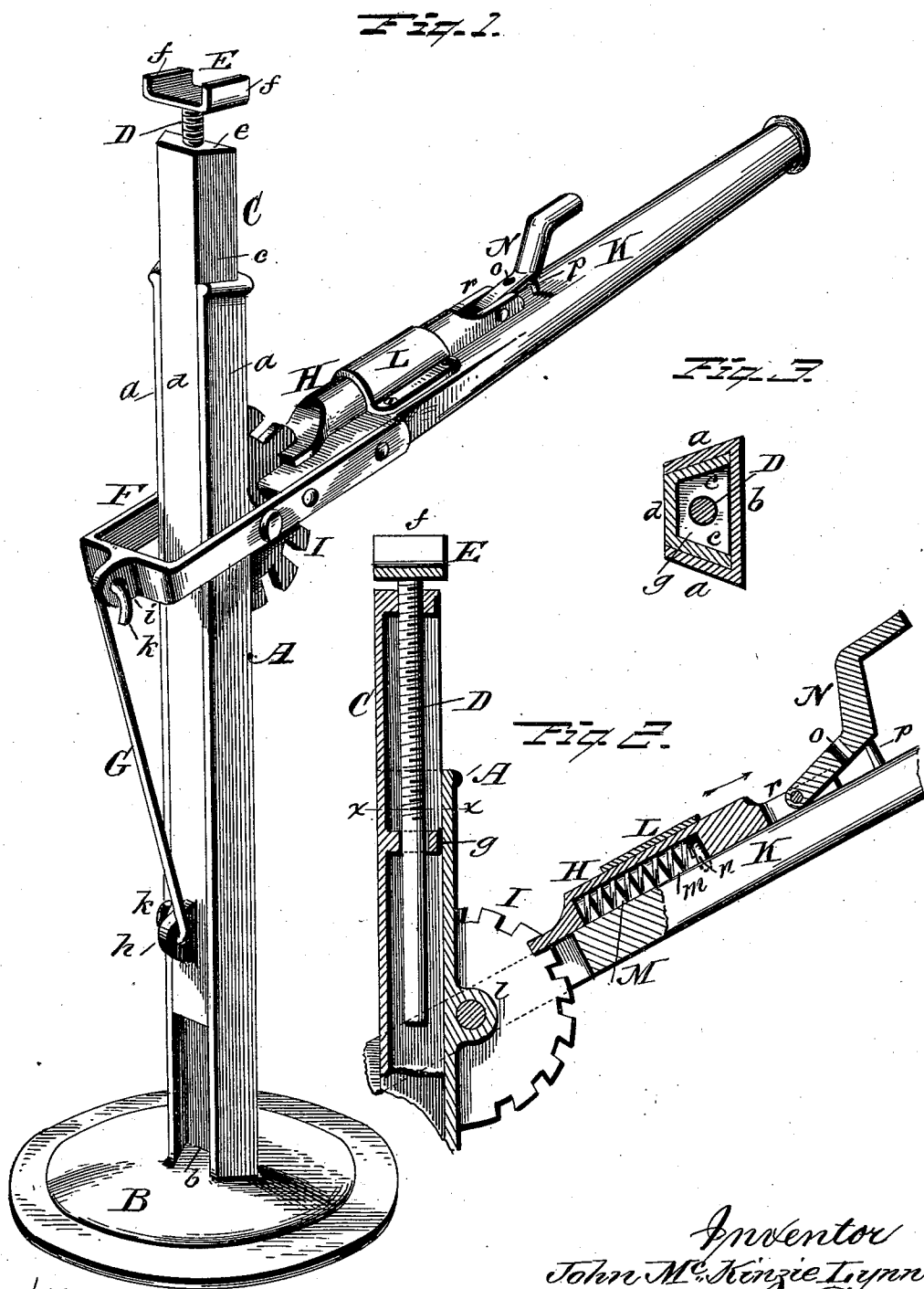


(No Model.)

J. McK. LYNN.
LIFTING JACK.

No. 546,704.

Patented Sept. 24, 1895.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN MCKINZIE LYNN, OF WELDON, TEXAS.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 546,704, dated September 24, 1895.

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To all whom it may concern:

Be it known that I, JOHN MCKINZIE LYNN, a citizen of the United States, residing at Weldon, in the county of Houston and State of Texas, have invented certain new and useful Improvements in Lifting-Jacks; and I 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 possess strength with durability necessary in this class of devices and that will be simple in construction and easy of operation; and it 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 my invention; Fig. 2, a detail view of the upper portion of the lifting-jack, partly in section; Fig. 3, a horizontal section taken on line *x x* of Fig. 2.

In the accompanying drawings, A represents the standard, provided at its lower end with a suitable base B, and within this standard works the lifting-bar C, the standard forming a guide therefor. The sides *a* of the standard extend inwardly or at an acute angle to the back *b*, thus forming a dovetail groove or recess, as shown in Fig. 3 of the drawings, said standard being formed of metal, with its sides and back of one piece.

Fitting within the dovetail groove of the standard A is the correspondingly-formed lifting-bar C hereinbefore referred to, said bar being constructed of a single piece of metal, with the sides *c* flaring outwardly or disposed at an obtuse angle to the back *d*, so as to nicely fit against the sides of the standard.

The bar C at its upper end is provided with a stationary nut *e*, which has a screw-threaded hole to receive a screw-threaded rod D, said rod provided at its upper end with a support E, having upwardly-extending flanges *f* to give the support greater strength and take the weight of the object to be raised off the flat portion of the support.

The smooth or unthreaded portion of the rod D extends down through a guide *g*, there-

by enabling the support to be raised or lowered, as circumstances require, without binding of the screw-threads, as would be the case 55
The bar C, near its lower end, is formed with an outwardly-projecting lug *h*, and a similar lug *i* is formed on a yoke F, said lugs having perforations, with which engage the hooks 60
k upon the ends of a connecting-rod G.

The yoke F is suitably pivoted to the lugs *l*, which project from the standard A, or said yoke may be pivoted to the standard in any suitable and well-known manner found best 65
adapted to the purpose. A spring-actuated and sliding pawl H is adapted to engage a notched segment I upon the standard A, which segment may be cast with the standard or formed separately and afterward rigidly 70
connected thereto in any preferred manner.

To the yoke F is connected a suitable hand-lever K, either of wood or metal, as found preferable, and of any desirable shape and length found best adapted to the purpose. 75
The hand-lever K has secured to its upper side a guide L to hold the pawl H to the hand-lever and guide it in its sliding movement when being engaged or released from engagement with the notched segment I. 80

The pawl H has a chamber or recess *m* upon its under side, in which is located a coiled spring M, which acts to automatically throw the pawl in engagement with the notches in the segment I when said pawl is 85
released and free to act, as will be hereinafter more fully described.

The outer end of the spring M should be connected to the hand-lever K in some suitable and convenient manner, or a lug *n*, projecting from the lever, may be used, against which the end of the spring can bear, or any suitable provision may be made that will insure the coils of the spring being compressed when the pawl is moved in the direction of 90
the arrow shown in Fig. 2 of the drawings.

In order to hold the pawl out of engagement with the notched segment, I provide a pivoted locking-lever N, which lever has a perforation *o* to engage with a locking-pin *p* 100
upon the hand-lever when it is desired to hold the pawl from engaging with the notched segment I.

The rear end of the pawl is bifurcated, as

shown at *r*, and between the arms of this bifurcation is pivoted the inner end of the locking-lever *N*, thereby preventing any lateral movement of the locking-lever and enabling the perforation *o* to be brought directly over and on line with the pin *p*, so that it will freely engage therewith.

Were not some means provided to guard against any slight lateral movement of the locking-lever *N*, the perforation *o* would not always be on line and directly over the pin *p* when the pawl is pulled back, and consequently would not engage the pin without the locking-lever were especially adjusted for this purpose.

The arms forming the bifurcation *r*, upon the end of the pawl *H*, will hold the locking-lever *N* in a true line by preventing any side-wise movement thereof.

When it is desired to operate the jack, the lifting-bar *C* is raised by pressing down upon the hand-lever *K*, and through the medium of the yoke *F* and connecting-rod *G* the bar will be elevated, with its load resting upon the support *E*.

After the lifting-bar *C* has been elevated the desired height the pawl *H* is released by lifting the locking-lever *N* sufficient to disengage it from the pin *p*, when the expansion of the coils of the spring *M* will force the pawl forward in engagement with the notch of the segment *I* in which the pawl is on line with, as shown in Fig. 2 of the drawings.

When the pawl is moved out of engagement with the notched segment it is held in such position by the pin *p* engaging with the perforation *o* in the locking-lever *N*, the coils of the spring *M* being compressed, and when the locking-lever is released the expansion of the coils will force the pawl forward and hold it in engagement with one of the notches of the segment *I*.

The lifting-jack may be of any size and dimensions which may be found most desirable and the operating parts of any suitable metal, although the hand-lever is preferably constructed of wood. In the construction of the jack there may be many changes or modifications in the details thereof without departing from the principle of the invention, and any such changes as would come within ordinary mechanical skill may be resorted to that would improve the efficiency of the device.

Having now fully described my invention,

what I claim as new, and desire to secure by Letters Patent, is—

1. A lifting-jack consisting of a suitable standard and lifting bar, and means for operating said bar, consisting of a pivoted hand-lever, a notched segment upon the standard, a sliding spring actuated pawl adapted to engage therewith, and a pivoted locking lever upon the end of the pawl, a perforation in said lever and a locking-pin on the hand-lever engaging with the perforation, substantially as and for the purpose specified.

2. A lifting-jack consisting of a suitable standard and lifting bar, notched segment upon the standard, a pivoted hand-lever connecting with the lifting-bar, and a sliding pawl recessed upon its underside and a coiled spring located therein, and a pivoted locking-lever connected to the pawl, substantially as and for the purpose set forth.

3. A lifting-jack consisting of a suitable standard and lifting bar, a notched segment upon the standard, a pivoted hand-lever connecting with the lifting-bar, and a spring actuated sliding pawl supported upon the hand-lever and held thereon by means of a guide secured to said lever, said pawl having a recess or chamber and a spring located therein, a bifurcation upon the end of the pawl, a locking-lever pivoted between the arms of the bifurcation, a perforation in said lever and a pin upon the hand-lever for engaging therewith, substantially as and for the purpose set forth.

4. A lifting-jack consisting of a standard having a dove-tail groove therein, a correspondingly formed lifting-bar fitting in the groove, an adjustable support connected to the upper end of the bar, a notched segment upon the standard, a yoke pivoted thereto, a rod connecting the yoke with the lifting-bar, a suitable hand-lever connected to the yoke, a spring actuated sliding pawl supported upon the hand-lever, and means for locking the pawl out of engagement with the notched-segment, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN MCKINZIE LYNN.

Witnesses:

JAS. LYNN,

J. A. ROSAMOND.