

(No Model.)

H. AUSTIN.
LIFTING JACK.

No. 314,908.

Patented Mar. 31, 1885.

Fig. 1.

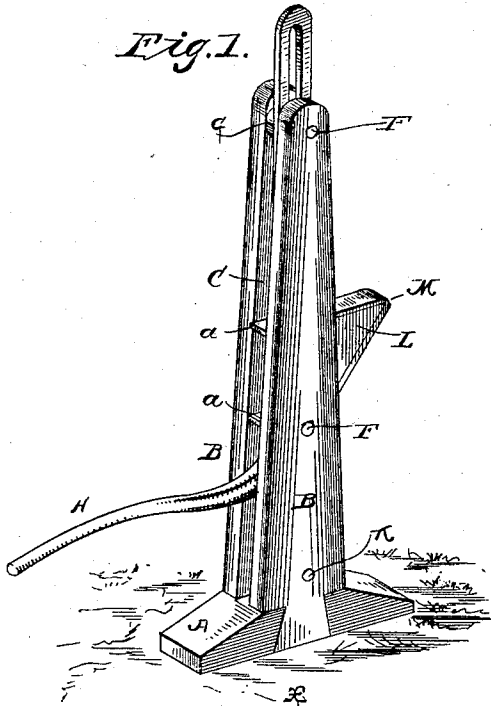


Fig. 2.

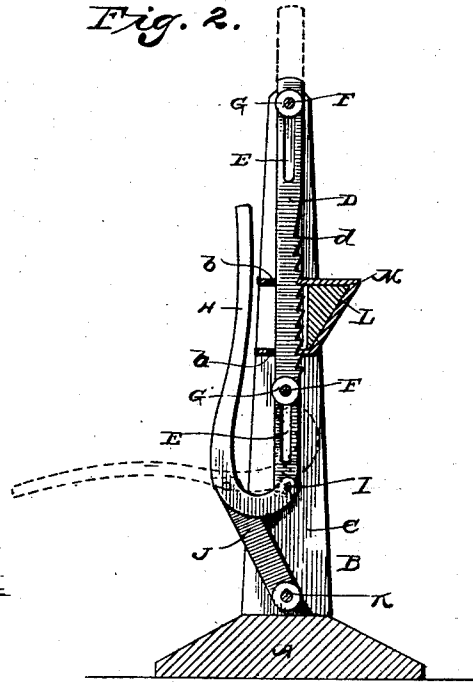


Fig. 3.

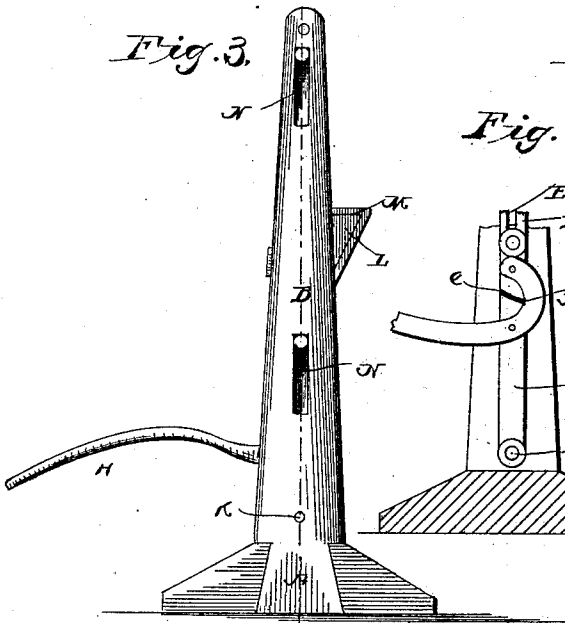
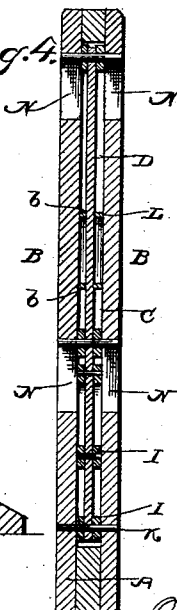
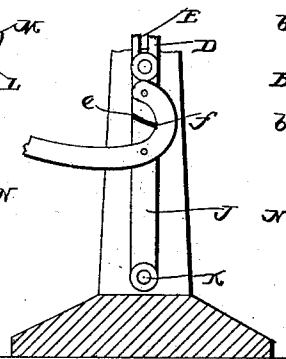


Fig. 4.

Fig. 5.



WITNESSES

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UNITED STATES PATENT OFFICE.

HENRY AUSTIN, OF SEYMOUR LAKE, MICHIGAN.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 314,908, dated March 31, 1885.

Application filed September 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY AUSTIN, a citizen of the United States, residing at Seymour Lake, in the county of Oakland and State of Michigan, have invented a new and useful Improvement in Lifting-Jacks, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to lifting-jacks; and it has for its object to provide a device of this character which shall have considerable lifting-power with a small expenditure of force, and which can be manipulated with ease and rapidity.

A further object of the invention is to provide a device which shall possess superior advantages over others of its class in point of simplicity, durability, inexpensiveness, and general efficiency.

To these ends the said invention consists in certain details of construction and combination of parts, as hereinafter set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my improved lifting-jack. Fig. 2 is a longitudinal vertical section of the same. Fig. 3 is a side view of a modified form. Fig. 4 is a vertical section of the same on the line *x x*, and Fig. 5 is a detail sectional view.

Like letters are used to indicate corresponding parts in the several figures.

Referring to the drawings, A designates the base of my improved lifting-jack, and B B two uprights or standards, which have their lower ends mortised in the base, extending upward, and arranged parallel to each other, a space, C, being left between the same.

D designates a lifting-bar working in the said space C and slotted at each end, as at E E, rods F F extending across the space C and connecting the uprights or standards, said rods fitting in the slots E, and having guide-blocks G G on opposite sides of the lifting-bar to guide the latter in its vertical movements.

H designates an operating-lever having its inner end bifurcated or slotted at I, and curved inward and pivoted to the lower end of the lifting-bar D. A connecting-bar, J, is pivoted at one end within the slotted end of the operating-lever, and at the other end to a rod, K, which is fitted in the uprights or standards,

said rod K having disks or blocks mounted thereon on each side of the connecting-bar J.

L designates a vertically-adjustable block, triangular in form, having its edges faced with metal, as at M, the ends *a a* of this metallic strip extending rearward and slotted at *b b* to receive the bar D. The latter is provided with teeth *d* on its front edge, which are adapted to be engaged by the front wall of the slots *b*, so that by moving the block L inward it can be adjusted at any point on the bar. As seen, the teeth on the bar D extend down to the intermediate bar, F, the blocks G on the same limiting the movement of the block in the adjustment thereof.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the annexed drawings.

In using my improved jack the block L is pushed inward until the front wall or edge of the slot *b* comes into engagement with the teeth on the bar D, so as to support the block. The operating-lever is then pushed down to cause the connecting-bar J to move inward and the bar D to move upward, the slots E E moving over the rods F and guiding the movement of said bar D. When the latter is raised to its highest point, (shown in dotted lines, Fig. 2,) the connecting-bar J stands on a line with and forms a support for the bar D, the upward movement of the latter raising the block L correspondingly. When it is desired the lower the jack, the block L is drawn out to disengage the front wall of the slot from the teeth of the bar D, allowing the said block to drop down, the operating-lever H being then drawn up into the position shown in full lines, Fig. 2, this movement of the lever drawing the bar D down into the normal position.

In Figs. 3 and 4 is shown a modified form of the lifting-jack, the difference consisting in making the bearings of the bar D movable in place of moving the latter through its bearings. As seen, the ends of the bar D have the rods F F extending outward and working in guide-slots N N in the sides of the uprights or standards.

The operation of this device is the same as that above described, and therefore need not be repeated here.

It will be apparent that I may make these and

other slight modifications in the details of construction without departing from the spirit or scope of the present invention. The upper end of the connecting-bar J and the lower end of the bar D are beveled off, as seen at *e f*, so as to fit together when the device is in the raised position.

It will be seen that the action of my device is positive and certain, and by means of the same heavy articles—such as wagons—may be raised and upheld with ease and with very little exertion. The adjustment is such that the device can be accommodated to different heights and elevate the articles to different points. It will be observed that the block is adjusted along the bar D to suit the height of the article when the operating-lever is worked to elevate the article off the ground.

This jack has considerable lifting-power with a small expenditure of force, and is manipulated with ease and rapidity.

It is simple in construction, cannot get out of order, and will prove of great utility for the purposes intended.

Having described my invention, I claim—

1. In a lifting-jack, the combination, with a suitable supporting base and uprights, of a vertically-movable bar, a block adjustable on the same, a lever pivoted to the bar, and a connecting-bar pivoted to the lever and arranged to support the bar in its raised position, as set forth.

2. In a lifting-jack, the combination, with a suitable supporting-base and a pair of uprights, of a vertically-movable bar working between the uprights and having teeth on one of its faces, a block adapted to engage with the teeth so as to be vertically adjustable, a lever connected to the bar, and a connecting-bar pivoted at one end to the uprights and attached to the lever, arranged and operating as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

HENRY AUSTIN.

Witnesses:

A. S. WARNER,
RALPH MCLEAN.