

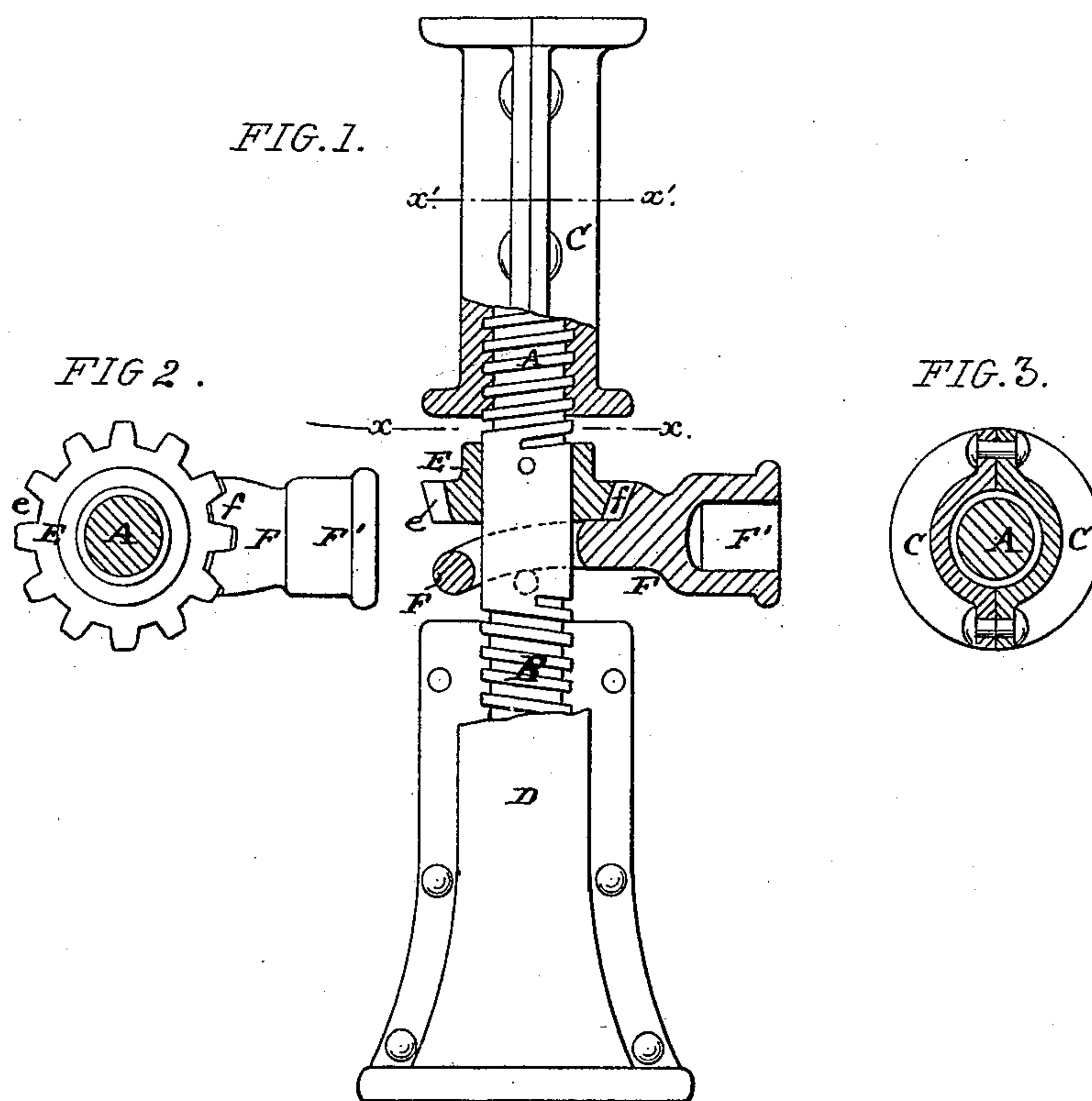
(No Model.)

J. CHURCH.

LIFTING JACK.

No. 258,556.

Patented May 30, 1882.



ATTEST:

Robert Burns.  
L.C. Morse

INVENTOR:

James Church

# UNITED STATES PATENT OFFICE.

JAMES CHURCH, OF ST. LOUIS, MISSOURI.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 258,556, dated May 30, 1882.

Application filed April 30, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES CHURCH, of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Lifting-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention consists in certain constructive features applicable to screw lifting-jacks, as will hereinafter more fully appear.

In the drawings, Figure 1 is a side view, with parts removed, of my invention as applied to screw lifting-jacks. Fig. 2 is a detail sectional plan at line *x x*, Fig. 1, of the device for rotating the screw. Fig. 3 is a detail section at line *x' x'*, Fig. 1.

The operating-screw is formed with right and left hand screw-threaded portions A B, which screw into the respective screw-threaded pieces C D. These pieces are cast with their screw-threads in two parts, which are afterward riveted or bolted together, as clearly indicated in Fig. 3.

E is a gear-wheel, slightly beveled, arranged on the shank of the operating-screw, the teeth *e* of which are engaged by one or more teeth, *f*, of a tilting sleeve, F, which surrounds the

screw-shank and rocks on a pin or collar on said shank, as clearly indicated in Fig. 1. This construction forms a cheap and effective ratchet device for rotating the screws, avoiding as it does the use of separate pawls, springs, &c., usually required to effect the purpose.

In use the teeth *f* can be moved down out of engagement with the gear-wheel E in the back motion of the sleeve F and moved up into engagement in the forward motion of the same when it is desired to force the parts C D apart, and vice versa in drawing the parts C D together. The sleeve F is provided with an eye or hollow extension, F', for the reception of an operating-lever.

I claim—

1. The operating-screw provided with gear-wheel E, in combination with a tilting sleeve or lever, F, having one or more teeth, *f*, as and for the purpose set forth.

2. The combination of operating-screws A B, parts C D, gear-wheel E, tilting sleeve F, and teeth *f*, as and for the purpose set forth.

In testimony of said invention I have hereunto set my hand.

JAMES CHURCH.

In presence of—

ROBERT BURNS,  
L. C. MORSE.