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P. E. OWENS

WRENCH

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Fig. 1.

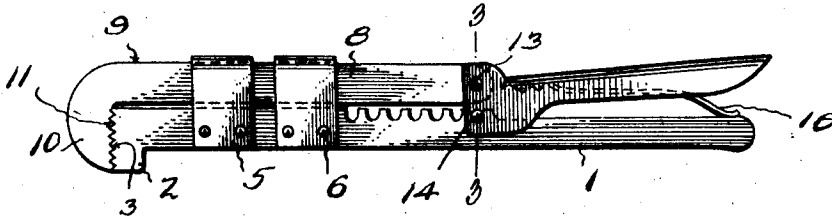


Fig. 2.

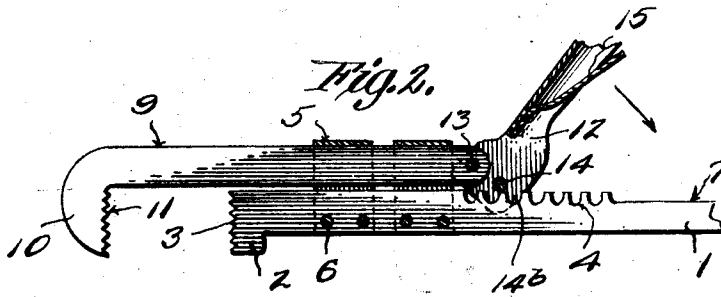
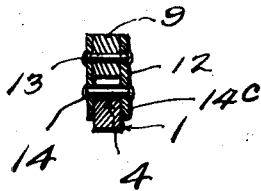


Fig. 3.



WITNESS  
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## WRENCH.

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This invention relates to wrenches, and has for its object the production of a simple and efficient wrench which consists of a minimum number of parts, and which may be very easily and conveniently adjusted to grip nuts, pipes, or other articles to be gripped thereby.

Another object of this invention is the production of a simple and efficient means for facilitating the drawing of the jaws to a gripping position by the compression of the handle of the wrench, after the jaws have been adjusted in close proximity to the article to be gripped.

With these and other objects in view, this invention consists of certain novel construction, combinations, and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings:

Fig. 1 is a side elevation of the wrench;

Fig. 2 is a longitudinal section through the guiding straps of the handle of the wrench, showing the manner of supporting the adjustable jaw upon the handle; and

Fig. 3 is a section taken on line 3—3 of Fig. 1.

By referring to the drawings, it will be seen that 1 designates the handle of the wrench, which is provided with a stationary jaw 2 at its outer end, having a toothed surface 3, as clearly indicated in Figs. 1 and 2. The handle 1 is provided with a plurality of adjusting notches 4 upon the upper face thereof, as indicated in Fig. 2, and a pair of spaced guiding straps 5 are riveted or otherwise secured to the handle 1, as indicated at 6 in Figs. 1 and 2. These straps extend above the upper face 7 of the handle 1, as illustrated in Figs. 1 and 2, and constitute a guideway for the shank portion 8 of the adjustable jaw 9. This adjustable jaw 9 is provided with an overhanging portion 10, which is adapted to extend in parallel relation relative to the stationary jaw 2, and is provided with a toothed inner face 11 for facilitating the gripping of an article. The members 1 and 9 each have longitudinally extending flat inner edges arranged in parallel sliding relation with each other.

A gripping lever 12 is pivotally secured at 13 to the inner end of the adjustable jaw 9, as shown clearly in Figs. 1 and 2, and this gripping lever 12 carries an offset rivet 14, securing the flanges 14<sup>c</sup> together near the lower end of the forward portion 14<sup>b</sup> of

the gripping lever 12, as clearly illustrated in Fig. 2, this rivet 14 being adapted to engage in one of the notches 4 of the handle 7 and cause the adjustable jaw 9 to be drawn inwardly relative to the stationary jaw 2 of the handle 1, as the gripping lever 12 is compressed inwardly upon the handle 1 in the direction indicated by the arrow in Fig. 2. The forward portion 14<sup>b</sup> is constructed to provide a pair of flanges 14<sup>c</sup> that snugly receive therebetween the end portion of the shank 8 and further has slidable engagement with and embraces the sides of the handle 1, and thus the association of the various parts is more effectively arranged to hold each other in a manner to readily take care of strains from various directions. A flat spring 15 is secured at the forward end to the inner face of the lever 12 and is adapted to engage at its spring end 16 the upper face of the handle 1, as clearly illustrated in Fig. 1, this spring 15 normally urging the gripping lever 12 outwardly relative to the handle 1, and tending to release the rivet 14 from the notches 4 on the handle 1.

From the foregoing description, it will be seen that the adjustable jaw 9 may be set to approximately a gripping position upon a nut, pipe, or other article to be gripped by the wrench, and by compressing the gripping lever 12 inwardly upon the handle 1, the rivet 14 will engage one of the notches 4, and cause the adjustable jaw 9 to be drawn inwardly upon the handle 1 relative to the stationary jaw 2. In this way an adjustment of approximately one-eighth of an inch may be obtained to cause the jaws 2 and 10 to be very tightly drawn into engagement with an article to be gripped by the wrench.

It should be understood that certain detail changes in mechanical construction may be employed without departing from the spirit of the invention, so long as these changes fall within the scope of the appended claim. It should be further understood that the wrench may be produced in any suitable or desired size or of any suitable or desired material without departing from the spirit of the invention.

Having thus described the invention, what is claimed is:

A wrench comprising a stationary and a movable jaw member, each having a longitudinally extending flat inner edge, which edges are arranged in parallel sliding rela-

tion with each other, said stationary jaw provided with a series of notches, straps carried by one jaw member for slidably receiving the other jaw member, a handle having a pair of flanges at one end receiving and embracing one end of the adjustable jaw members and further slidably embracing opposite sides of the stationary jaw member, a pivot connecting said flanges to the adjustable jaw member, and a rivet securing the flanges together and adapted to have adjustable engagement with said notches. 10

In testimony whereof I affix my signature.  
PATRICK E. OWENS.