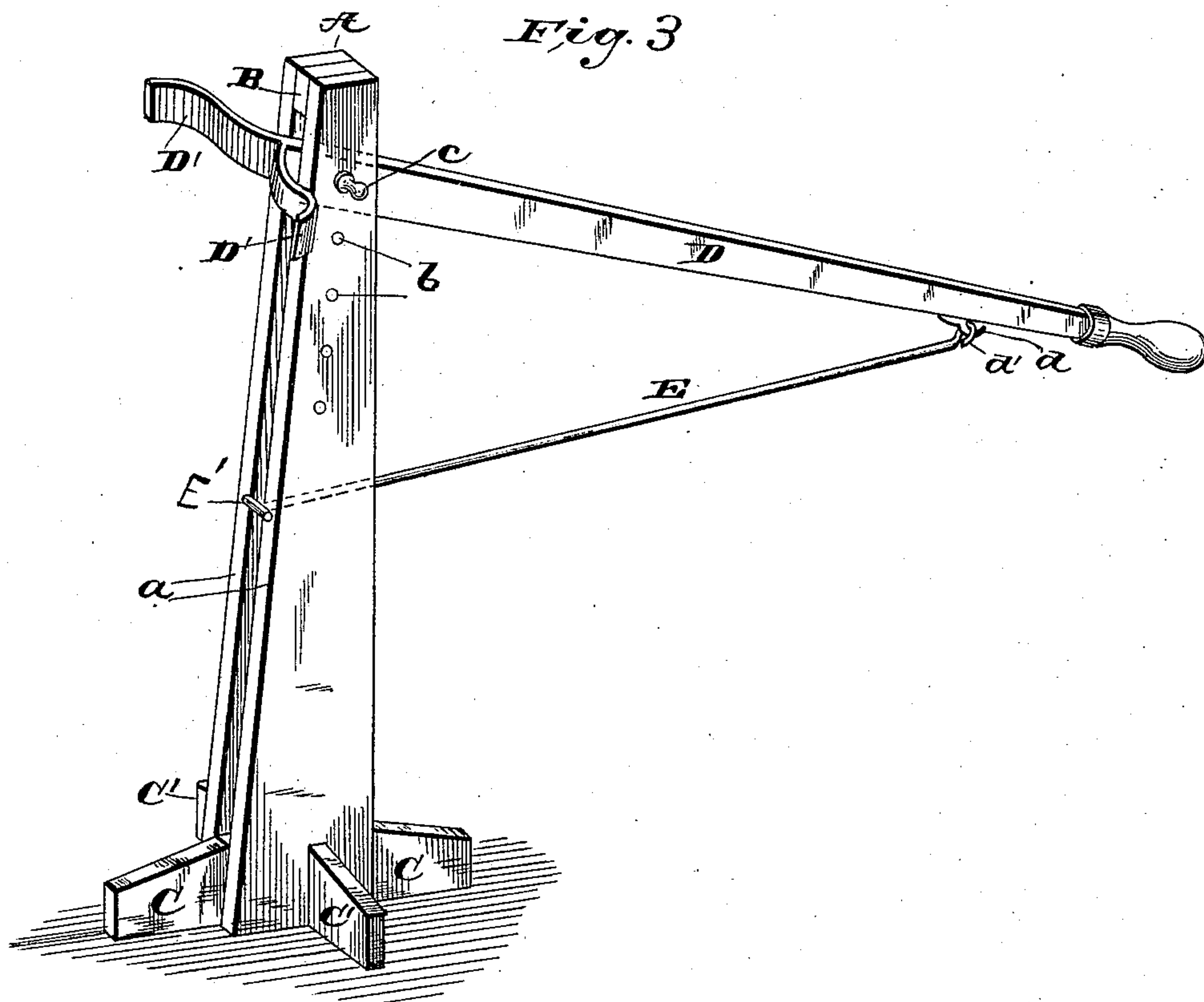
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Witnesses:

E. J. Walker

L. B. Whitaker

Inventor

Wm. J. Hollenbeck

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Whitaker & Prevor

UNITED STATES PATENT OFFICE.

WILLIAM J. HOLLENBECK, OF CORTLAND, NEW YORK.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 407,529, dated July 23, 1889.

Application filed December 5, 1887. Serial No. 257,031. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. HOLLENBECK, a citizen of the United States, residing at Cortland, in the county of Cortland and State of New York, have invented certain new and useful Improvements in Wagon-Jacks; and I do hereby 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.

My invention relates to that class of wagon-jacks in which the lifting-lever and retaining-pawl operate between two parallel upright bars or standards. Its object is to furnish a wagon-jack which can be constructed at a small cost and at the same time be simple and effective in its operation; and my invention consists of certain novel features of construction and combination of parts, which will be more fully described in the ensuing description, and distinctly pointed out in the claims at the close thereof.

In the accompanying drawings, Figure 1 is a perspective view of my improved jack. Fig. 2 is a perspective view of a single form of the same. Fig. 3 is a modification of the form shown in Fig. 1. Fig. 4 represents the form of the pivotal pin partly in section. Fig. 5 represents the hook for connecting the retaining-pawl to the lever.

The same letters of reference indicate identical parts in all the figures.

In the drawings, A A are the individual parts of the double standards, each of which parts is composed of two upright bars *a a*, bolted or otherwise secured at their upper and lower ends, respectively, on opposite sides of blocks B B and C C, the latter of which are made to project somewhat in front of the double standard to form a base to prevent the jack from tilting forward when in use, and the two parts are firmly connected together by means of the braces or bars F F or in any convenient or desirable manner. The standard A A is provided with a double lifting-lever D D, the members of which are pivoted between the upright bars *a a*, by means of pivotal pin *c* passing through the same. The two parts of the lever D D are also connected at any convenient point by a rod or bar H. The long arms of the lever D D are connected

by the handle J, constructed substantially as shown in Fig. 1, for operating the lever. The long arms of the lever D D are each provided on the under side with a hook *d*, which passes through an eyelet *d'* on one end of the T-headed rods E E. The cross-head E' of the rod consists of two smooth-faced projections or lugs extending at right angles to the rod. I prefer to make the faces of these projections or lugs curved in form, to avoid marring the edges of the standard with which they come in contact. This hook I prefer to construct as shown in Fig. 5, which consists of a straight portion *l*, to enter the lever D, and the outer end is bent in the form of a hook *l'*. This hook *l'* is re-enforced at the point *l''* to compensate for wear. It is also provided with a lug or projection *b*³, to strengthen the same at the point where it engages with the lever. The free ends of the rods E E pass between the bars *a a* of the double standards A A and are pivoted to the lever D D at such points that the lever may be raised sufficiently to allow the short arms to be placed under the axle. On depressing the longer end of the lever to elevate the axle on the short arm the T-head of the pawl will fall and engage the front edges of the standard, retaining the lever in the desired position, the jack being so constructed with relation to the weight to be raised that the contact of the smooth curved faces of the cross-head with the stand is sufficient to hold the weight at any desired point.

The pivotal pins may be any ordinary pins; but I prefer to use such as is shown in Fig. 4, which consists of a pin having a shoulder *e* at one end and an opening *f* at the other, through which passes a key *g*, substantially as shown, so that when the jack is in operation the key *g* is placed in the position shown in dotted lines and prevents the pins from being withdrawn, and when it is desired to change the height of the levers D the keys are placed as shown in full lines in the drawings, when the pin can be readily withdrawn and as readily inserted in another opening. The key *g* is prevented from being wholly withdrawn from the opening by the curved ends *g'* coming in contact with the pins at the point *h*.

On the inner sides of the bars composing the lever D D are eyelets *i*, through which

passes a cord *k*, the ends of said cord being connected to the retaining pawls or rods *E*, so that by pulling on the cord *k* both rods or pawls will be raised simultaneously. I prefer to construct the standard *A A* with its front side slanting toward the lower front edge, and provide the same with openings *b b* for the passage of the pivotal pin *c* in adjusting the jack to suit different vehicles. These openings *b b* are in lines parallel with the front edges of the standard in order that the same retaining-pawls may be used when the jack is required for different vehicles, though this is not essential, as the standard may be made of uniform width, in which case the openings may be placed in the center of the standard.

The standard may be made, if desired, of the form shown in Fig. 2, and which is adapted more especially for light vehicles.

By making the front edge of the standard slanting and the openings *b b* parallel therewith and making the arms *D'* rather short I throw the weight of the load on the center of the base, which lessens the tendency to tilt forward, as is the case when the weight is thrown forward of the center of the base.

In the form shown in Fig. 2 the standard is the same as that above described, except that it is single and is provided at its base with an additional base-block *C' C'*, placed at right angles to the block *C C*, so as to prevent the jack from tilting sidewise when in use. The short arm *D'* of the lever *D* is bifurcated or made double, as shown in the drawings, in order that it may engage the axle of a vehicle at two points, as in the other construction, and lift both wheels from the ground and prevent the same from tilting when raised.

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

1. In a wagon-jack, the combination, with the double standard the parts of which are rigidly connected together, of a double lifting-lever pivoted one part in each portion of

said standard, the said lever parts having their long arms connected together and provided with a handle and retaining-pawls, substantially as described.

2. In a wagon-jack, the combination, with a double standard the parts of which are rigidly connected together, of a double lifting-lever pivoted one part in each part of the standard, said lever parts having their long arms connected together and provided with a handle, **T**-headed retaining-pawls, and a cord for simultaneously raising said retaining-pawls, substantially as described.

3. In a wagon-jack, the combination of the double standard *A A*, double lever *D D*, pivoted in said standard, the handle *J*, the retaining-pawls loosely connected to said lever, the hooks *d*, the cord *k*, and the eyelets *i i*, for guiding the cord, substantially as described.

4. In a wagon-jack, the combination, with a standard, of a lever passing therethrough, provided at one end with a handle and at the other end with two axle-engaging projections diverging out of the vertical plane of the handle, and a retaining-pawl, substantially as described.

5. In a wagon-jack, the combination, with a standard having openings in its sides for the reception of a pivotal pin, of a lever pivoted therein, a **T**-headed retaining-pawl loosely connected at one end to said lever and operating between the sides of the standard, the **T**-head of said retaining-pawl having a curved standard engaging-face and operating entirely by frictional contact with the front of the standard to hold the lever and weight to be raised stationary at any desired point, substantially as described.

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

WILLIAM J. HOLLENBECK.

Witnesses:

J. E. EGGLESTON,
W. C. CROMBIE.