

(Model.)

J. W. PRUITT.

RATCHET WRENCH.

No. 283,357.

Patented Aug. 14, 1883.

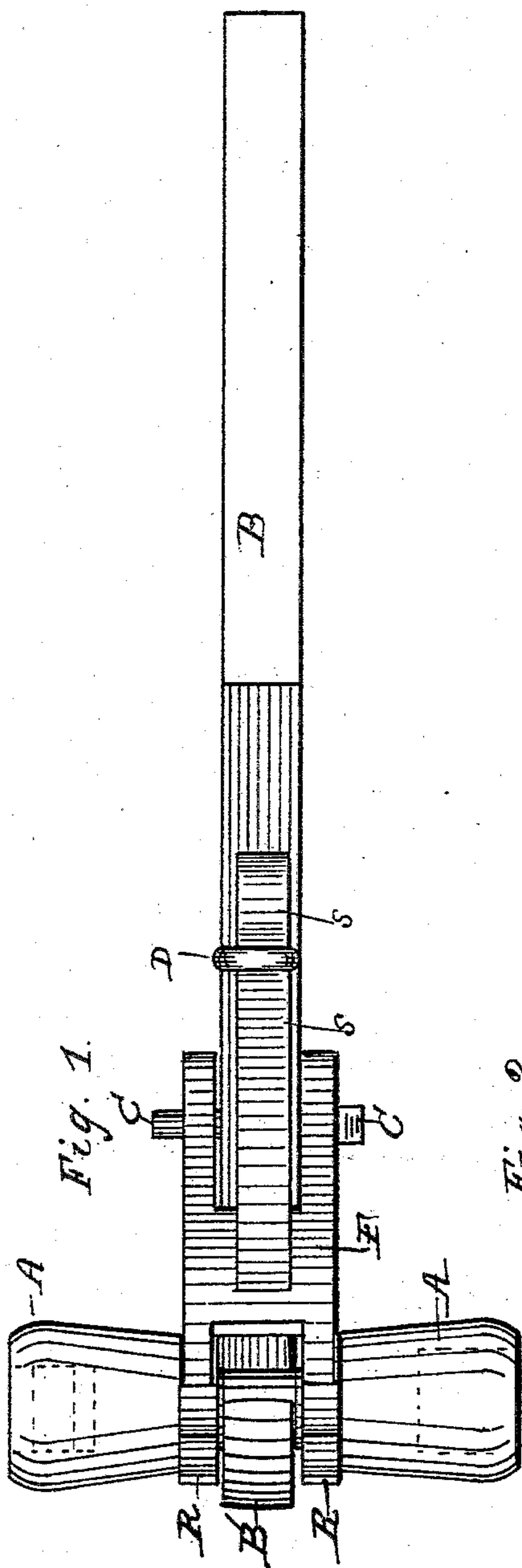


Fig. 1.

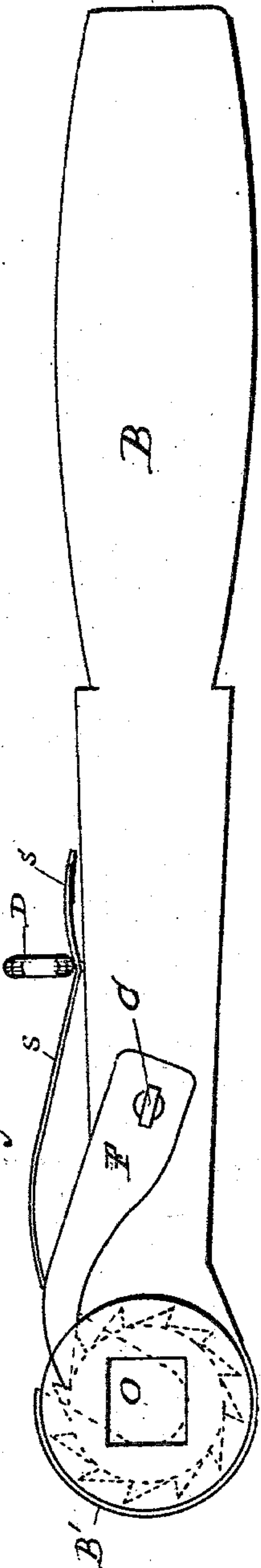


Fig. 2.

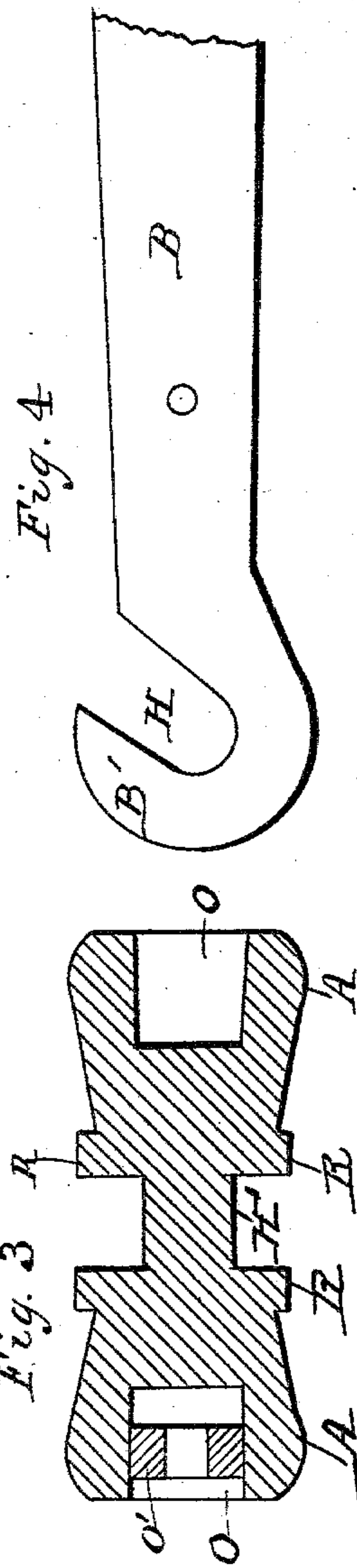


Fig. 4.

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RATCHET-WRENCH.

SPECIFICATION forming part of Letters Patent No. 283,357, dated August 14, 1883.

Application filed March 14, 1883. (Model.)

To all whom it may concern:

Be it known that I, J. W. PRUITT, a citizen of the United States, residing at Russellville, in the county of Pope and State of Arkansas, have invented certain new and useful Improvements in Ratchet-Wrenches; 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 appertains to make and use the same.

This invention relates to improvements in ratchet-wrenches, and has for its objects the easy removal of the die from the stock and to screw or unscrew nuts or bolts. These objects are attained by the mechanism illustrated in the drawings, forming a part of this specification, in which—

Figure 2 is a plan view of the wrench. Fig. 1 is a side elevation. Fig. 3 is a longitudinal section of the die. Fig. 4 is a detailed view of the stock removed from the die and partly broken away.

The letter A represents the die, which is formed of a single piece of metal, enlarged at each end to enable sockets O to be formed therein of any desired size and shape to fit such nuts or bolts upon which it is to be used. The central portion of the die is reduced and formed into a journal, H', to receive the hooked portion of the stock B, as shown at B' and H in Fig. 4.

H' is the journal portion of the die, on each side of which are cut the ratchet-teeth R, (shown in Fig. 1 in full, and in Fig. 2 in dotted lines.)

F is a double pawl formed of a single piece of metal with an opening of suitable form to permit of the introduction of the stock B, and also of a transverse pin or rivet, C, which secures the pawl F to the stock.

The letter S represents a spring the longer end of which bears upon the back of the pawl F, and the shorter end upon the back of the stock B, to which it is attached by the screw

D. The spring S has sufficient play to permit the pawl F to be raised sufficiently to allow of the removal of the die A entirely from the hook B' of the stock B whenever it may be desired to do so.

O' represents a reducer, of leather or other suitable material, in order to adapt the size or form of the die to different-sized nuts or bolts, as well as to nuts or bolts of different shapes. I prefer leather, as a firm material, which can be readily brought to the desired shape and size by simple tools usually at hand.

To screw on a nut, if the threads are cut right handed, place the wrench upon the nut with the pawl next the operator, then work the handle back and forth, steadying the die with the hand, if necessary. The pawl will spring over the ratchet-teeth and turn the die as the handle is moved toward the operator.

To take a nut off, place the wrench upon it with the pawl on the side farthest from the operator and proceed as before.

For nuts cut left handed, the above directions must be reversed.

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

1. In a ratchet-wrench, the die A, cut with double ratchet-teeth R, in combination with stock B, having hook B', and provided with pawl F and spring S, substantially as described, and for the purposes set forth.

2. In a ratchet-wrench, the handle B, having hook B', and provided with spring S, screw D, pawl F, and pin C, with die A, having journal H', and ratchet-teeth R, substantially as described, and for the purposes set forth.

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

JOHN WILLIAMS PRUITT.

Witnesses:

J. H. TUCKER,
JAMES H. POE.