L. HAVERSTICK.

Lifting-Jack for Vehicles.

No. 221,230. Patented Nov. 4, 1879.

Fig. 1

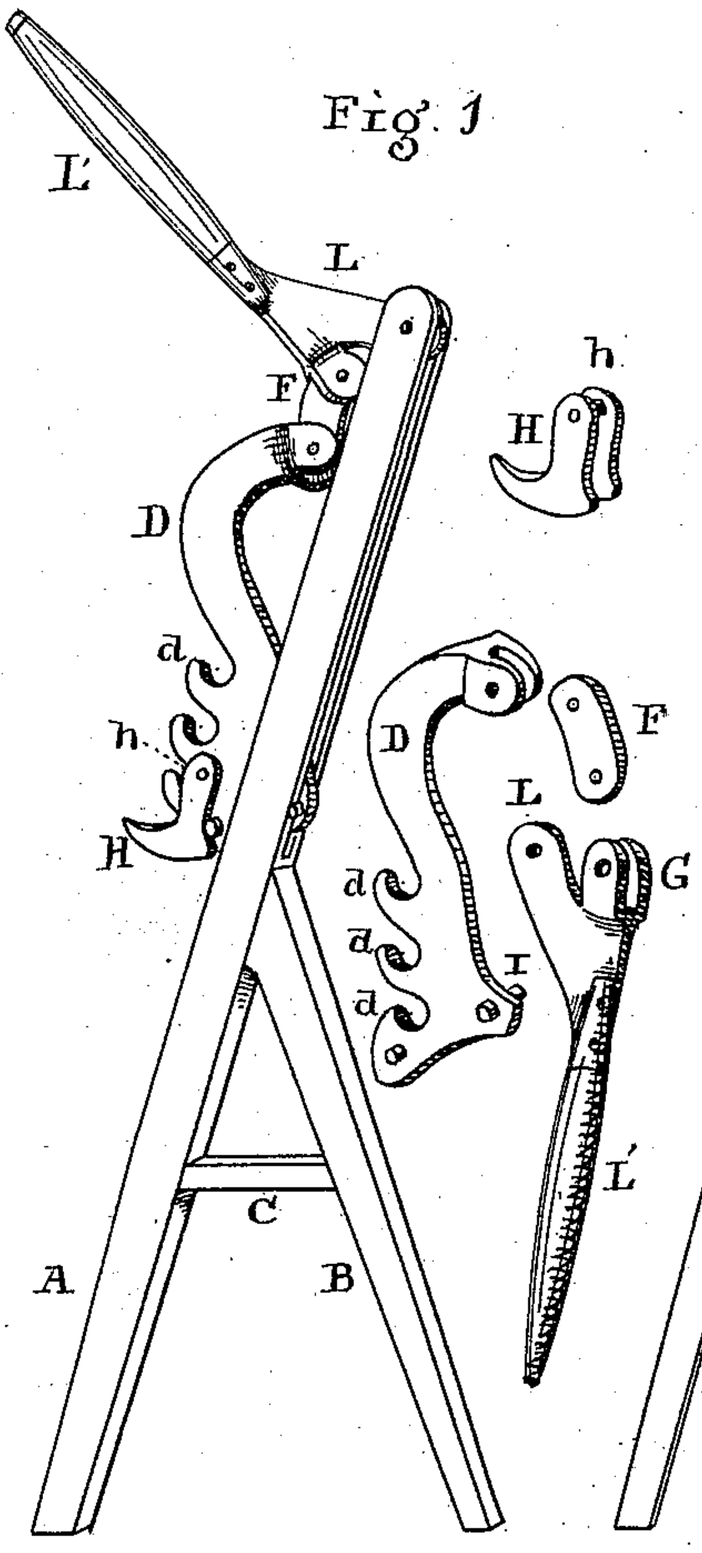
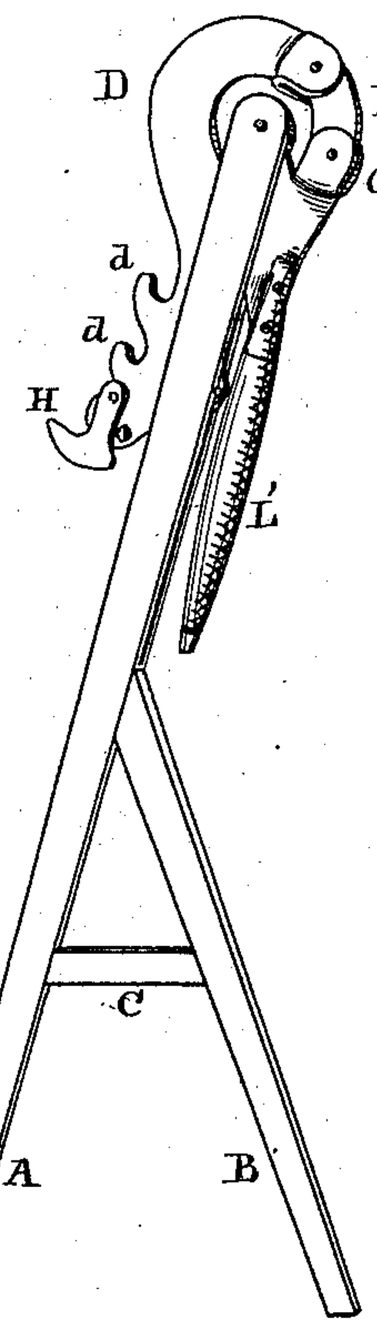


Fig. 2.



WITNESSES:

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LEVI HAVERSTICK, OF MANOR TOWNSHIP, (WASHINGTON P. O.,) LANCASTER COUNTY, PENNSYLVANIA.

IMPROVEMENT IN LIFTING-JACKS FOR VEHICLES.

Specification forming part of Letters Patent No. **221,230,** dated November 4, 1879; application filed September 4, 1879.

To all whom it may concern:

Be it known that I, LEVI HAVERSTICK, of Manor township, (Washington P. O.,) Lancaster county, State of Pennsylvania, have invented certain Improvements in Lifting-Jacks for Vehicles, of which the following is a specification.

This invention relates to a class of lever-jacks for raising the wheels of vehicles.

The novelty consists in the combination of a sliding hook-bar, in connection with the lever, by an intervening link, for the double purpose of increasing the extent of the raising-power and acting eccentrically as a lock to hold the object when raised automatically—that is, without a ratchet-bar and catch—as herein more fully set forth.

The accompanying drawings, with the letters of reference marked thereon, and a brief explanation will enable those skilled in the art to make and use the same.

Figure 1 shows the jack with the lever thrown up and the hook-bar slid down for application to raise. Fig. 2 shows the lever down and locked, with the sliding hook-bar up to sustain the thing raised to the extent shown. The intermediate figures represent the several parts in detail or detached.

The support consists of a main piece, A, having an open slot down to a branching prop or leg, B, inclined in relation to each other—say at an angle of thirty degrees at the point of union—and connected by a cross-brace, C, as shown.

The lever L has a slotted branch, G. A wooden handle, L′, may be bolted to it, or a handle may be cast with it also. This lever L has its fulcrum pin or bolt in the top of the slotted support A.

The slotted branch G of said lever is connected by a pivot to one end of a curved link-piece, F. The other end of this link-piece connects by a pivot with the slotted head of the curved sliding hook-bar D. This bar has hooks *d* on the lower and outer edge, and is widened below, so as to project beyond the slot in the upright on each side. Pins I are inserted in the projecting portions on each side of said upright, and retain and guide the said hook-bar in its up-and-down motion.

H is a detachable boot-shaped lifting-hook having the vertical sides slotted and provided with a cross-bolt, *h*, at the upper end, by which it is held and made adjustable in the hooks *d* of the sliding hook-bar D.

The operation is readily understood by the illustration. The jack is placed in position with the lifting-hook down and placed beneath the axle of the vehicle or object to be raised. The lever is then drawn over, while the eccentric link and its connection increases the rise of the hook fully one-third; and when the lever is brought over and down along the side of the support this link also aids in producing a lock, and the weight raised will be held automatically in that position without any ratchet or catch attachment for that purpose.

The link might be dispensed with if the increase of rise was no object, and remain substantially the same otherwise.

This simple arrangement, in which the several parts are readily united and put in place without labor or expense, can be made sufficiently light and strong when cast, so as to be easily handled, and prove as convenient as it is strong, cheap, and efficient, and cannot fail to give entire satisfaction.

I am aware that lifting-jacks of a great variety are in use having levers, hook-bars, and sliding portions in slotted uprights; but I am not aware that any combination substantially arranged and operating as herein set forth was ever before known or used. Therefore

What I claim as my invention is—

The combination of the double-ended lever L G, one end held by a bolt within the slotted support A at its upper end, and the branch G, connected or hinged by a pivot to an intermediate curved link, F, or direct to the hinged sliding hook-bar D, having hooks *d* and guide-pins I, and the adjustable lifting-hook H, with its cross-piece *h*, all substantially arranged and operating as and for the purpose specified.

LEVI HAVERSTICK.

Witnesses:
W. B. WILEY,
JACOB STAUFFER.