

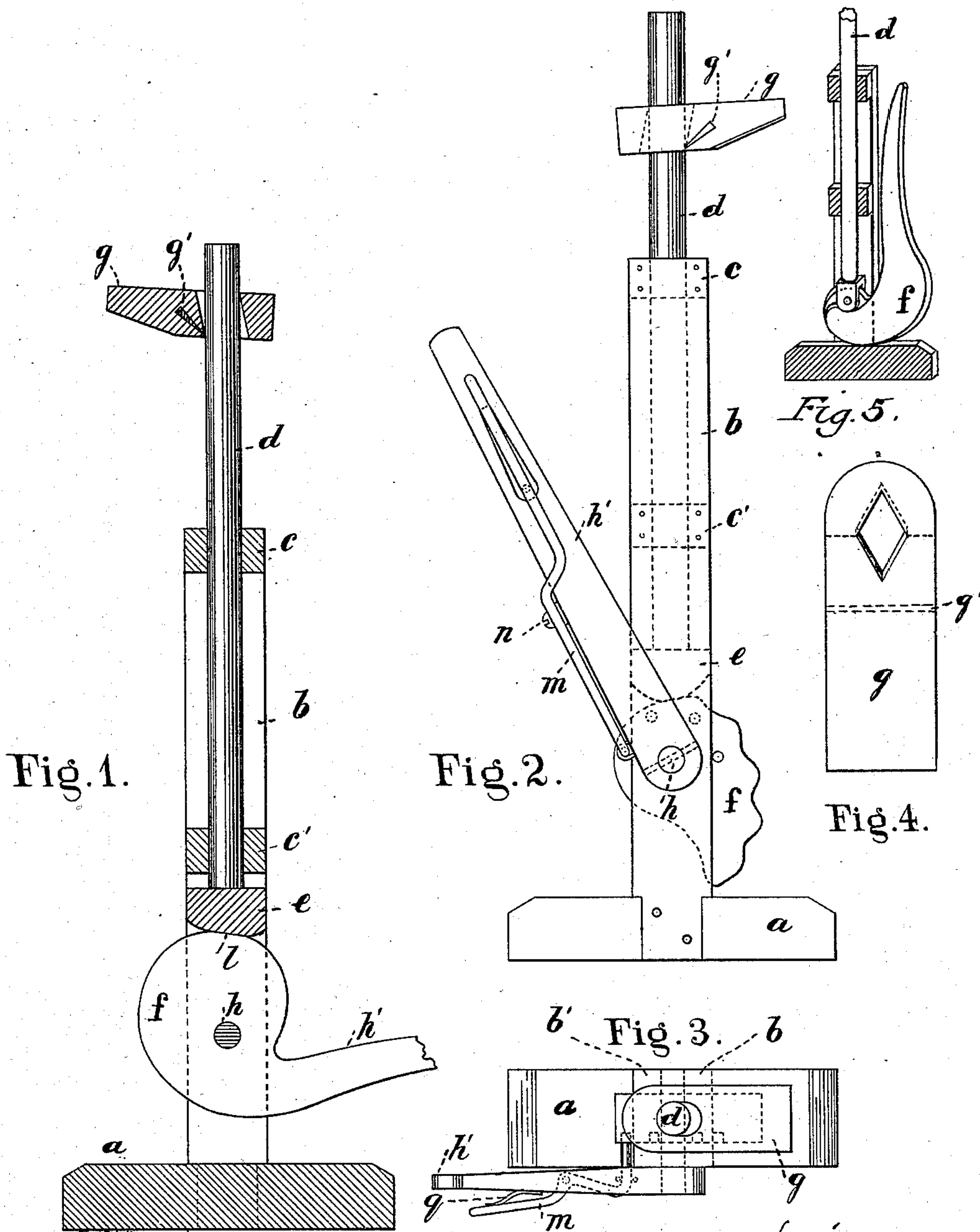
(No Model.)

A. E. PETTICREW.

WAGON JACK.

No. 278,594.

Patented May 29, 1883.



Attest:
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UNITED STATES PATENT OFFICE.

ALBERT E. PETTICREW, OF SPRINGFIELD, ASSIGNOR TO WM. G. STARTSMAN & CO., OF CINCINNATI, OHIO.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 278,594, dated May 29, 1883.

Application filed March 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT E. PETTICREW, of Springfield, county of Clarke, State of Ohio, have invented a new and useful Improvement in Wagon-Jacks, of which the following is a specification.

My invention relates to that class of lifting-jacks known as "wagon-jacks;" and it consists in the construction and arrangement of parts in the manner hereinafter more fully specified.

In the accompanying drawings, Figure 1 is a vertical section of a wagon-jack embodying my improvements. Fig. 2 is a vertical elevation of a wagon-jack illustrative of a modification that may be made in the construction of my invention. Fig. 3 is a plan view of said modification, and Fig. 4 is a plan view of the lifting-dog.

Letters of like character indicate corresponding parts in each of the figures.

In the construction of my improved jack I use a base, *a*, upon which are mounted the parallel uprights *b b'*. These uprights are joined by cross-ties *c c'*, which are secured to the aforesaid uprights after the push-rod *d* has been adjusted to its place. The cross-ties *c c'* are perforated to receive the push-rod *d*, and serve as guides for said push-rod, and the latter is provided with a cross-head, *e*, at its lower extremity, that slides in the space made between the uprights *b b'*, and thereby prevents the push-rod from moving laterally, and at the same time presents an enlarged bearing-surface for the periphery of the cam to act upon. The cam *f* is pivoted between the uprights *b b'* by means of a pin or screw-bolt, *h*, and is provided with a handle, *h'*, of any desired shape or length, and either in one piece with the cam, in the manner illustrated by Fig. 1, or of two or more pieces, in the manner illustrated by Fig. 2. Upon the push-rod *d* a dog, *g*, is loosely mounted, and may be moved up or down on said rod to come to or from the load to be lifted. The perforation made in the dog *g* for the reception of the rod *d* preferably should be oblique to the upper bearing-surface of said dog and of a diamond shape, as illustrated by Fig. 4, whereby two of the lower converging edges of the opening

in the dog will impinge against the plane face of the push-rod in lifting a load, and thereby hold the dog. When, for the reason of cheapness of construction, the push-rod *d* and dog *g* are made of wood, a metallic piece, *g'*, is inserted in the dog, as shown; otherwise the impinging corners of said dog become worn and the action of the jack becomes impaired.

The operation of the jack may be briefly stated as follows: The eccentric *f* is placed in a position to bring the push-rod *d* to its lowest resting-place. Then the dog *g* is placed immediately under the object to be raised, and the handle *h'* is depressed until the flat portion *l* of the eccentric *f* comes under the cross-head *e*. When this has been done the object that has been raised will remain suspended upon the dog *g*.

In Figs. 2 and 3 I have shown a modification wherein the eccentric *f* is detached from the lever *h'*, and a bent lever, *m*, pivoted at *n* to said lever *h'*, engages in a series of concentric perforations, *p*, made in the eccentric *f*, the lever *m'* being kept against the side of said eccentric by means of a spring, *q*. I have also represented the eccentric as corrugated around its periphery, so as to hold said eccentric from slipping while the cross-head is resting in either of the concaves.

By Fig. 5 of the drawings I have represented still another modification of this principle of a wagon-jack, in which the eccentric *f* is pivoted to the push-rod *d* instead of to the uprights *b b'*, and bears against the base of the jack in place of against the base of the push-rod.

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

1. A lifting-jack composed of a base-piece, *a*, parallel uprights *b b'*, joined together by upper and lower perforated cross-ties *c c'*, the push-rod *d*, passing through and guided by the cross-ties, and provided with the adjustable dog *g*, which impinges against the plane face of the push-rod in lifting a load, and a cam-lever pivoted between the uprights for lifting the push-rod, substantially as described.

2. In combination with the push-rod and

cam-lever for lifting the same, the dog *g*, having the diamond-shaped opening extending through it obliquely to the upper bearing of the dog, whereby two of the lower edges of
5 the opening impinge against the plane face of the push-rod in lifting a load, substantially as described.

In testimony whereof I have hereunto set my hand this 6th day of March, 1883.

ALBERT E. PETTICREW.

Witnesses:

HENRY MILLWARD,
E. S. WALLACE.