

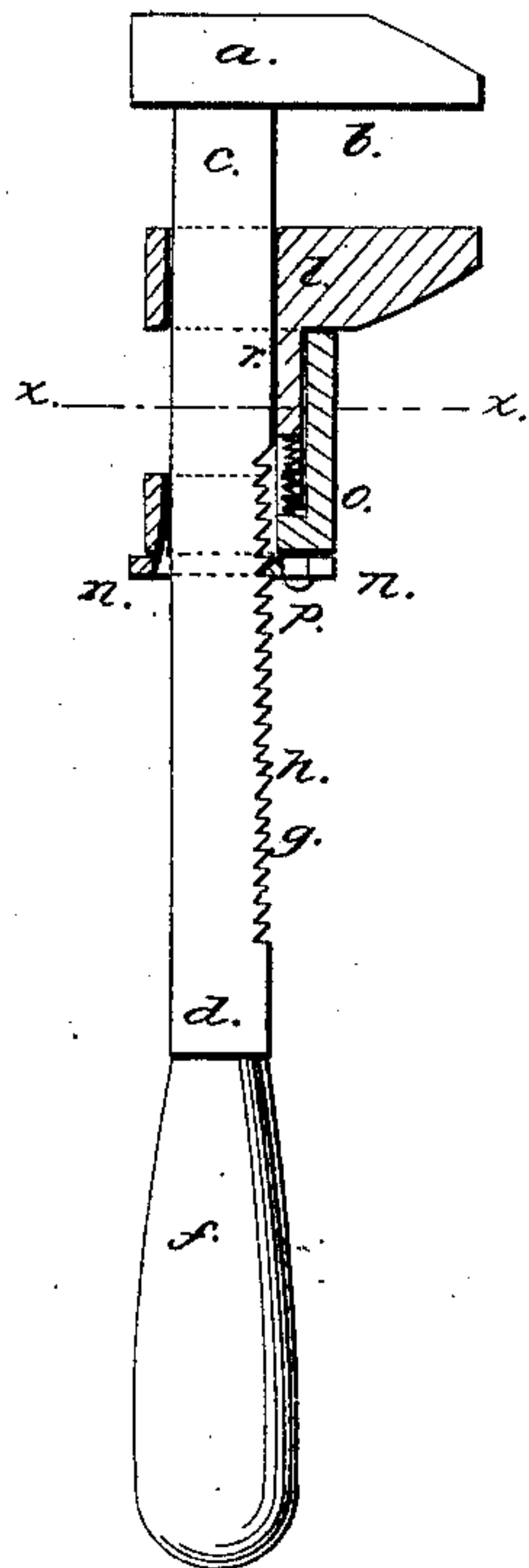
*S. S. Barnaby,*

*Wrench.*

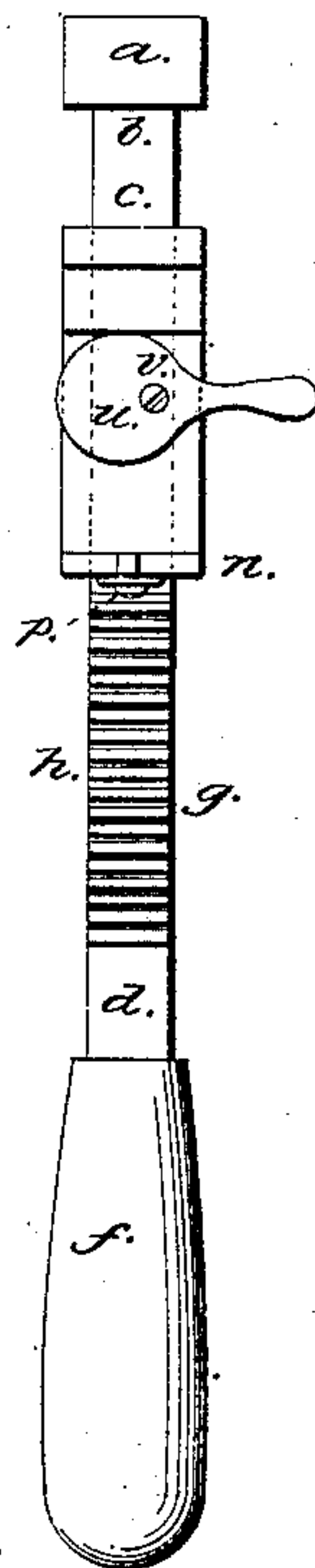
*N<sup>o</sup> 63,459.*

*Patented Apr. 2, 1867.*

*Fig. 2.*



*Fig. 1.*



*Fig. 3.*



*Witnesses:*

*F. A. Jackson.*  
*W. H. Swan.*

*Inventor:*

*S. S. Barnaby.*  
*Per Munn & Co.*  
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# United States Patent Office.

SAMUEL S. BARNABY, OF CHICAGO, ILLINOIS.

*Letters Patent No. 63,459, dated April 2, 1867.*

## IMPROVEMENT IN WRENCHES.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL S. BARNABY, of Chicago, in the county of Cook, and State of Illinois, have invented a new and useful "Improvement in Wrenches;" and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention consists in so arranging the movable jaw of a wrench with regard to its fixed jaw that it can be readily adjusted and set at any desired position upon the common connecting-bar or shaft of the same so as to increase or decrease the space or opening between them according to the size or dimensions of the nut or other device upon which it is intended to operate. My improvements are represented in the accompanying plate of drawings, of which—

Figure 1 is a plan or top view.

Figure 2 a side view of the same, showing the arrangement of the movable jaw in section; and

Figure 3 a transverse vertical section, taken in the plane of the line *x x*, fig. 2.

*a a*, in the drawings, represent the fixed jaw of the wrench, secured at right angles to and upon the outer end *b* of a straight, square, or other suitable-shaped bar or rod, *c*, made of proper length, having at its other or inner end *d*, a handle, *f*, attached in any suitable manner, or formed as a part thereof. The upper edge *g* of the bar *c* has a series of parallel teeth, *h h*, formed in the same for a portion of its length, but extending entirely across its width. *l* the movable jaw, made of similar shape to the fixed jaw *a*, placed loosely upon the bar *c*, so as to be freely moved toward or from the fixed jaw at pleasure, and thus decrease or increase the size of the opening or space *m* between them, it being securely held at any desired position thereon, by means of a sliding spring plate *n*, on the inner end of its hollow sleeve *o*, interlocking with the teeth of the bar *c*, from which it is disengaged by simply raising the same, as is apparent by inspection of fig. 2, it moving upon a fixed guide-pin or screw, *p*, of the sleeve *o*. But in case it should be necessary to adjust or set the movable jaw with regard to the fixed one at a less distance than the space between the teeth of the bar *c*, I attach to the said jaw an arm, *r*, moving in a groove, *s*, of the horizontal and upper portion *t* of its sleeve *o*, so that by turning the eccentric or cam lever *u*, hung upon a pivot, *v*, of the sleeve, in the proper direction to bring it to bear against the inner end of the jaw, the said jaw can be made to move toward the fixed jaw the requisite distance, it being there held by the eccentric until the same is released therefrom, when the jaw is forced back to its original position by means of the spiral spring *y* of its arm *r*, as is obvious without further explanation.

I claim as new, and desire to secure by Letters Patent—

The movable jaw *l*, hollow sleeve *o*, spring plate *n*, spiral spring *y*, cam lever *w*, constructed, arranged, and operating upon the bar *c*, substantially as and for the purpose herein set forth.

The above specification of my invention signed by me this 16th day of June, 1865.

SAM'L S. BARNABY.

Witnesses:

ALBERT W. BROWN,  
M. M. LIVINGSTON.