(No Model.)

J. RITCHIE & F. LUCKERMANN.

LIFTING JACK.

No. 300,011. Patented June 10, 1884.

Fig. 1.

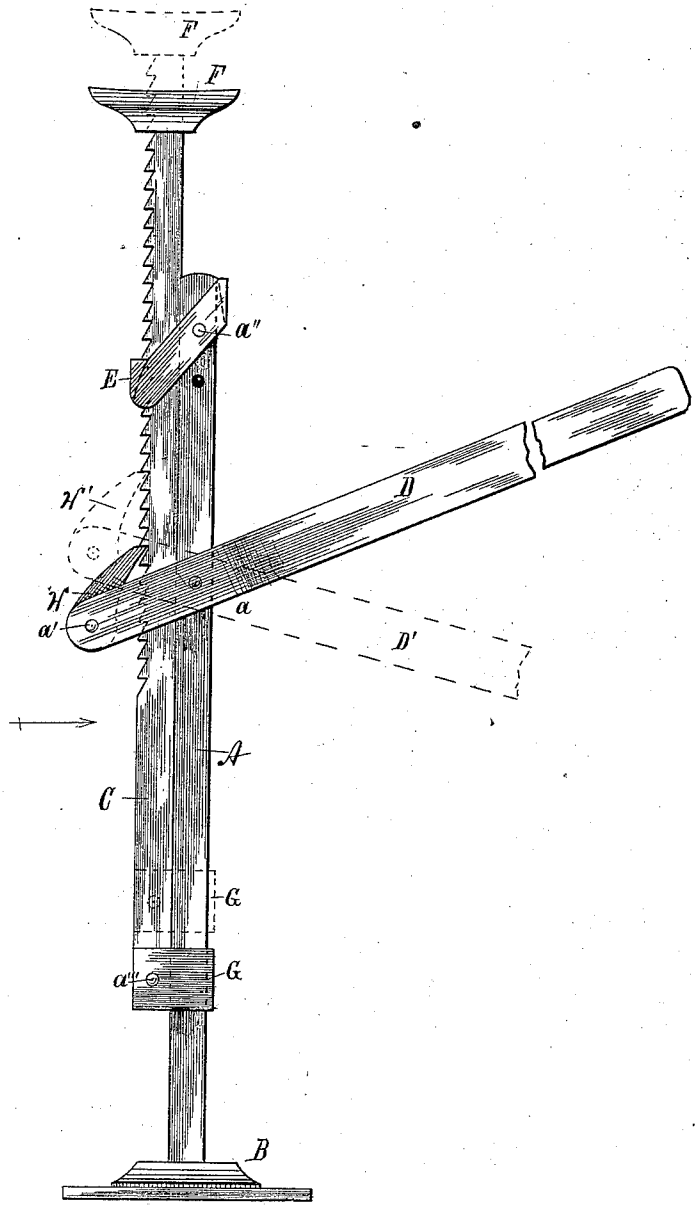
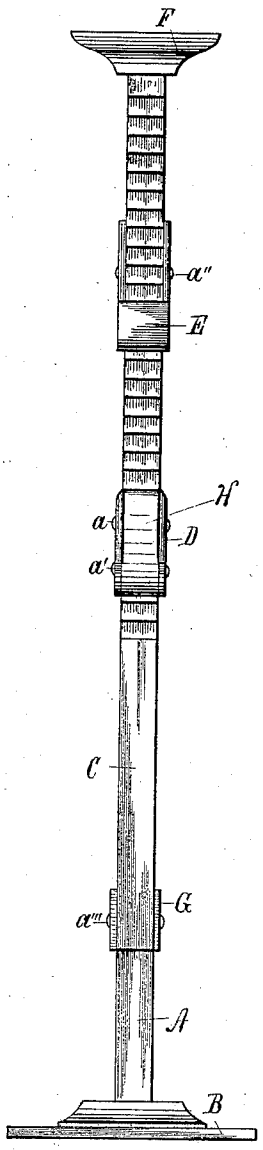


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN RITCHIE AND FRIEDRICH LUCKERMANN, OF FREEPORT, ILLINOIS.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 300,011, dated June 10, 1884.

Application filed February 23, 1884. (No model.)

To all whom it may concern:

Be it known that we, JOHN RITCHIE and FRIEDRICH LUCKERMANN, residents of Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Lifting-Jacks; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

Our invention is an improved lifting-jack which is especially adapted for use as a wagon-jack, but may be employed for any other similar purpose. The construction of the device is fully explained and described in the following specification and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of the device; and Fig. 2, a front elevation of same, looking in the direction indicated by the arrow *a* in Fig. 1.

In these views, A is a plain vertical bar, of wood or metal, rigidly attached to a suitable base, B; and C is an auxiliary bar of the same thickness as the bar A, and lying in contact with its front face. The bar C is notched in its front edge to form a ratchet-bar, and is held in contact with the front face of the bar A by means of a rigid loop, G, and a pivoted loop, E, which loops clasp the two bars. The loop G is rigidly attached to the bottom of the bar C, and passes around the bar A, and the loop E is pivoted to the upper end of the bar A by means of the pivot *a''*, and passes around the bar C. The inner face of the loop E lies in contact with the ratchet-teeth of the bar C, and is sloped backward, as shown by dotted lines in Fig. 1, to form a pawl corresponding to the notches in the ratchet-bar. The opposite inner face of the loop E is cut back, as shown by dotted lines in Fig. 1, to allow sufficient play of the loop for the pawl to pass from notch to notch of the ratchet-bar. A lever, D, the longer part of which lies in rear of the bars A C, is pivoted to the bar A by means of a pivot, *a*, and extends a short distance in front of the vertical bars. The longer part of the lever is a single bar; but a short distance in rear of the bar A it is divided into two parts, which lie one on each side of the bars A C, the pivot *a* passing through both of said parts, as well as the bar A. In the front end of the lever D is pivoted a pawl, H, the point of which, when in working position, is above the pivot *a'*, which connects it with the lever and in engagement with the ratchet-teeth of the bar A.

The operation of the device is evident from the drawings and the foregoing description. The lever D being depressed from the position shown by full lines to that shown by dotted lines in Fig. 1, the pawl H rises to the position H', and the bar C is raised a corresponding distance. As the bar rises, the front edge of the loop E (which forms a gravity-pawl) engages successively with the upwardly-moving teeth of the ratchet as they pass through the loop E, and when the downward pressure on the lever D ceases the weight of the bar C falls upon and is sustained by the loop E. The pivot *a''* of the loop E being wholly outside of the bar C, the downward pressure of the bar C on the loop swings the latter toward the bar A and holds the two bars firmly in contact. The upper end of the bar C is provided with a plate, F, which serves as a base for any weight to be raised. The upper face of the plate F is slightly concave, (see Fig. 1,) to adapt it especially to the lower surface of a wagon-axle.

Having now described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a wagon-jack, the combination of two bars—one plain, the other provided with ratchet-teeth—lying in contact and sliding longitudinally one upon the other, a loop attached rigidly to the lower end of the ratchet-bar and passing around the plain bar, a loop pivoted to the plain bar and passing around the ratchet-bar, and forming a gravity-pawl adapted to engage the teeth thereof, and means for raising said ratchet-bar, substantially as shown and described.

2. The combination of the plain bar A, ratchet-bar C, loop G, attached to the bar C and inclosing the bar A, loop E, pivoted to the bar A, and inclosing the bar C and en-

gaging the successive teeth of said bar, the lever D, pivoted to the bar A, and the pawl H, pivoted to the lever D, and engaging the ratchet-teeth of the bar C, substantially as shown and described, and for the purpose set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

JOHN RITCHIE.
FRIEDRICH LUCKERMANN.

Witnesses:
MICHAEL STOSKOPF,
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