

T. Symonds,

Wrench.

N^o 54,040.

Patented Apr. 17, 1866.

Fig. 1.

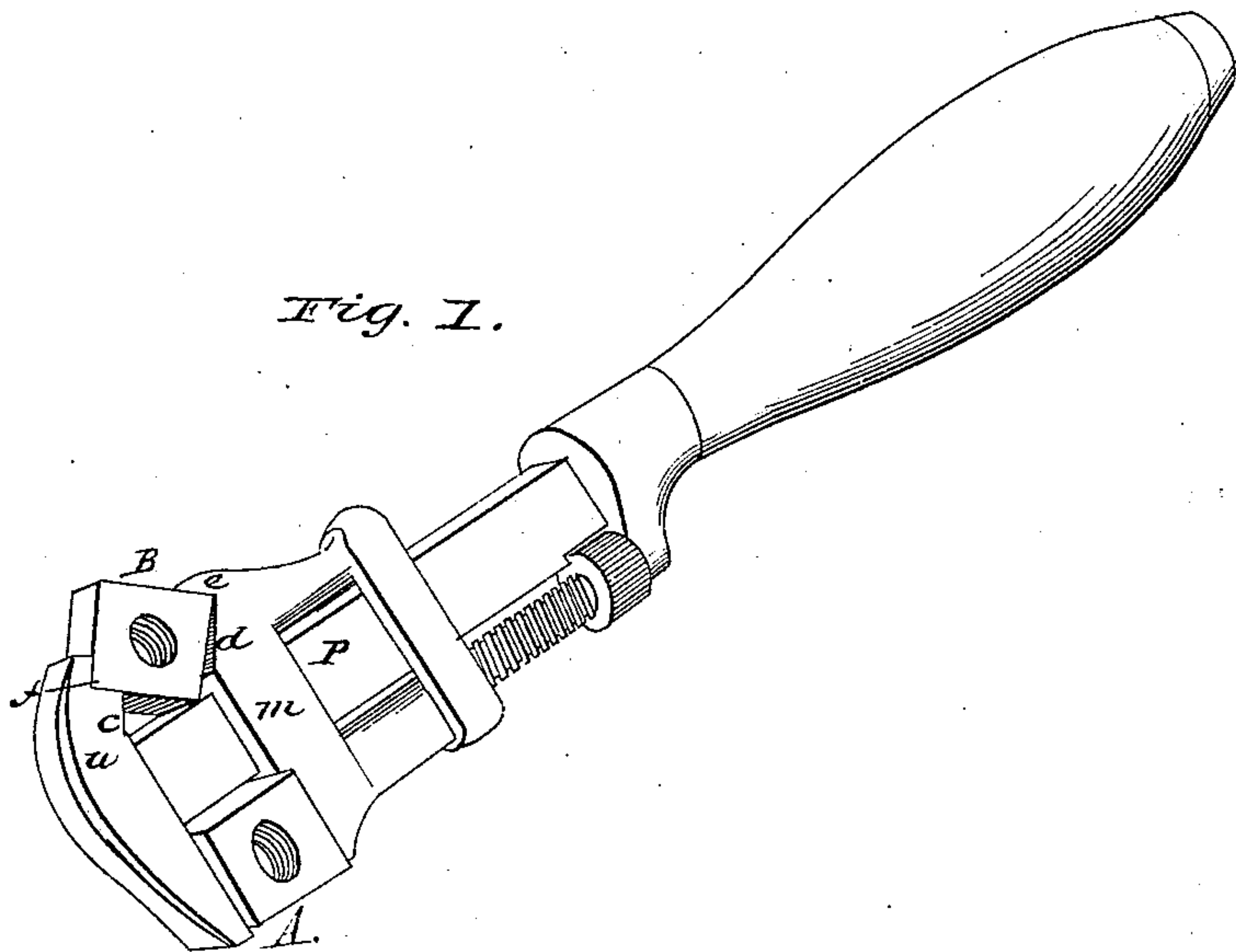
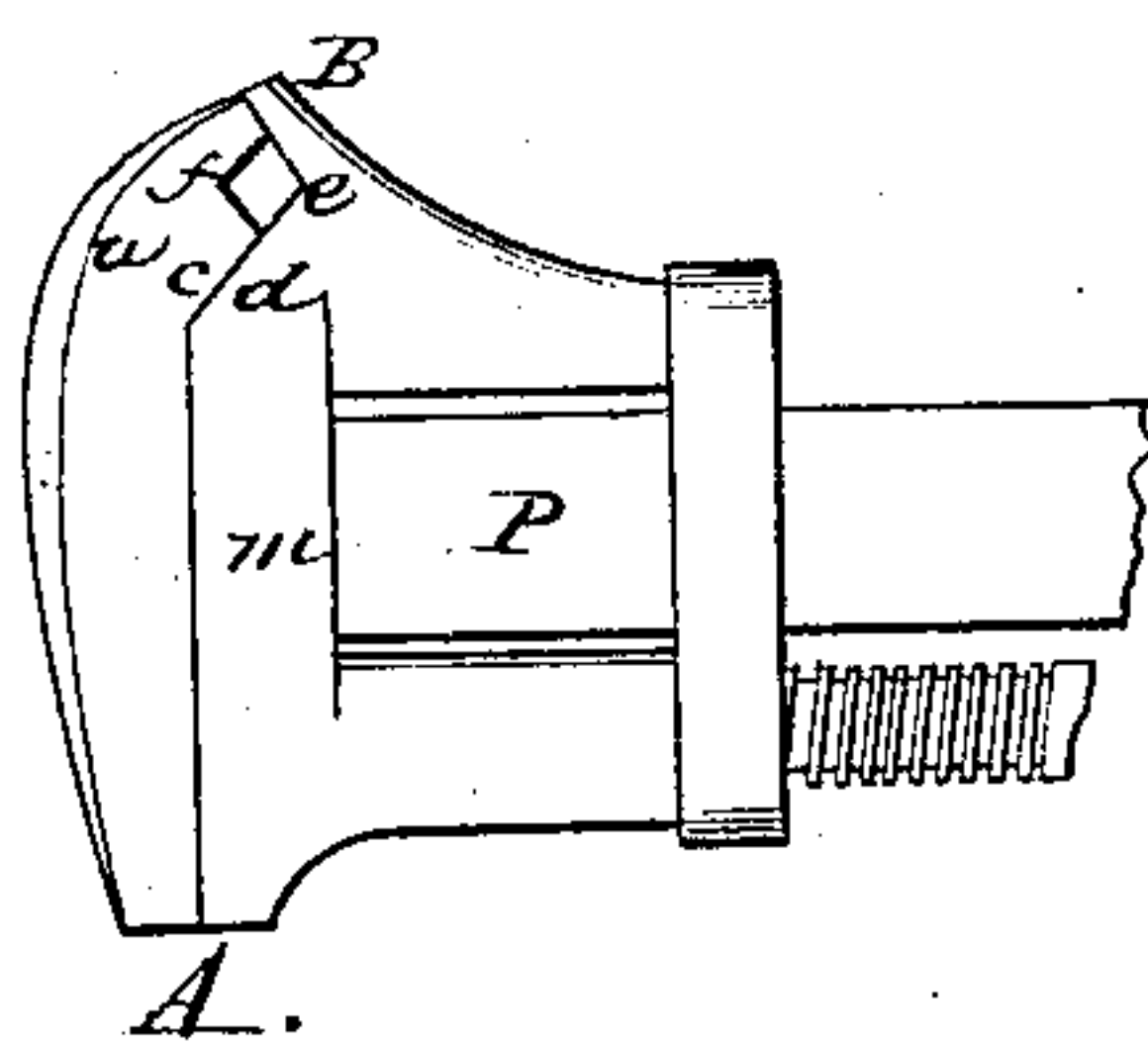


Fig. 2.



Witnesses.
William H. Clifford
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THOMAS SYMONDS, OF PORTLAND, MAINE.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 54,040, dated April 17, 1866.

To all whom it may concern:

Be it known that I, THOMAS SYMONDS, of Portland, in the county of Cumberland and State of Maine, have invented a new and useful Double-Jawed Wrench; and I hereby declare the following to be a full, clear, and exact description thereof, reference being made to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a view in perspective of my invention, which illustrates the uses of the two jaws; Fig. 2, a side view of my invention, showing the form of the jaws when closed.

The object of my invention is to produce a doubled-jawed wrench so constructed that when a nut is embraced upon its sides by one set of jaws it can be firmly held by the corners in the other set.

Fig. 1 shows an ordinary wrench, with the jaws A constructed in the common form. B represents the jaws, fitted with an improvement to hold a nut by its corners. These jaws are composed of the inclined portions *c*, *d*, and *e*, and the notch *f*, made in the upper jaw. By means of these inclined portions, when the jaws are closed, the upper jaw, *u*, fits into the lower jaw, *m*, upon this side when closed also; and when the jaws A are in close contact there is a space left between the jaws *m* and *u* on the side marked B sufficient to allow for the difference between the width and the diagonal of a nut, so that when the side A is arranged for a nut to be held in the one position the side B is prepared for its reception in the other without change of the jaws. The

part *e* of the jaw *m* of the side B is made to project beyond the upper jaw in order to encompass and hold the nut with more firmness. The space left between the jaws of the side B when the same are closed extends across from side to side of the jaws, as indicated in the drawings, and cannot for this purpose be constructed in any other way.

I construct my invention by adding to a wrench as at present made another jaw upon the opposite side of the stock P, and constructing therein the parts above described, making the space in the jaws of the side B of size sufficient for the purpose to which it is destined. The projection of a bolt through the nut to which the jaws of the side B are applied will not interfere with the usefulness of the invention, as can be seen by Fig. 1.

When either side of the wrench is to be employed on a nut, the insertion into the other side of a nut of the same dimensions will do away with the spring and yielding which exist more or less in all wrenches as at present made.

What I claim as my invention, and desire to secure by Letters Patent, is—

Making a wrench double-jawed and so arranged that a nut can be embraced in either of the two described positions without change in the position of the jaws, in the manner set forth.

THOMAS SYMONDS.

Witnesses:

WILLIAM H. CLIFFORD,
J. H. WINSLOW.