

B. F. JOSLYN.  
WRENCH.

No. 170,860.

Patented Dec. 7, 1875.

Fig. 2.

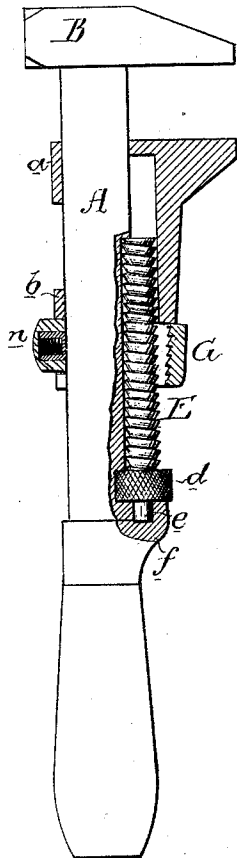


Fig. 1.

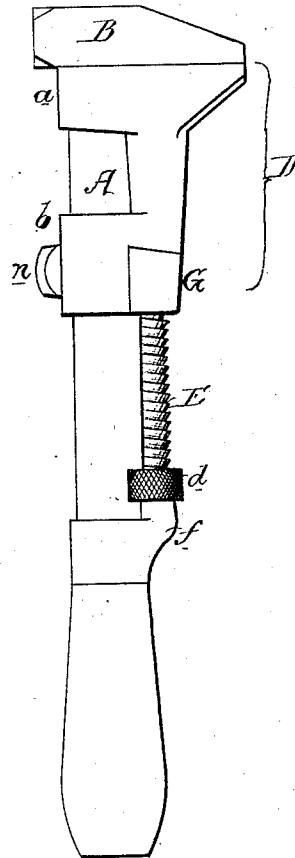


Fig. 4.

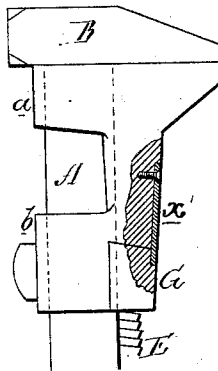
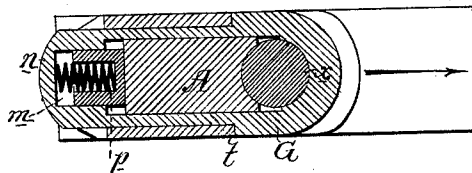


Fig. 3.



Witnesses,  
Harry Smith  
Hubert Howson

B. F. Joslyn  
by his Attorneys,  
Hazen and Son

# UNITED STATES PATENT OFFICE

BENJAMIN F. JOSLYN, OF WORCESTER, MASSACHUSETTS.

## IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **170,860**, dated December 7, 1875; application filed September 17, 1875.

### CASE B.

*To all whom it may concern:*

Be it known that I, BENJAMIN F. JOSLYN, of Worcester, Massachusetts, have invented an Improvement in Wrenches, of which the following is a specification:

The object of my invention is to construct a wrench in which the movable jaw can be readily moved beyond the control of or into gear with the adjusting-screw; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1, Sheet 1, is a side view of my improved wrench; Fig. 2, the same with the movable jaw in section; Fig. 3, a transverse section on the line 1 2, drawn to an enlarged scale.

In Figs. 1, 2, and 3, A is the stem, B the fixed jaw, and D the movable jaw, of the wrench. A screw, E, fits snugly in a groove in the stem A of the wrench, and has the usual serrated enlargement, *d*, adapted to a recess in the stem, and a journal, *e*, adapted to a bearing in a projection, *f*, secured to or forming part of the stem. The thread of the screw E is inclined on one side and abrupt on the other, and receives threads, or rather teeth, of a similar character formed in the concave portion *x* of the sliding yoke G, through which passes the stem A, the yoke being allowed a limited play on the stem in the direction of the arrow, but fitting snugly to the opposite sides of the said stem, all as best observed in the sectional view, Fig. 3. The yoke passes through and is guided by the projection *b* of the movable jaw, and in the projecting end *n* of the yoke is formed a pocket, *m*, for the reception and guidance of a block, *p*, containing

a spiral spring, the effect of which is to maintain the yoke in the position shown in Fig. 3, where its teeth are in gear with the screw E, and its shoulders *t* in contact with the front edge of the stem. As long as the teeth of the yoke are in gear with the thread of the screw the jaw D is fixed, but may be adjusted delicately, as in ordinary wrenches, by manipulating the screw. On pushing the yoke G outward from the stem, however, until its teeth are out of gear with the screw, the jaw D will be at liberty to be quickly moved in either direction on the stem.

In Fig. 4 a spring, *x'*, is secured within a recess in the front edge of the jaw D, and bears against the yoke G. This flat spring may be used in place of that in the block *p*, or both springs may be used.

I wish it to be understood that I do not desire to claim, broadly, the combination of the adjusting-screw and movable jaw of a wrench with a movable nut adapted to the said screw; but that

I claim as my invention—

The combination of the stem A of the wrench, the movable jaw *a*, and the spring-yoke G, a portion of which is adapted to the screw, another portion projecting through and arranged to slide in the said movable jaw and embracing the stem A, all being constructed as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BENJAMIN F. JOSLYN.

Witnesses:

S. B. I. GODDARD,  
CHARLES V. PUTNAM.