W. KNIFFIN.
Lifting-Jack.

No. 207,876. Patented Sept. 10, 1878.

Fig: 1.

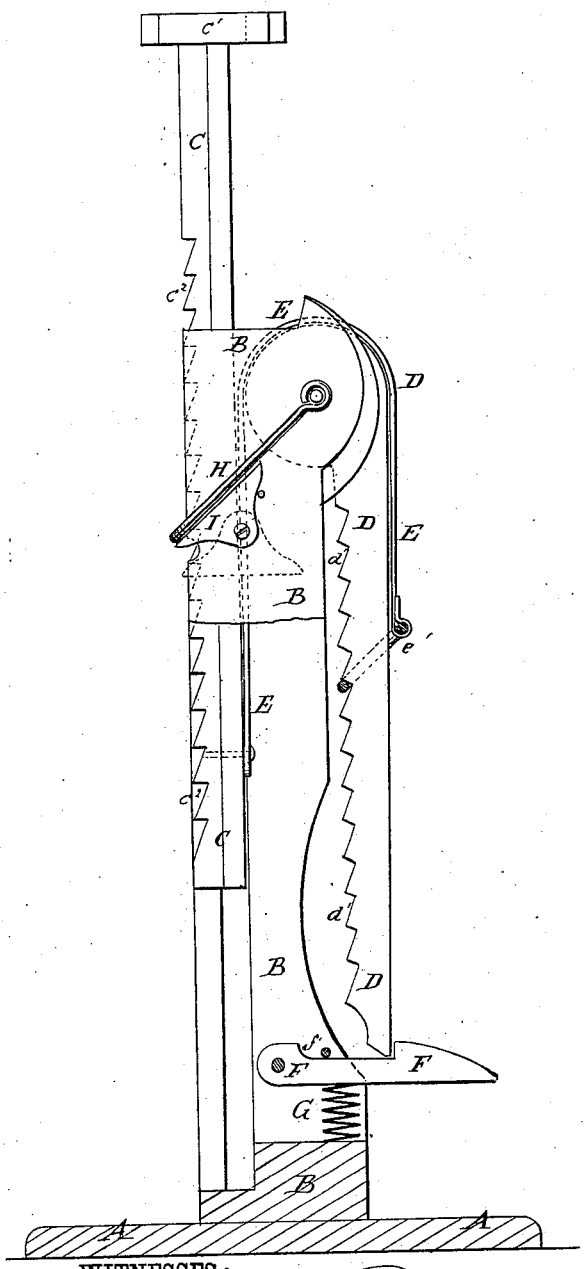
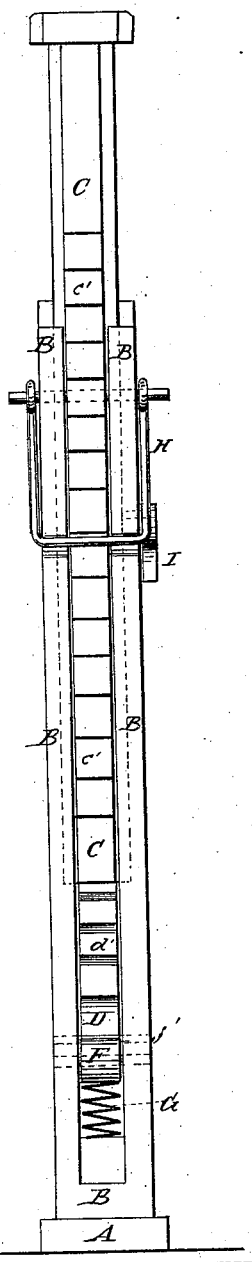


Fig: 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIE KNIFFIN, OF YORKTOWN, NEW YORK.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **207,876**, dated September 10, 1878; application filed May 14, 1878.

To all whom it may concern:

Be it known that I, WILLIE KNIFFIN, of Yorktown, in the county of Westchester and State of New York, have invented a new and useful Improvement in Wagon-Jacks, of which the following is a specification:

Figure 1 is a side view of my improved jack, partly in section to show the construction. Fig. 2 is a front view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved machine for raising the axles of wagons to allow their wheels to be removed and to raise other heavy weights, which shall be so constructed as to enable a weight to be raised by a slight exertion of power, which will hold the weight suspended for any desired length of time, and which at the same time shall be simple in construction, convenient in use, strong, and durable, not being liable to break or get out of order.

The invention consists in the combination of the sliding bar provided with ratchet-teeth upon its forward side, the pivoted lever provided with ratchet-teeth upon its lower side, the strap or chain provided with a loop or ring, and the spring-catch with the slotted standard or frame provided with a base; and in the combination of the pivoted loop and the pivoted button with the slotted standard or frame, the toothed sliding bar, the toothed lever, and the strap or chain provided with the loop or ring, as hereinafter fully described.

A is the base of the machine, which should be made of such a size as to afford a firm and stable support, and to the center of which is attached the lower end of the slotted standard or upright frame B. Within the cavity of the standard or frame B slides an upright bar, C, to the upper end of which is attached a head, c^1, for the object to be raised to rest upon.

In the forward edge of the sliding bar C are formed ratchet-teeth c^2, as shown in Fig. 1.

To the rear upper part of the standard or frame B is pivoted the end of a lever, D, upon the lower edge of which are formed ratchet-teeth d'.

To the lower part of the rear side of the sliding bar C is attached the end of a strap or chain, E, which passes around the rounded end of the lever D and along the upper side of the said lever, and has a ring or loop, e', attached to its end. The loop or ring e' is made of such a size as to receive and slide upon the lever D, so as to engage with the ratchet-teeth of the said lever, as shown in Fig. 1.

To the lower part of the standard or frame B is pivoted a catch, F, in such a position that the free end of the lever D, when turned downward into the position shown in Fig. 1, may catch upon and be held by the said catch F. The catch F is held up in proper position for the end of the lever D to catch upon it by a spring, G, placed beneath it, as shown in Figs. 1 and 2.

The catch F is kept from being forced too far upward by the action of the spring G by a pin, f', attached to the standard or frame B, for the upper edge of the said catch to strike against.

To the ends of the pivot of the lever D or other suitable supports are pivoted the ends of the loop H, which passes around the forward side of the standard or frame B, so as to drop into a notch in the forward edge of the said side and engage with the ratchet-teeth of the bar C, to support the said bar and the weight resting upon it at any desired elevation.

To the side of the standard or frame B is pivoted a button, I, which may be turned up into the position shown in full lines in Fig. 1 to hold the loop H away from the teeth of the bar C, or may be turned into the position shown in dotted lines in Fig. 1 to allow the said loop H to engage with the teeth of the said bar C.

In using the machine, it is placed beneath the axle or other weight to be raised, the lever D is raised into an upright position, and the bar C is raised against the said weight by slipping the ring or loop d' outward upon the lever D; then by lowering the lever D the bar C will be forced upward, raising the weight, the catch F receiving and holding the outer end of the lever D, locking the machine in position.

If it is desired to raise the weight to an additional height, the button I is turned to allow the loop H to rest against the ratchet-teeth of the bar C, so as to support the said bar. The

lever D is then again raised and the loop e' is slipped forward upon it, so that the weight may be farther raised by again operating the said lever.

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

1. The combination of the sliding bar C, provided with ratchet-teeth upon its forward side, the pivoted lever D, provided with ratchet-teeth upon its lower side, the strap or chain E, provided with a loop or ring, e', and the spring-catch F G with the slotted standard or frame B, provided with a base, A, substantially as herein shown and described.

2. The combination of the pivoted loop H and the pivoted button I with the slotted standard or frame B, the toothed sliding bar C, the toothed lever D, and the strap or chain E, provided with the loop or ring e', substantially as herein shown and described.

WILLIE KNIFFIN.

Witnesses:
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LEWIS H. MILLER.