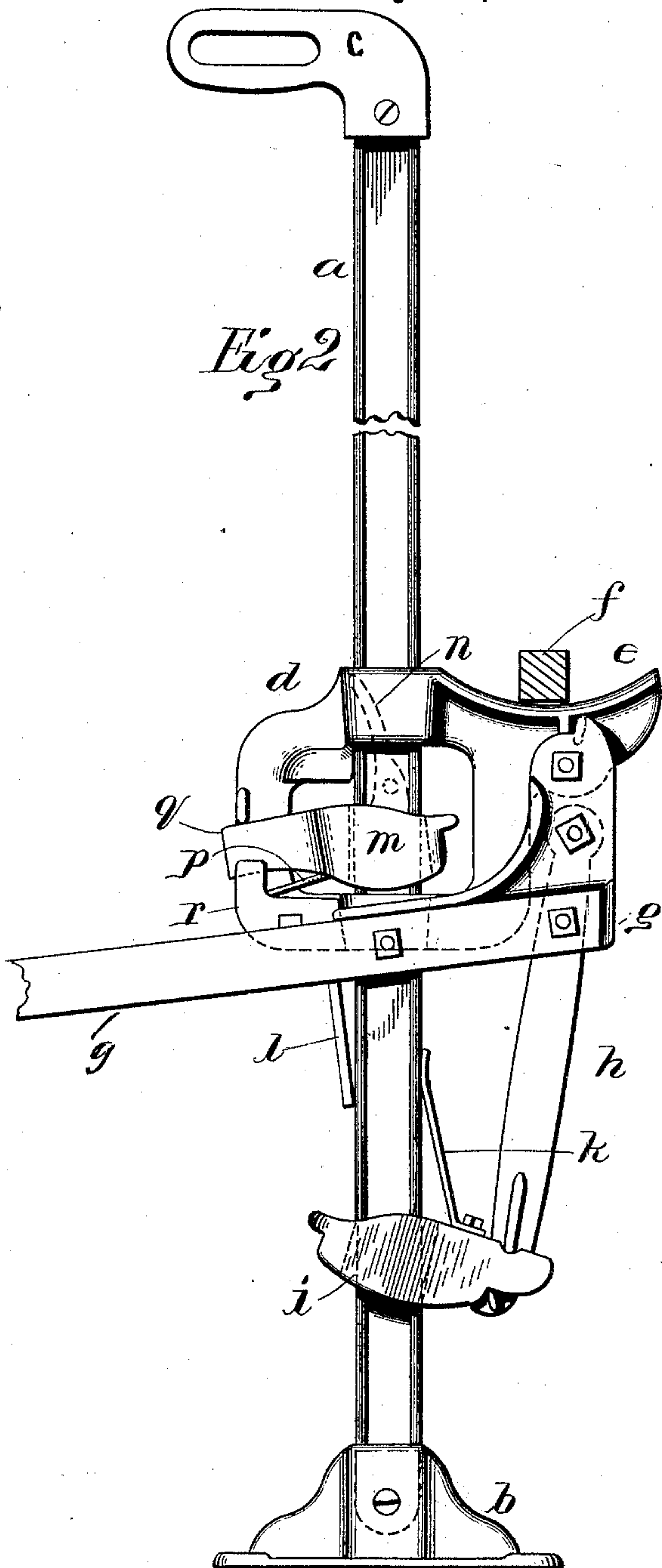
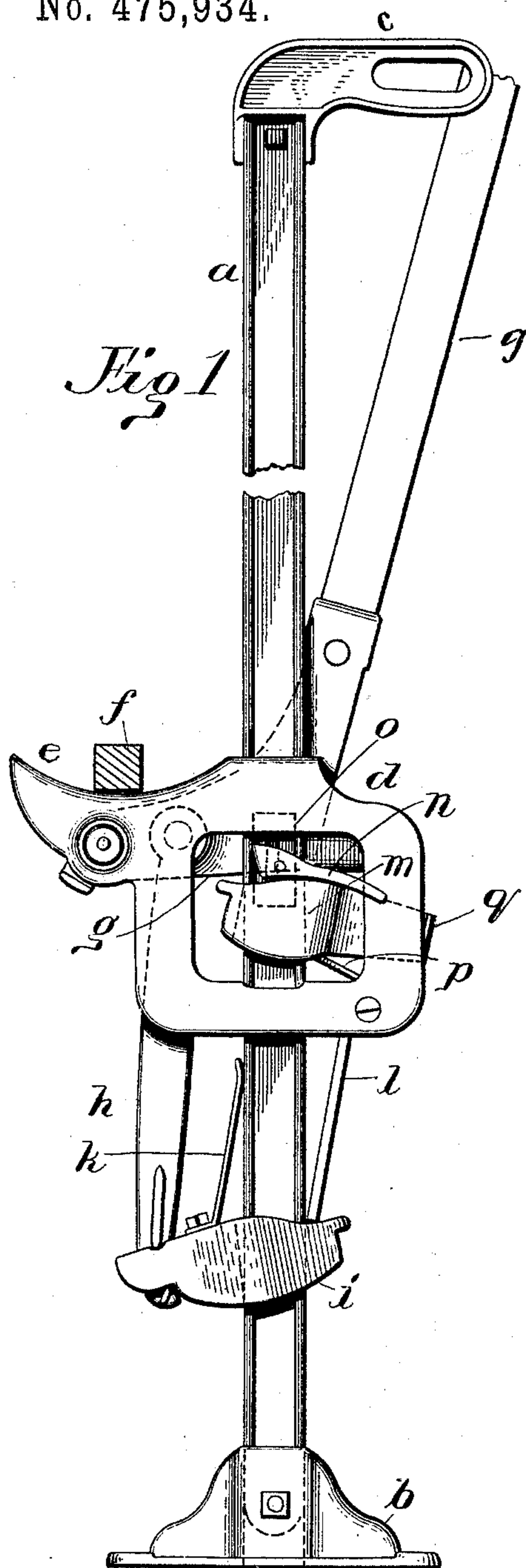


(No Model.)

W. H. COX.  
LIFTING JACK.

No. 475,934.

Patented May 31, 1892.



Witnesses

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Attorneys.



# UNITED STATES PATENT OFFICE.

WILLIAM H. COX, OF VIRDEN, ILLINOIS.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 475,934, dated May 31, 1892.

Application filed April 9, 1892. Serial No. 428,535. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. COX, a citizen of the United States, residing at Virden, in the county of Macoupin and State of Illinois, have invented certain new and useful Improvements in Lifting-Jacks; and I do 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 and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements upon my prior patent, No. 468,965, granted February 16, 1892, my object being to produce a device by means of which the lifting-bracket will climb the standard by the movement of the handle and which will be more simple, convenient, and effective than those which do the same thing.

With this object in view my invention consists in the peculiar features and combinations of parts, more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of my invention, showing the position of parts arranged so that the bracket will climb the standard upon moving the handle. Fig. 2 represents a view of the opposite side of the jack, showing the position of parts when the sliding bracket is adjusted without the aid of a second clamp.

The reference-letter *a* represents a standard, pivoted to a base *b* and provided at its upper end with a handle *c*, by means of which the jack can be easily and conveniently moved about. Arranged to slide upon the standard *a* is a sliding bracket *d*, provided with a substantially forwardly-extending arm *e*, having a concaved upper surface to retain a wagon-axle, such as *f*. Pivotaly secured to the under inner face of this arm is the short arm of a bell-crank-actuating lever *g*, having a movable fulcrum-rod *h*, the lower end of which rod is pivoted to a clamping-runner *i*, adapted to clamp the standard by means of the plate-spring *k*, which is secured to the forward upper face of the runner and bears against the front face of the standard. Secured to the rear lower edge of the sliding

bracket is a releasing-rod *l*, the lower end of which is adapted to engage the rear upper face of the clamping-runner *i* when the actuating-lever is raised to a vertical position. All the foregoing is described and shown in my prior patent before mentioned.

Surrounding the standard *a* and placed between the upper and lower sides of the bracket *d* is a second clamping-runner *m*, which is held out of engagement with the standard *a* by means of a thumb-lever *n*, pivoted on a movable support *o*, which fits in the recessed side of the standard and travels with the bracket in its movements by means of a lug, the upper end of which bears against the lower edge of the upper side of the bracket and the lower end bearing upon the upper face of the clamping-runner *m*. The runner is held in engagement with the standard when the thumb-lever is thrown back or into a horizontal position by means of a plate-spring *p*, which bears against the lower edge thereof. The rear end *q* of the runner is fulcrumed or supported in the rear edge of the bracket and held in this position by a removable plate *r*.

Having thus described the preferred form of construction, I will now proceed to describe its operation.

When it is desired to use my jack, the operator grasps the handle *c* with his left hand and the handle of the actuating-lever *g* with his right hand and raises the latter handle to a vertical position. This movement allows the releasing-rod *l* to bear upon the rear end of the runner *i*, thereby releasing it, and the runner and bracket are thus allowed to slide on the standard *a*, either up or down, at the will of the operator. The jack is now ready to be adjusted to an axle of any height, so the operator places the arm *e* directly under the axle and pulls upon the handle of the actuating-lever *g*, and as the bracket *d* is connected thereto it will of course be raised also. The operator raises the bracket until its upper face bears against the lower face of the axle, such as is shown in Fig. 1. He then releases the handle of the actuating-lever *g* from its vertical position, which movement allows the releasing-rod *l* to become disengaged from the runner *i*, allowing the runner to clamp or bind against the edges of



the standard. This position is shown in Fig. 1. The axle of the wagon is now ready to be lifted and the handle of the actuating-lever *g* is pushed down to the position shown in Fig. 2, which raises the axle a predetermined distance, the runner *i* forming a rigid base for the fulcrum-rod *h*. Now if it is desired to raise the axle still higher the second clamping-runner *m* is brought into play by throwing the thumb-lever *n* down to a horizontal position, as shown in Fig. 2, thus allowing the spring *p* to exert its energy and force the forward end of the runner up, thereby binding against the faces of the standard. It will be seen that by using this second clamping-runner *m* the handle of the actuating-lever *g* can be raised to the position shown in Fig. 1 without fear of the weight of the wagon forcing the bracket *d* down, and a higher grip can thus be secured upon the standard by the runner *i*.

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

1. The combination, in a lifting-jack, of a

standard, a bracket movable on said standard, a movable clamping-runner, a lever having its fulcrum on said runner and adapted to actuate the bracket, and a second movable clamping-runner, substantially as described. 30

2. In a lifting-jack, the combination of a movable clamping-runner, a movable bracket supported by said runner, and a second clamping-runner placed above the first and adapted to support the bracket, substantially as described. 35

3. In a lifting-jack, the combination of a bracket surrounding a standard and movable thereon, a movable clamping-runner adapted to support the bracket, a second clamping-runner, a spring for throwing said second clamping-runner in position, and a movable thumb-lever for throwing it out of position, substantially as described. 40

In testimony whereof I affix my signature in presence of two witnesses. 45

WILLIAM H. COX.

Witnesses:

BALFOUR COWEN,  
F. N. MARTIN.