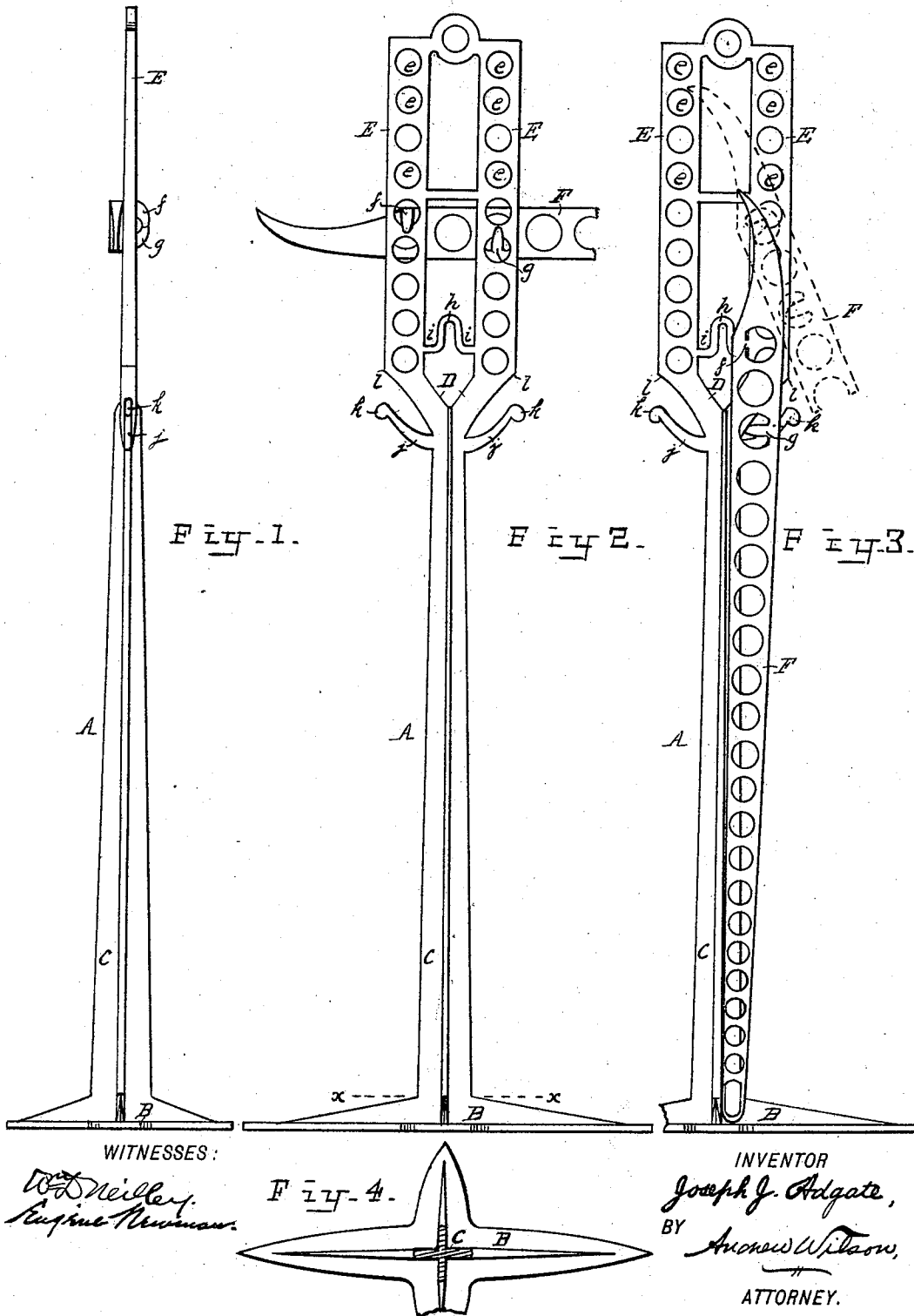


(No Model.)

J. J. ADGATE.
WAGON JACK.

No. 578,033.

Patented Mar. 2, 1897.



UNITED STATES PATENT OFFICE.

JOSEPH J. ADGATE, OF LIBERTY, NEW YORK.

WAGON-JACK.

SPECIFICATION forming part of Letters Patent No. 578,033, dated March 2, 1897.

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To all whom it may concern:

Be it known that I, JOSEPH J. ADGATE, of Liberty, Sullivan county, New York, have invented certain new and useful Improvements in Wagon-Jacks, of which the following is a specification.

My invention relates to that class of wagon-jacks wherein a detachable lever is used in connection with a standard having a plurality of fulcrum-bearings on which the lever may be adjusted at different heights; and my improvements consist in the particulars hereinafter pointed out.

In the drawings, Figure 1 is a front elevation of the jack with the lever locked in a horizontal position. Fig. 2 is a side elevation of the same, the end of the lever being broken off. Fig. 3 is a side elevation with the lever locked in a suspended position, as when not in use; and Fig. 4 is a top view of the foot, taken on the line *xx* of Fig. 2, with one of the toes partly broken off.

In referring to similar parts I have used the same reference-letters in all the figures. A is the standard, which is preferably formed of cast metal, provided with a splay foot B, supporting a ribbed upright C, which is surmounted by the head D. This head D consists, essentially, of two thin parallel bars E E, increasing slightly in thickness toward their bases, joined by cross-braces, and each provided with a series of round holes *eee* to form bearings for the lever-hooks. These holes pass completely through the bars E E, and the formation is identical on both sides, so that the lever may be used equally well on either side of the standard.

F is the lever, the truss-like formation of which combines lightness and strength. This lever F is provided with the reversed hooks *f g*, which are cast integral with the lever, the openings in the lever below the hooks allowing the sand to draw, so that the casting may be done without coring. It will be seen that the lever may be used with equal facility on either side of the standard, the two series of holes *eee* reversing their functions when the relative positions of the standard and lever are reversed. Thus the left-hand series of holes *eee* in Figs. 2 and 3 form fulcrum-bearings for the pivot-hook *f* when the lever is upon the side, as shown, while

the right-hand series form seats for the locking-hook *g*. If now the lever is placed upon the side of the standard nearest the observer, with the lever-handle toward the left, the right-hand series of holes *eee* will form the bearings for the pivot-hook *f* and the left-hand series of holes *eee* will become seats for the locking-hook *g*. Thus by making the standard-head with similar sides and so thin that the lever-hooks can pass completely through the hook-seats I am enabled to make the standard reversible and to give to each series of hook-seats the dual functions already specified. This reversibility of the standard greatly facilitates its use, as no care is necessary in placing either edge foremost when using it, the lever always being applicable to the right side of the standard as it may stand before the user.

Owing to the principles upon which the jack operates the connection of the lever-hooks with their seats is not stable except when the forward end of the lever is loaded. It is therefore important to provide suitable means for detachably attaching the lever to the standard when not in use. To do this, I utilize the lever-hooks *g f*, and provide for them suitable bearings or slotted seats on the standard, in which the hooks can be readily seated, so as to retain the lever in a position readily accessible for use.

At each end of the cross-brace *h* I form a recess *i* between the cross-brace and the bar E, and on each side of the upright C, near its top, I place an arm *j*, the end *k* of which approaches nearer than its base to the seat *i* above it, the distance being somewhat less than the distance from the under side of the lever-hook *f* to the under side of the lever-hook *g*. When it is desired to fold the lever upon the standard, the lever is turned over, so that its under edge is uppermost, and is brought up against the left side of the bar E nearest the user, with the front end elevated, as shown by the dotted lines in Fig. 3, and the hook *f* passing behind the bar E. The hand end of the lever is then dropped till the hook *g* engages the outer edge of the bar E, in which position the lever, rocking over the hook *g*, will take a sliding grip on the bar E, down which it will slip vertically until the hook *g* passes the point *l* and swings beneath

the inclined base of the bar E, when the hand end of the lever will swing in against the upright C, entering the angle formed between the adjacent ribs, the arm *j* guiding the hook *g* until it locks in the angle between the arm and the standard, when the hook *f* will have found its seat *i* and the lever will be securely folded into place. From this position the lever can only be unshipped by swinging the hand end out and up, the hook *g* riding over the top *k* of the arm *j*, forcing the hook *f* up in its seat *i*, and continuing the movement until the hook *f* has entirely cleared its seat or until the lever has been swung so nearly horizontal that the hook can be swung side-wise out of the seat. The reverse of this latter movement may be used in folding the lever, but it requires greater care and more nicety of adjustment than the method first described. Furthermore, the second method will result in the hook *g* striking the end *k* of the arm *j*, over the rounded end of which it will be carried by its own momentum or by additional pressure, raising the whole lever, to drop again after the point of the arm *j* has been passed.

The lever can be folded with equal facility on either side of the standard, either of the bars E serving equally well, and being especially adapted for the use described by its comparative thinness and by the parallelism of its edges.

By the means described I secure a jack which can be made complete with but two pieces, and which is made completely reversible in operation by the use of but two series of carrying-hook seats, the lever of which can be simply and securely folded upon the standard and readily detached for use when required.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a wagon-jack, of a lever, provided with a fulcrum-hook and a locking-hook, relatively reversed near opposite edges of the same side thereof, an upright standard, a standard-head embodying two parallel bars each pierced by a series of lever-hook seats, each series of seats reversing its functions when the standard and lever

are relatively reversed, the standard being provided on each side with separate slotted detaining-seats for the lever-hooks, wherein the lever when not in use may be locked, by its hooks, in a suspended vertical position, substantially as described.

2. The combination, in a wagon-jack, of an upright standard, provided near its top with branching arms, and supporting a standard-head, embodying two parallel bars, joined by an intermediate cross-brace, each bar being pierced by a series of lever-hook seats, and having vertical edges, the inner edges descending to a hook-seat at the end of said cross-brace, and the outer edge terminating above the end of one of the branching arms, a lever, provided with a fulcrum-hook and a locking-hook, relatively reversed, near opposite edges of the same side thereof, said hooks, when the lower edge of the lever is uppermost, being adapted to grasp the vertical edges of either of the standard-head bars, with a sliding grip, till the uppermost lever-hook descends to the upper-hook seat, and then to permit the lever to swing into a vertical position, and to be so held by the locking of the lower hook between the branching arm and the standard-head, substantially as described.

3. The combination, in a wagon-jack, of a lever, provided with a fulcrum-hook and a locking-hook, relatively reversed near opposite edges of the same side thereof, an upright standard, a standard-head embodying two parallel bars each pierced by a series of lever-hook seats, each series of seats reversing its functions when the standard and lever are relatively reversed, the standard being provided on each side with separate detaining-seats for the lever-hooks, wherein the same may be locked, by its hooks, in a suspended position, by swinging the lever from a horizontal into a vertical position, and from which it can only be unlocked by the reverse movement, substantially as described.

JOSEPH J. ADGATE.

Witnesses:

WM. D. NEILLEY,
JAS. F. GRAY.