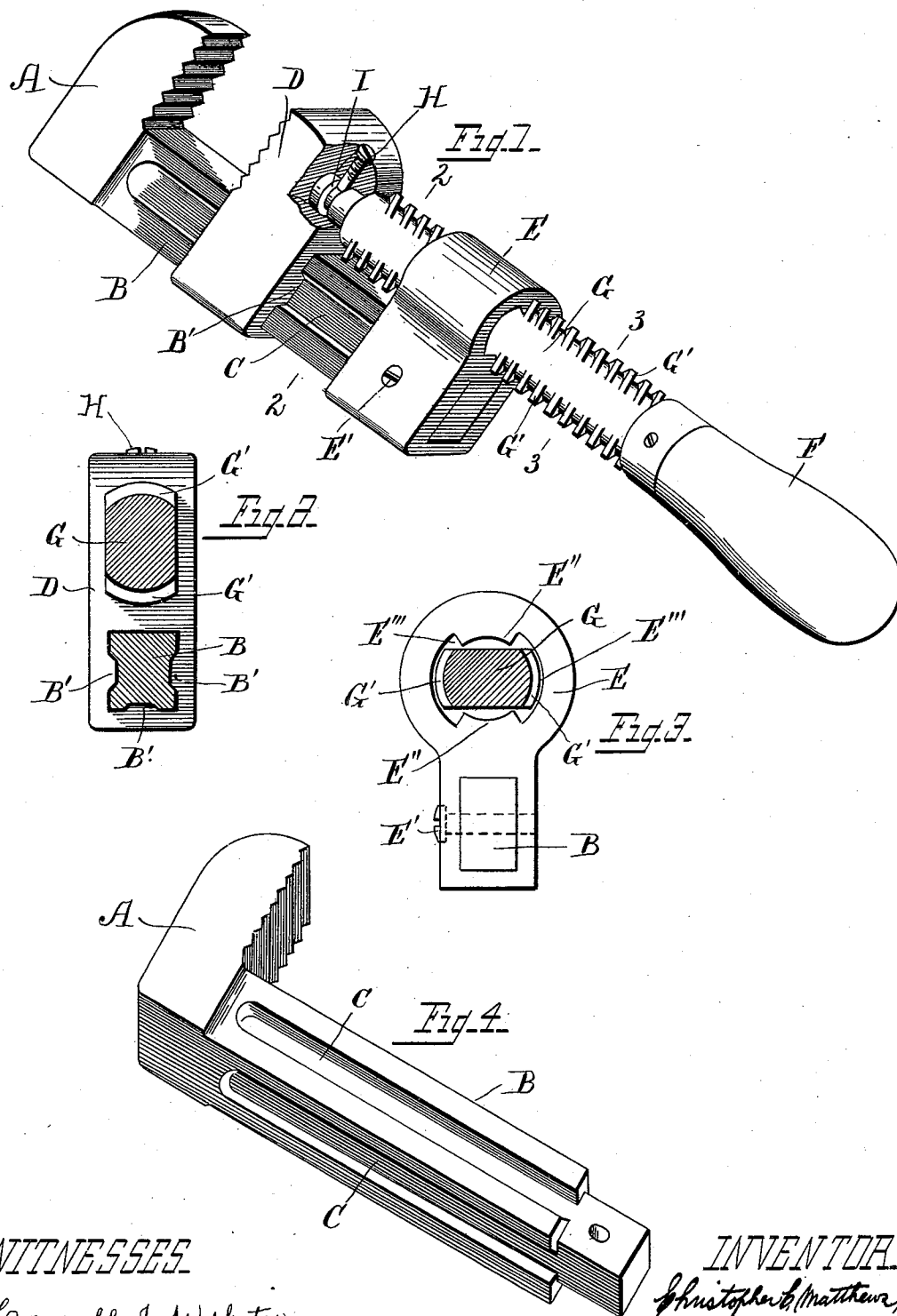


(No Model.)

C. C. MATTHEWS
WRENCH.

No. 564,442.

Patented July 21, 1896.



WITNESSES

Carroll J. Webster
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UNITED STATES PATENT OFFICE.

CHRISTOPHER C. MATTHEWS, OF ALEXANDRIA, INDIANA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 564,442, dated July 21, 1896.

Application filed December 28, 1895. Serial No. 573,608. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER C. MATTHEWS, a citizen of the United States, residing at Alexandria, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in 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.

My invention relates to improvements in wrenches, and the objects of my invention are to construct a cheap and substantial wrench and one that is quickly adjusted. These and other objects not hereinbefore specified are accomplished by the construction illustrated in the accompanying drawings, wherein like letters of reference indicate corresponding parts, and in which—

Figure 1 is a perspective view of my improved wrench. Fig. 2 is a section on the line 2 2, Fig. 1. Fig. 3 is a section through the shank of the stationary jaw and post, and Fig. 4 is a detail perspective view of the stationary jaw and its shank.

In the drawings, A designates the stationary jaw provided with the shank B.

C designates longitudinal grooves on the shank.

D designates the sliding jaw adapted to slide on the shank B and provided with lugs B', which engage the grooves C on the shank. On the inner end of the shank B is secured a threaded post E, having an aperture therein with threads E'' at the top and bottom thereof, forming a mutilated thread, and the grooves E''', arranged at opposite sides of the aperture. This post is secured in place by a rivet or screw E', which passes through the said post and shank.

F designates a handle which is swiveled to the sliding jaw D by means of the set-screw H, which passes through the jaw and engages a groove I in the end of the handle. It will thus be seen that the handle can be rotated at will and at the same time the sliding jaw will not rotate. The handle is provided with a flattened shank G, and the opposite edges of

the shank are threaded, forming a mutilated thread on the shank, as shown at G'. The shank of the handle extends through the post E, and when the shank is in one position the mutilated threads G' will engage the internal threads E'' on the post, and when turned the threads E'' will become disengaged and the shank will slide in the groove E'''.

The operation is as follows: In Fig. 1 my wrench is shown with the handle so that the mutilated threads in the shank engage the mutilated threads in the post E, and in this position the wrench is ready to be tightened up on a pipe by simply turning the handle slightly to the right. When it is desired to set the wrench to a different-sized pipe, the handle is turned to the left, disengaging the threads, and the shank and handle can then be slid in either direction, for the reason that the edges of the shank will be resting in the oppositely-arranged grooves E''' in the post. When the sliding jaw is moved the desired distance until the sliding jaw bears against the pipe, the handle is again moved to the right and the wrench will be tightened on the pipe. It will thus be seen that the wrench can be almost instantly adjusted and with slight modifications made in the jaws can be used as well for a nut-wrench as a pipe-wrench.

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

In a wrench, the combination with a stationary jaw, of a shank on the jaw, a post on the shank having an aperture therein and a mutilated thread in the aperture, a sliding jaw on the shank of the stationary jaw, a handle having a flattened shank swiveled to the sliding jaw and passing through the aperture in the post and having a mutilated thread adapted to engage the thread in the aperture in the post, substantially as described.

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

CHRISTOPHER C. MATTHEWS.

Witnesses:

EBEN HURLOCK,
R. E. MERRIKEN.