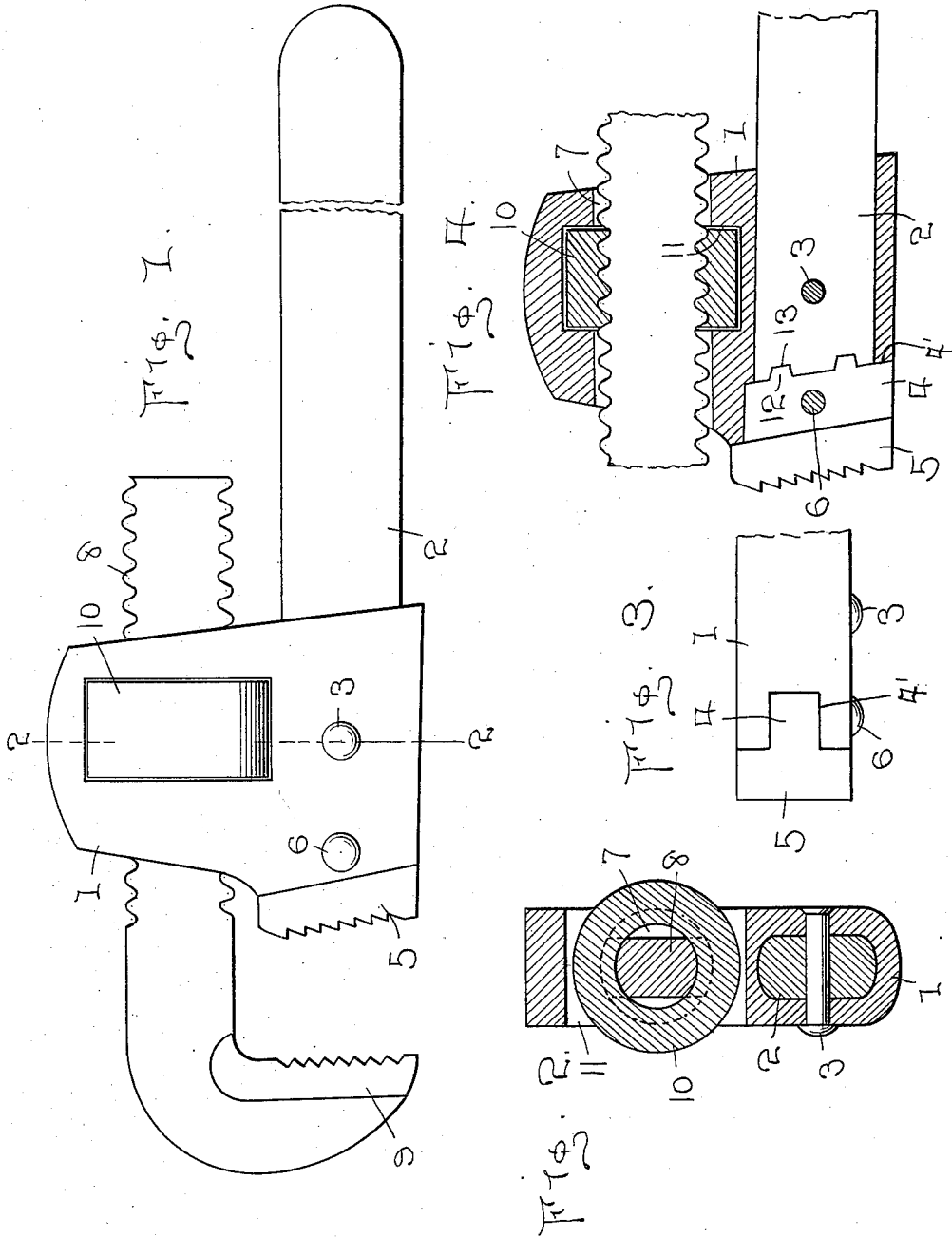


F. H. DICKSON.
WRENCH.

APPLICATION FILED OCT. 6, 1911.

1,026,661.

Patented May 21, 1912.



WITNESSES:

Thomas Ray
M. Newcomb

INVENTOR

F. H. Dickson

BY

W. J. Fitz Gerald ⁷⁶
Attorneys

UNITED STATES PATENT OFFICE.

FRANK H. DICKSON, OF OSWEGO, NEW YORK.

WRENCH.

1,026,661.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed October 6, 1911. Serial No. 653,119.

To all whom it may concern:

Be it known that I, FRANK H. DICKSON, a citizen of the United States, residing at Oswego, in the county of Oswego and State of New York; 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.

This invention relates to wrenches and more particularly to wrenches having removable handles.

The object of the invention is to provide a wrench, the handle of which is made separate from the other parts of the tool.

Another object is to provide a wrench having the various parts formed separate and connected together in such a manner as to make a strong and durable wrench.

Another object is to provide a wrench of the above stated character which will be highly efficient and effective in the performance of its duties and one in which any of the parts may be readily replaced should they become worn or broken without affecting the remaining parts of the implement.

Other objects and advantages will be hereinafter set forth and pointed out in the specification.

In the accompanying drawings, which are made a part of this application, Figure 1 is a side view of the complete implement with the parts properly assembled. Fig. 2 is a cross sectional view on the line 2—2, Fig. 1. Fig. 3 is a fragmentary front view, showing the manner in which the rigid jaw is secured in the frame, and, Fig. 4 is a fragmentary longitudinal section, showing the manner in which the handle is secured in the frame.

Referring to the drawings in which similar reference numerals designate corresponding parts throughout the several views, 1 represents the frame which is provided with a suitable bore to receive the removable or replaceable handle 2, the outer wall of the bore is provided with a recess 4', said handle having one end fitting snugly within the bore of the frame 1 and prevented from backing out of the same by means of a rivet or bolt 3 passed transversely through the frame 1 and the end of the handle 2. It

will be noted that the handle 2 stops short of the end of the bore and within this end of said bore is positioned the reduced portion 4 of the rigid jaw 5, said reduced portion being held in position by a rivet 6 passed therethrough and through the frame 1. The frame 1 is extended in one direction and provided with a second bore 7 for the accommodation of the threaded shank 8 of the movable jaw 9. The threaded shank 8 is caused to move back and forth through the bore 7 by means of the usual operating nut 10 engaged thereover and positioned within the opening 11 provided therefor in the extended portion of the frame 1, said opening intersecting the bore 7, the nut 10 projecting through the opposite sides of the frame 1, as will be readily understood. The reduced portion 4 of the rigid jaw 5 is provided with a plurality of lugs 12 which rest in suitable recesses 13 formed in the end of the handle 2. This will eliminate all possibility of the handle 2 and the jaw 5 becoming loose and rocking upon the pivots or bolts 3 and 6. It will be evident that this construction of frame and removable handle 2 and removable stationary jaw 5 presents a tool which will be extremely strong and durable in use. With this construction it is also possible to readily repair or replace any of the parts should they become worn or broken without having to replace any of the uninjured parts. The outer end of the handle 2 may be of any form desired. Further, the handle 2 may take any form given to rolled or pressed metal. By forming the handle 2, frame 1 and stationary jaw 5 separate and connecting them as shown and described, the tool is made much stronger at the points which heretofore have been the weakest. The cost of manufacturing and the labor and time necessary in forming these parts are also reduced to the minimum by this construction.

Thus it will be seen that I have provided a wrench construction which will be cheap to manufacture, strong and durable in use and effective in the performance of its duties.

What I claim is:

A wrench comprising a stationary jaw frame having a longitudinal bore terminating in a seat for the jaw, a handle positioned within a portion of said bore, and

having recesses in its forward end, a stationary jaw having abutments adapted to engage the forward end of the frame and having a lugged reduced portion adapted
5 for engagement within said seat and recesses, and means respectively for directly securing said jaw and handle to said frame.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK H. DICKSON.

Witnesses:

MAY K. RALEIGH,
DAN A. HOURIGAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."