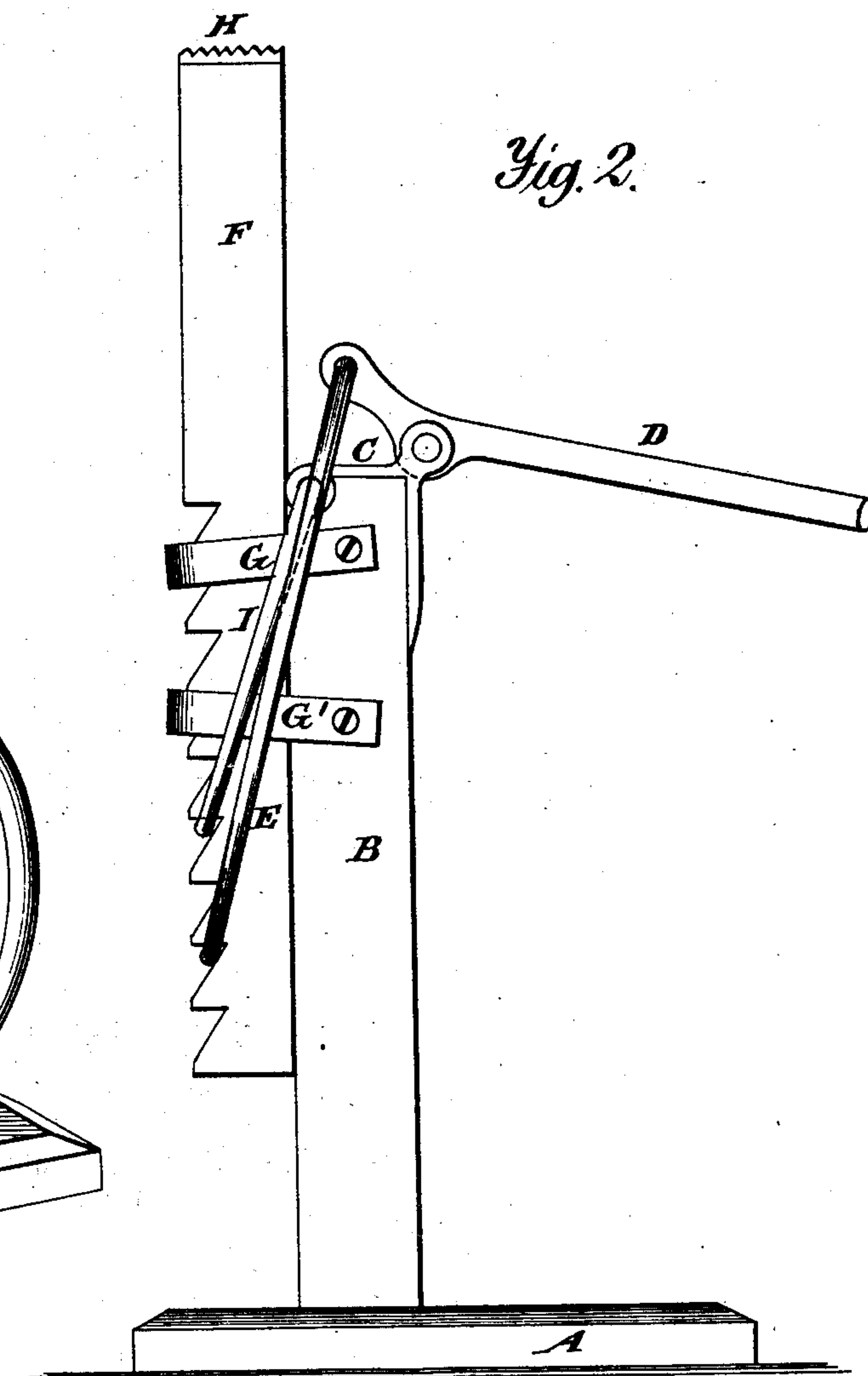
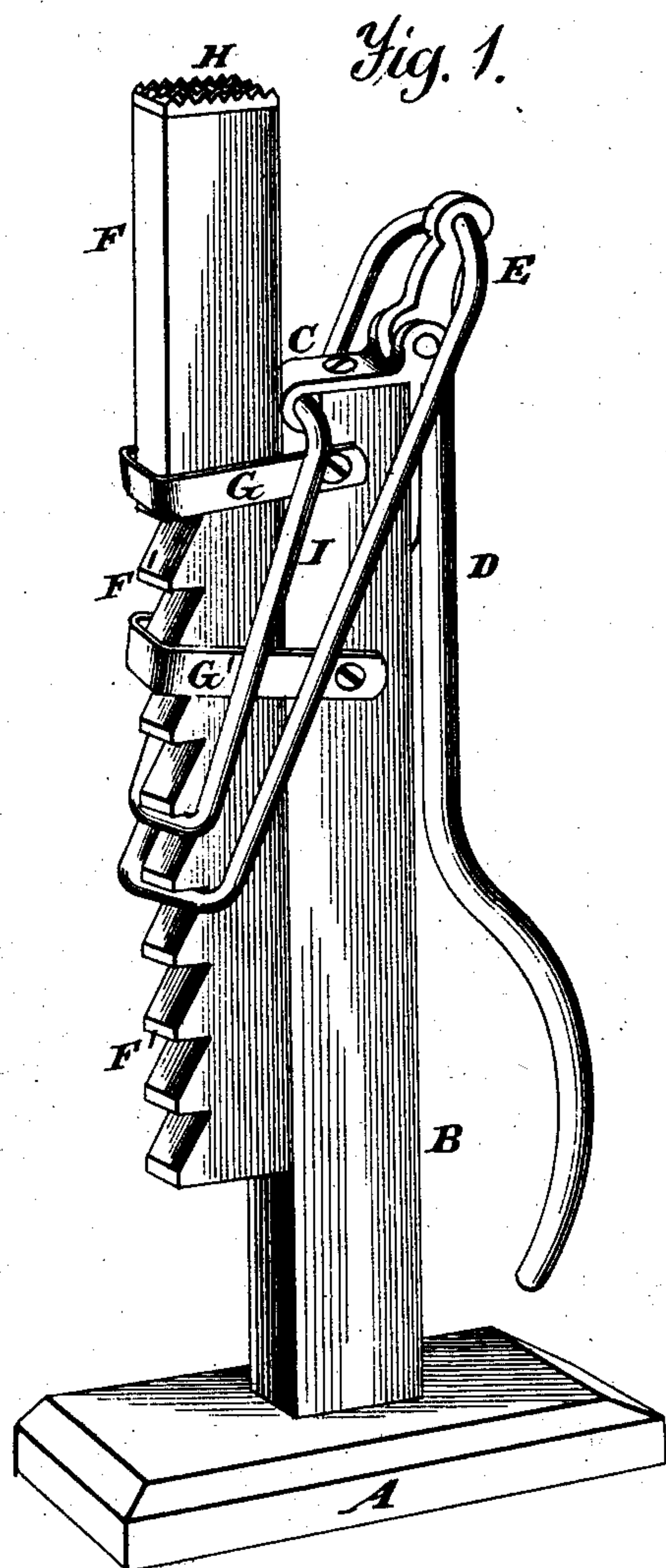


(No Model.)

E. LATHROP.  
LIFTING JACK.

No. 245,180.

Patented Aug. 2, 1881.



*Witnesses.*  
*A. Ruppert*  
*C. M. Connell*

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# UNITED STATES PATENT OFFICE.

ELIAS LATHROP, OF AVILLA, INDIANA.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 245,180, dated August 2, 1881.

Application filed March 18, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, ELIAS LATHROP, a citizen of the United States, residing at Avilla, in the county of Noble and State of Indiana, have  
5 invented certain new and useful Improvements in Lifting-Jacks; and I 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 appertains to make  
10 and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in lifting-jacks which are used for lifting the wheels of wagons and other vehicles from the ground when necessary to remove them from their axles, and the object of my invention is to provide in such jacks a novel combination of devices which shall both raise the wheels and  
20 axles and hold them in their elevated position for any required length of time. I attain this object by the combination of devices illustrated in the accompanying drawings, in which—

25 Figure I is a perspective view of a jack, showing a stand or platform provided with an upright column and loops for retaining in position a toothed or notched sliding column, a lever for raising the wheels, and two links.  
30 Fig. II is a side elevation of the same, showing the parts in position for lifting.

Similar letters refer to similar parts in both figures.

In constructing jacks of this type I provide  
35 a stand or platform, A, of suitable dimensions, and secure to or in it a column, B, of suitable height to adapt it to the work to be done, and of suitable dimensions otherwise to enable it to bear its load. Upon the top of this  
40 standard there is secured a plate of metal, C, which is provided with suitable ears for the reception of a lever, D, which is pivoted to the plate, as shown in the drawings, and has one long and one short arm. To the short arm  
45 there is affixed a link, E, which, by preference, is welded after it is passed through the lever. This link spans the standard B and a sliding toothed or notched column, F, its lower end engaging the notches formed thereon. This  
50 toothed or notched column has one smooth side, which bears upon the column B, while a portion of its opposite side is provided with teeth F', which are made of such length that the upward movement of the long arm of le-

ver D will cause the link E to descend sufficiently far to pass from one to another, or to pass over and engage with the next one, such arrangement being effected and controlled by the length of the short arm of said lever, or by the length of the teeth, or by both. The sliding  
60 column is held in contact with column B by means of plates of metal G G', which are secured to the latter and pass around the former, as shown.

Upon the upper end of column F there is,  
65 by preference, placed a serrated or roughened plate of metal, H, the points upon the upper surface of which are designed to bear against the axle of the wagon or the substance to be raised, and thus prevent it from slipping  
70 thereon.

For the purpose of retaining the column F in its raised position as it is raised by the link E, there is pivoted to the plate C a link, I, which swings freely in said plate and passes  
75 around the column F and engages the teeth or notches on its outer face, its arrangement being such that as the column is raised its lower end falls into one of the notches on the column and holds it in position or prevents it from  
80 falling back while the lever D is being manipulated for the purpose of raising the wheel or other substance to a greater height. The link also serves the purpose of holding the weight raised to the required height in that position  
85 as long as desired.

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

The combination, in lifting-jacks, of a stationary column, B, a vertically-moving column, F, having upon its upper end a serrated or notched plate, H, a movable link, E, attached to the upper end of a lifting-lever, a stationary link, I, pivoted to the upper end of  
90 the column B, yoke or staples G G' for holding the vertically-moving column F in position, and a lever, D, for operating the link E, the parts being arranged as described, whereby the link I is made to support the load while  
100 the link E is being lowered upon the column, all as described.

In testimony whereof I affix my signature in presence of two witnesses.

ELIAS LATHROP.

Witnesses:

JOSEPH P. CESSNA,  
SAMUEL P. STEWART.