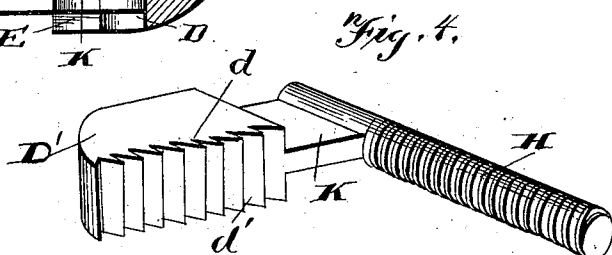
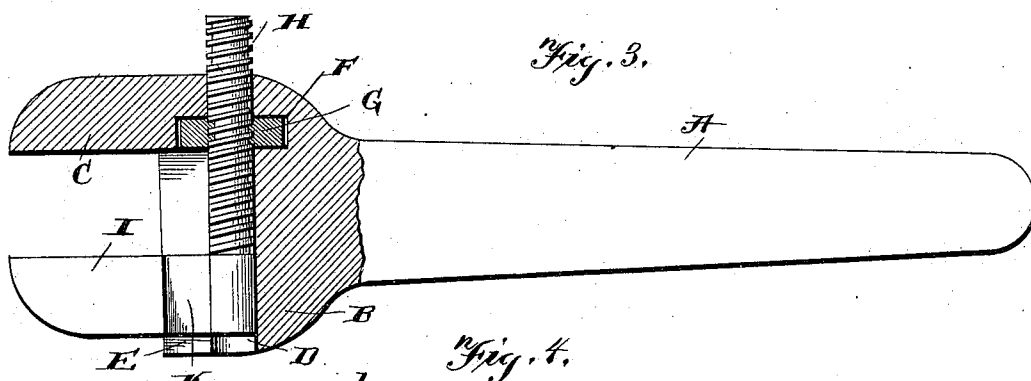
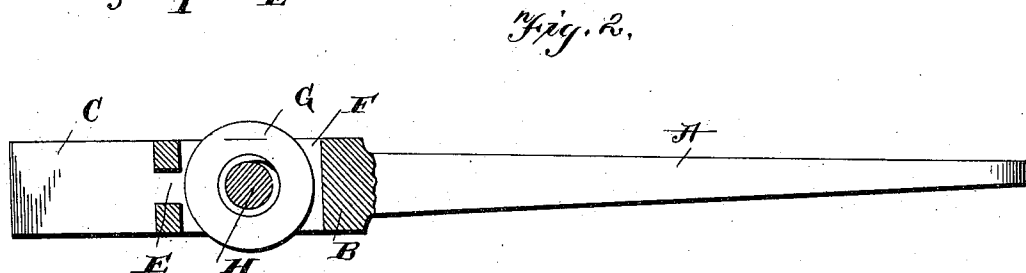
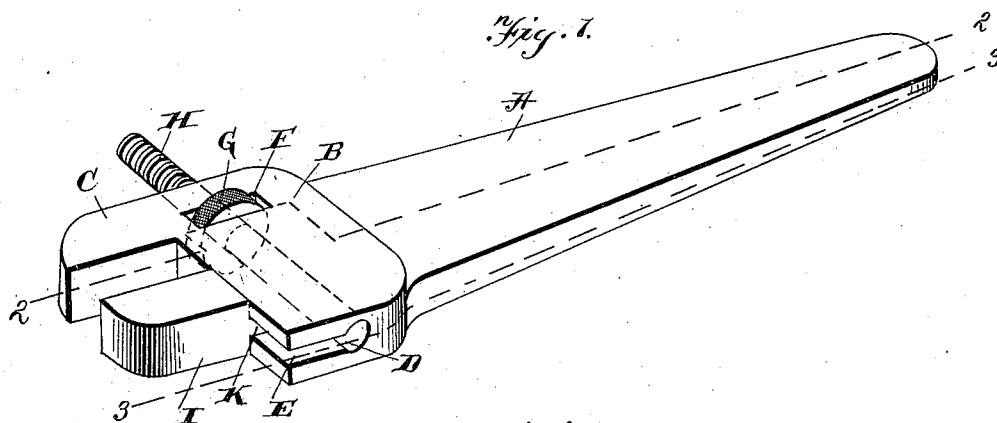


(No Model.)

F. EZZELL.
WRENCH.

No. 574,314.

Patented Dec. 29, 1896.



Witnesses
A. L. Ouyard
A. C. Smith

Inventor
Fletcher Ezzell

By *[Signature]*
Attorney

UNITED STATES PATENT OFFICE.

FLETCHER EZZELL, OF SAN ANTONIO, TEXAS, ASSIGNOR OF ONE-HALF TO
P. T. SHIELDS, OF SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 574,314, dated December 29, 1896.

Application filed May 18, 1896. Serial No. 592,016. (No model.)

To all whom it may concern:

Be it known that I, FLETCHER EZZELL, a citizen of the United States, residing at San Antonio, in the county of Bexar and State of Texas, have invented certain new and useful Improvements in Wrenches; and I do 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 has relation to wrenches, and more particularly to that class of removable-jaw wrenches which can be converted into a pipe or monkey wrench at will; and the object is to produce a simple, strong, and durable tool of this kind that can be conveniently used in confined places when a monkey-wrench would be useless; and to these ends the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same letters of reference indicate the same parts of the invention.

Figure 1 is a perspective view of my improved wrench. Fig. 2 is a longitudinal central vertical section of the same on the dotted line 2 2 of Fig. 1. Fig. 3 is a longitudinal transverse section on the dotted line 3 3 of Fig. 1, and Fig. 4 shows the pipe-jaw removed from the wrench.

A is the handle, and its head B is formed with an integral rigid jaw C and a guide-slot having a semicircular orifice D extending at a right angle to the handle, which extends outwardly in the form of a rectangular slot E, forming a continuation of the orifice D.

F is an open-ended recess extending transversely through the head in the path of the orifice D. An internally-threaded milled-head nut G is located in said recess, and its

threads engage similar threads on the cylindrical shank H of the removable jaw I, which is connected to said shank by an integral rectangular web K.

As will be seen, the movable jaw I is adjustable with reference to the rigid jaw by means of the nut G on the shank H, said shank sliding in the semicircular orifice D in the head B and the web K sliding in the rectangular slot E, forming a strong and durable movement, and by the arrangement of the jaws extending straight out in front of and in line with the handle a nut or pipe located in a corner or other confined place can be readily reached.

In Fig. 4 I have shown the pipe-jaw D' detached from the wrench. It is the same in construction except that its inclined face *d* is provided with parallel teeth *d'* to facilitate its engagement with the pipe or any other cylindrical surface.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

A wrench of the class described, comprising the handle A, the integral head B, and jaw C provided with a rectangular transverse nut-recess F, the rectangular guide-slot E, and the semicircular guide-orifice D communicating with said slot E, in combination with the movable jaw I formed with an integral rectangular web K and a screw-threaded shank H and the nut G, substantially as shown and described.

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

FLETCHER EZZELL.

Witnesses:

HARRY C. SEELE,
MONROE ADLER.