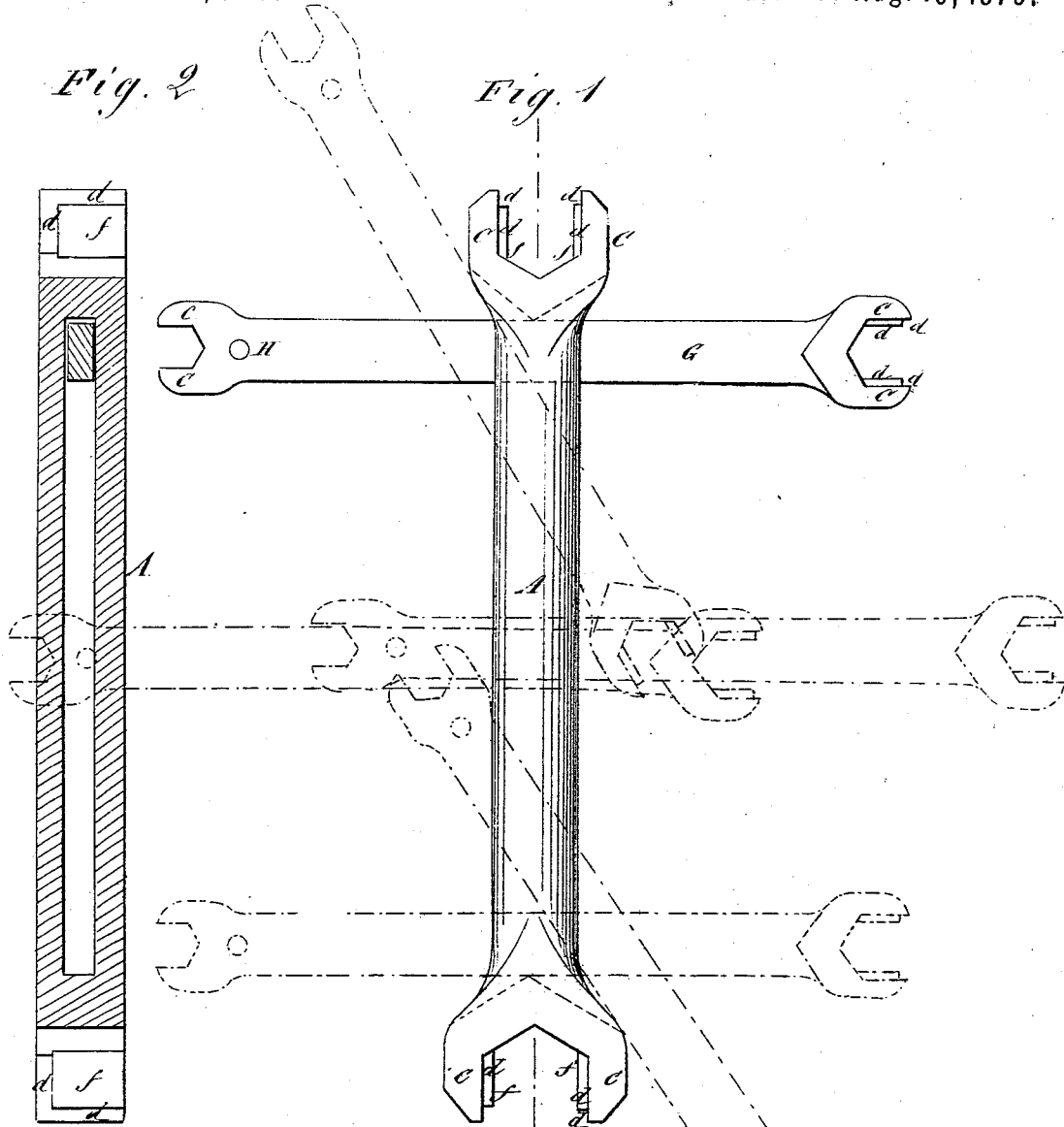


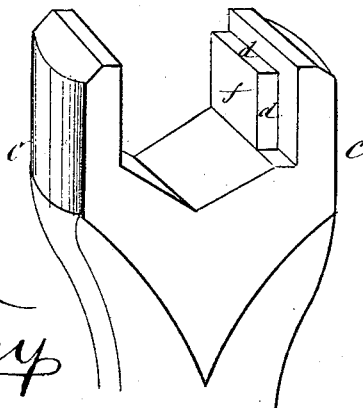
T. F. DUNN.  
Wrenches.

No. 166,514.

Patented Aug. 10, 1875.



WITNESSES:  
*C. Nelson*  
*A. J. Terry*



INVENTOR:  
*T. F. Dunn*  
BY  
*Munnell*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

THOMAS F. DUNN, OF SACCARAPPA, MAINE.

## IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **166,514**, dated August 10, 1875; application filed May 22, 1875.

*To all whom it may concern:*

Be it known that I, THOMAS F. DUNN, of Saccarappa, Cumberland county, Maine, have invented a new and useful Improvement in Wrenches, of which the following is a specification:

This invention relates to wrenches for turning the nuts of bolts, or turning bolts or screws attached to iron or wood machinery; and it consists in combining two or more wrenches, by means of a longitudinal slot, in one.

Figure 1 is a side view of the double wrench, showing the manner of using it. Fig. 2 is a longitudinal section of Fig. 1, taken on the line *x x*, showing the slot in the wrench; and Fig. 3 is a perspective view of one head or end, showing the shoulder and projection, to adapt it to nuts or heads of different sizes.

Similar letters of reference indicate corresponding parts.

A is a straight wrench, which has a longitudinal slot, B. At one or both ends are jaws C C, which are rabbeted on one or more sides and at the end, to show interior shoulders *d*, the rabbeted portion showing recesses on one side of the wrench and at the end, and projections *f*, to adapt the jaws to nuts or heads of different sizes.

The slot B allows a wrench of any size (which has one end made thin, so as to be passed through the slot) to be used as represented in the drawing.

By this means the leverage on either of the wrenches is materially increased, and when one of the wrenches is placed endwise on the nut, the wrench G, which is passed through the slot, may be used as a handle to obtain leverage, and the same of the larger wrench A when G is thus used.

By placing the interior wrench as seen in the dotted lines the two wrenches may be made to serve as an S-shaped wrench, to accommodate any particular position of the bolts or screws.

The wrench G, when passed through the slot B, works freely, and may slide anywhere, and be placed in any position, and is prevented from sliding from the slot by the pin H.

I am aware it is not new to provide the jaws of a wrench with projections, as shown in the drawing, and do not claim such construction.

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

The wrench provided with a lengthwise slot, B, in its body or handle portion, for the purpose of adapting it to be applied to another wrench, in the manner specified.

THOMAS F. DUNN.

Witnesses:

ABRAHAM HONSTOR,  
HENRY BLATCHFORD.