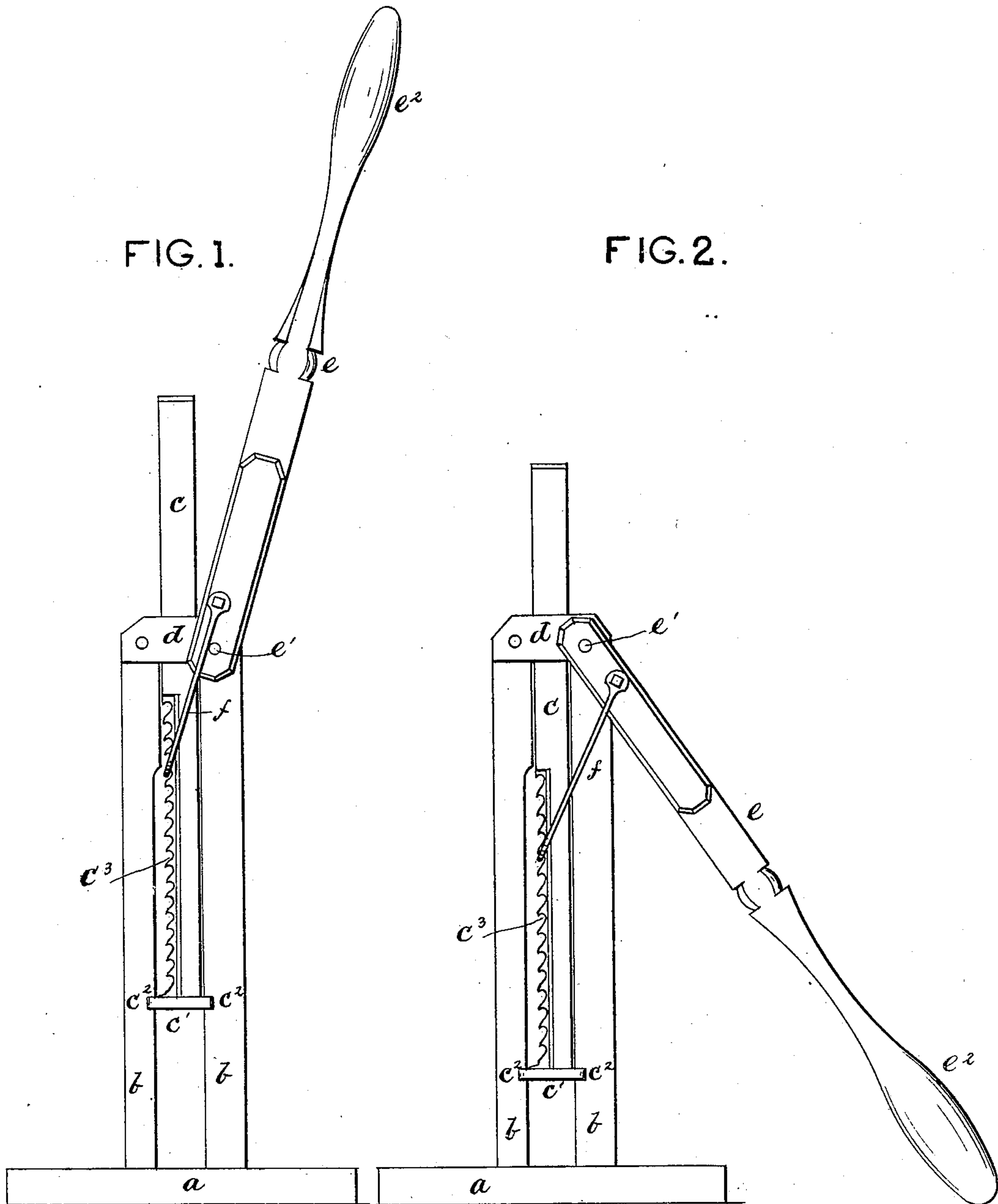


(No Model.)

A. V. RYDER.  
Lifting Jack.

No. 230,966.

Patented Aug. 10, 1880.



Witnesses:

Jno. S. McLean  
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By R. B. V. A. Lacey Attys:

# UNITED STATES PATENT OFFICE.

ANDREW V. RYDER, OF GERMANO, OHIO.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 230,966, dated August 10, 1880.

Application filed May 31, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, ANDREW V. RYDER, a citizen of the United States, resident at Germano, in the county of Harrison and State of Ohio, have 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 ap-  
10 pertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in lifting-jacks; and it consists in the arrangement of the several parts hereinafter described, and specifically pointed out in the claim.

In the drawings, Figure 1 is a side elevation, showing the hand-lever raised, and Fig. 2 is a side elevation, showing the hand-lever drawn down.

*a* is the base or sill, into which is mortised the two upright posts *b b*, between which the jack-post *c* slides up and down. The upper  
25 ends of the posts *b b* are held together by two plates, *d*, (only one of which is shown,) placed in opposite sides and riveted or bolted in position. The jack-post *c* is provided with a foot, *e'*, having short spurs *e''*, which project over  
30 onto the sides of the posts *b* and hold the lower end of said jack-post steadily in place between the uprights. The jack-post is provided with a toothed rack, *e'''*, placed on one of its edges next one of the posts *b*. The teeth of the rack  
35 are inclined downward, as shown, and are adapted to hold the end of the stirrup or loop *f* affixed to the hand-lever *e*. The hand-lever *e* is pivoted on a bolt, *e'*, put through its end and through the upper end of one of the posts  
40 *b*, as shown. The stirrup *f* engages the tooth-rack *e'''*, and it has its upper or outer end pivoted to the hand-lever *e* at a point between the bolt *e'* and the handle *e''*. By this arrange-

ment it will be seen that when the handle *e* is lowered the stirrup *f* slides downward over the ends of the teeth on the rack *e'''*, and when the lever *e* is raised the stirrup engages one of the teeth and the jack-post is raised. By raising the lever *e* till the sides of the stirrup have swung past the pivotal bolt *e'*, as shown in  
50 Fig. 1, the jack-post will be locked in its place.

In my device I have arranged the parts so that the greatest purchase or power can be exerted by the person using it.

I am aware that lifting-jacks have been made resembling mine in their general outline; but they have been arranged so that the power of the person was exerted by pulling down on the lever *e*, and in such devices weights which exceeded the weight of the operator could not  
60 be raised. With my device any weight equal to the lifting-power of the person can be raised.

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

The improved lifting-jack composed of two parallel upright posts held together by suitable means, a jack-post furnished with guide-spurs on its lower end, a stirrup-shaped lifting-loop passed between the parallel uprights  
70 and over the toothed rack on the jack-post and having its arms pivoted on opposite sides of a hand-lever, and a hand-lever pivoted to the top of the upright post against which the jack-post bears, the pivotal point of the said  
75 stirrup lifting-loop being fixed between the pivotal point of the hand-lever and the outer or swinging end thereof, substantially as and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

ANDREW V. RYDER. [L. S.]

Witnesses:

REV. THOS. S. PARK,  
J. W. RAMSEY.