

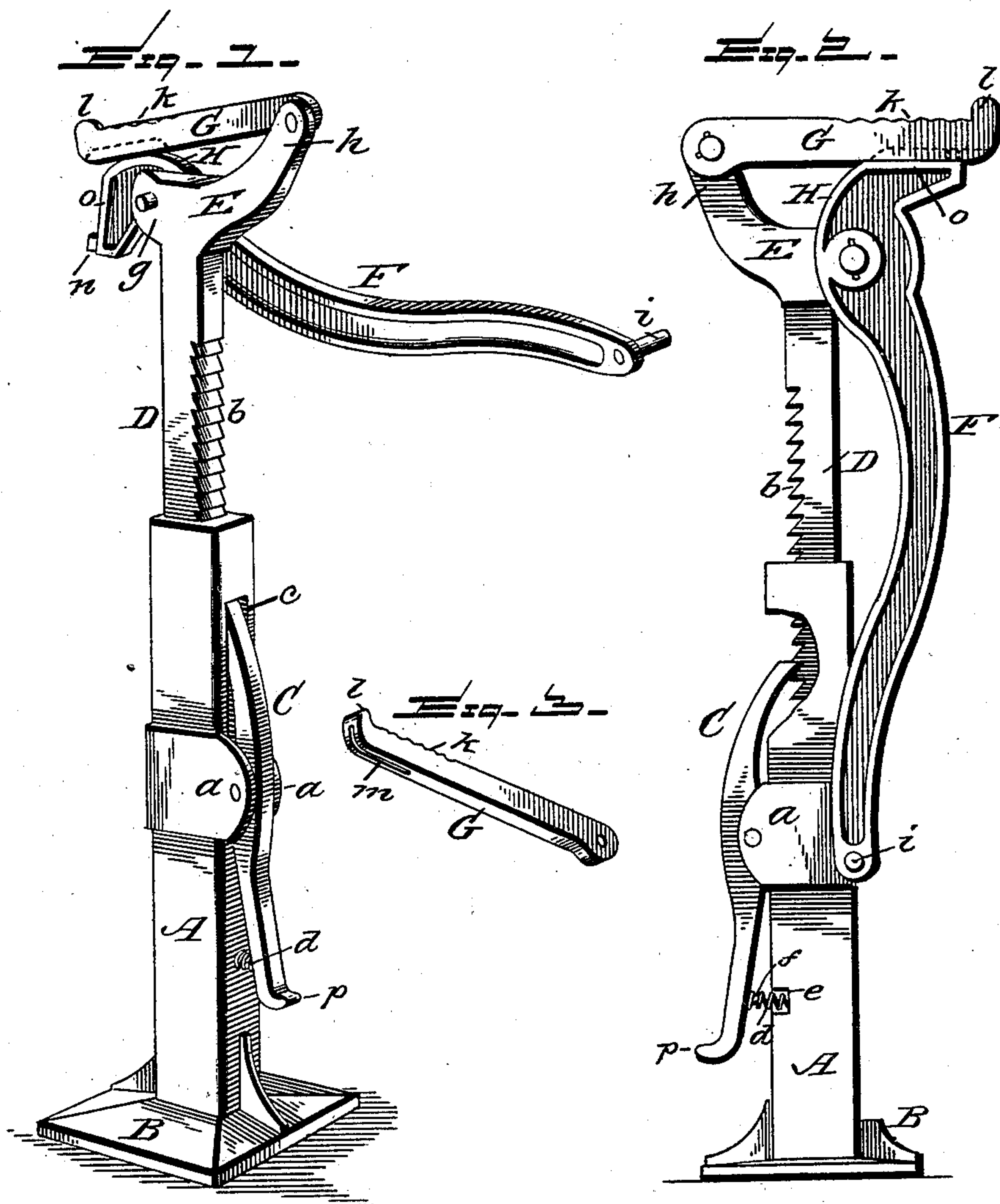
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Patented Apr. 9, 1901.

W. M. BALLARD & J. H. NICKERSON.
LIFTING JACK.

(Application filed Dec. 8, 1900.)

(No Model.)



WITNESSES:

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WILLIAM M. BALLARD AND JAMES H. NICKERSON, OF MARENGO, ILLINOIS.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 671,748, dated April 9, 1901.

Application filed December 8, 1900. Serial No. 39,167. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM M. BALLARD and JAMES H. NICKERSON, citizens of the United States, residing at Marengo, in the county of McHenry and State of Illinois, have invented certain new and useful Improvements in Lifting-Jacks; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide a lifting-jack that will be simple in construction, easily operated, and that will possess great lifting power, and especially valuable as a wagon-jack and for similar uses.

The invention consists in a lifting-jack constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a perspective view of a lifting-jack constructed in accordance with our invention; Fig. 2, a side elevation thereof, showing the operating-lever and the supporting-arm in the position they will assume when the jack is in use; Fig. 3, a detail perspective view of the supporting-arm.

In the accompanying drawings, A represents a tubular standard of any suitable form and construction and provided at its lower end with a supporting-base B. The standard A is provided with suitable ears or plates *a*, between which is suitably pivoted a spring-actuated pawl C, adapted to engage the ratchet-teeth *b* upon an extensible upright bar D. The bar D fits into the tubular standard A and is adapted to slide up and down therein to regulate the height of the same, the end of the pawl C engaging the ratchet-teeth *b* to hold the bar in its adjusted position. The end of the pawl C extends through an elongated opening *c* in the standard A in order to engage the teeth on the bar D, and a suitable spring *d* is located between the standard and the lower end of the pawl to render the pawl spring-actuated. One end of the spring is seated in a socket *e* in the standard, and the opposite end of said spring engages a short pin *f*, projecting from the inner side of the pawl, whereby said spring is held in position between the standard and pawl. The upper end of the ratchet-bar D terminates in a

curved shoulder E, the two ends *g h* of the shoulder being on different horizontal planes, as shown in Fig. 1 of the drawings. The upper end of the operating-lever F is pivotally connected to the end *g* of the shoulder E, and the pivotal end of the lever has a cam H to bear against the under side of a supporting-arm G to elevate the same. The lever F may be of any suitable construction and operated in any preferred manner, either by hand or by the foot, a bearing *i* being provided when it is to be operated by the foot. The supporting-arm G is pivotally connected to the end *h* of the shoulder E and has a corrugated or roughened upper surface, as shown at *k*, to prevent slipping of the object resting thereon, and a stop *l* at the extremity of the arm. The free end of the arm G is provided with an elongated mortise *m* upon its under side, as shown more clearly in Fig. 3 of the drawings, a pin *n* upon the pivotal end of the lever engaging said mortise when the lever F is depressed. The pin engaging the mortise prevents the supporting-arm moving laterally or sidewise and takes any strain off the pivotal connection of the arm with the end of the shoulder E.

The pivotal end of the operating-lever F has a straight bearing *o* to level the supporting-arm G and lock the lever when in the position shown in Fig. 2 of the drawings, thereby preventing the lever from flying up when the jack is under a load.

The pawl C may be provided with a projection *p* to operate the pawl by the foot when so desired.

Having now fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A lifting-jack consisting of a slidable bar, means for holding the bar in its adjusted position, a pivoted supporting-arm, and a pivoted operating-lever having a cam for operating the arm, substantially as and for the purpose set forth.

2. A lifting-jack consisting of a slidable bar, means for holding the bar in its adjusted position, a pivoted supporting-arm at the upper end of the bar having an elongated mortise upon its under side, and a pivoted operating-lever having a pin upon its upper end to engage the mortise in the supporting-arm,

substantially as and for the purpose described.

3. A lifting-jack consisting of a slidable bar, means for holding the bar in its adjusted position, a pivoted supporting-arm at the upper end of the bar, and a pivoted operating-lever having a cam and a straight bearing to act in connection with the pivoted supporting-arm to raise the same and lock the lever, substantially as and for the purposes specified.

4. A lifting-jack consisting of a slidable bar, a pivoted supporting-arm at the upper end thereof having an elongated mortise upon its under side, a pivoted operating-lever, having a cam, a straight bearing, and a pin upon its upper end to act in connection with the supporting-arm, the pin engaging the mortise thereof when the lever is depressed, substantially as and for the purpose described.

5. A lifting-jack consisting of a slidable bar, means for holding the bar in its adjusted position, an elbow upon the upper end of the bar having its ends on different horizontal planes, a supporting-arm and an operating-lever pivoted thereto, said lever having a cam and a straight bearing upon its upper end to operate in connection with the supporting-arm, substantially as and for the purpose set forth.

6. A lifting-jack consisting of a tubular standard, a ratchet-bar slidable therein, a spring-actuated pawl to engage the ratchet-bar to hold it in its adjusted position, a piv-

oted supporting-arm at the upper end of the ratchet-bar, and a pivoted operating-lever having a cam at its upper end to act against the under side of the supporting-arm, substantially as and for the purpose described.

7. A lifting-jack consisting of a tubular standard, a ratchet-bar slidable therein, means for holding the bar in its adjusted position, a pivoted supporting-arm at the upper end of the bar having a stop and a mortise upon its upper and lower sides respectively, a pivoted operating-lever having a cam, a straight bearing, and a pin upon its upper end, substantially as and for the purpose specified.

8. A lifting-jack consisting of a tubular standard, a ratchet-bar adjustable therein, a spring-actuated pawl adapted to engage the bar and provided with means for operating it by the foot, a pivoted supporting-arm at the upper end of the ratchet-bar, and a pivoted lever provided at its upper end with a cam and a straight bearing, and means for operating the lever by the foot, substantially as and for the purpose set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

WILLIAM M. BALLARD.
JAMES H. NICKERSON.

Witnesses:

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AMOS F. BININGTON.