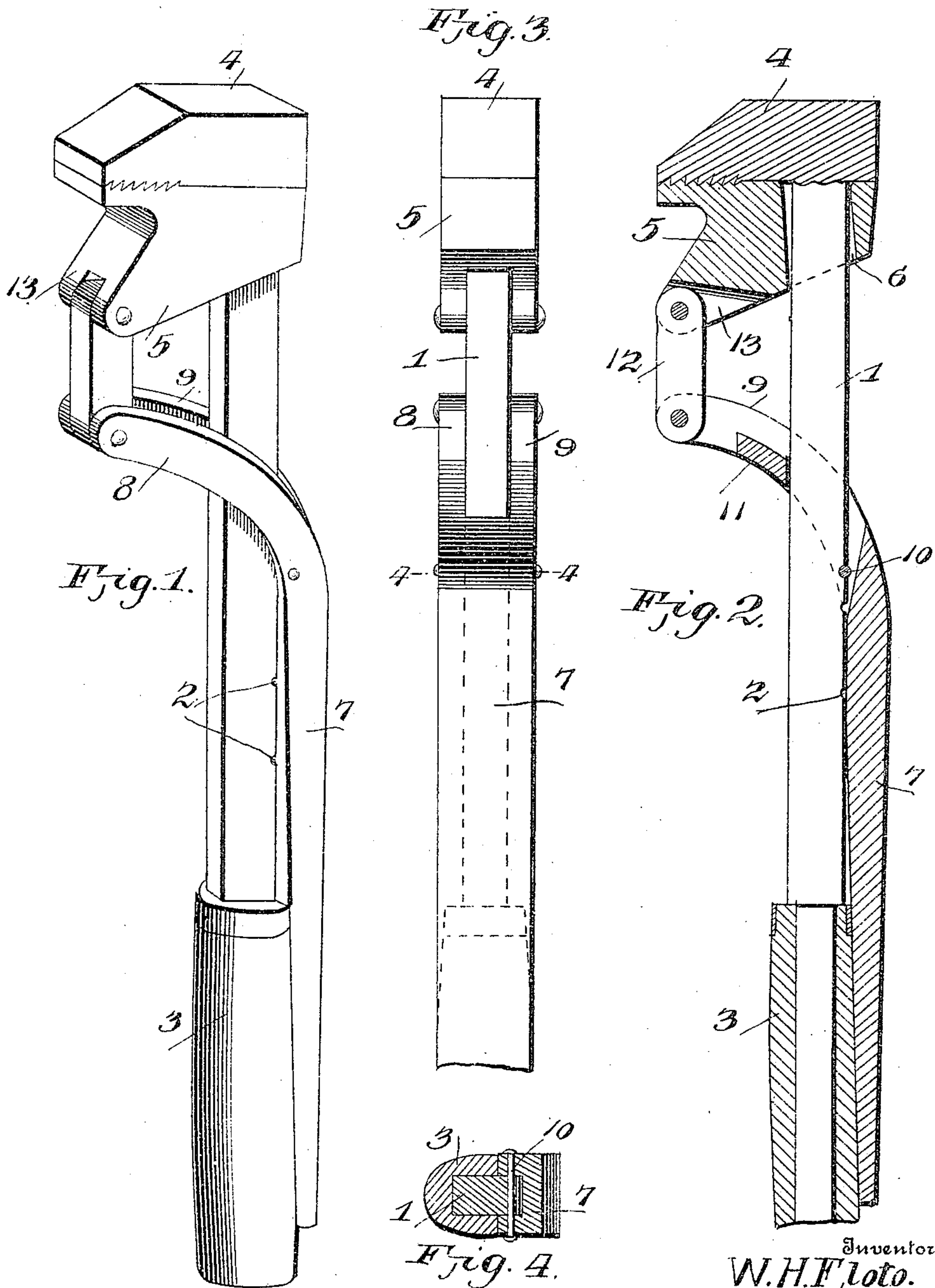


No. 817,701.

PATENTED APR. 10, 1906.

W. H. FLOTO.
WRENCH.

APPLICATION FILED FEB. 23, 1905.



Witnesses
Frank V. Hough
W. H. Clarke.

By

Victor J. Evans
Attorney

Inventor
W. H. Floto.

UNITED STATES PATENT OFFICE.

WILLIAM H. FLOTO, OF MEYERSDALE, PENNSYLVANIA.

WRENCH.

No. 817,701.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed February 23, 1905. Serial No. 246,999.

To all whom it may concern:

Be it known that I, WILLIAM H. FLOTO, a citizen of the United States; residing at Meyersdale, in the county of Somerset and State of Pennsylvania, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to wrenches.

The objects of the invention are to improve and simplify the construction of such devices; furthermore, to increase their efficiency in operation and to decrease the expense attending their manufacture.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the novel combination and arrangement of parts and in the details of construction hereinafter described and claimed as a practical embodiment thereof.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a wrench constructed in accordance with the invention. Fig. 2 is a longitudinal section. Fig. 3 is a rear elevation. Fig. 4 is a transverse section on the line 4 4 of Fig. 3.

Like reference-numerals indicate corresponding parts in the several views.

The reference-numeral 1 indicates a shank which is formed with notches 2 and is provided with a handle 3 of any suitable form and construction. Secured to the shank 1 is a fixed jaw 4, having the usual teeth or serrations.

The movable jaw 5 is formed with a passage 6, through which the shank 1 extends. The passage 6 is slightly wider than the shank 1, so as to permit the jaw 5 to move freely thereon, and said passage is so arranged that when the operating or meeting faces of the two jaws 4 and 5 are in parallel relation with each other the passage 6 is disposed at a slight angle with respect to the shank 1, as shown clearly in Fig. 2. By means of this arrangement the jaw 5 is caused to move more easily upon the shank 1, and said jaw is also held more securely in parallel relation with the jaw 4 when the wrench is in use.

The operating-lever 7, which is adapted to be forced into parallel relation with the shank 1 when it is desired to lock the jaws in operative position, is provided with two curved

or angularly-disposed arms 8 9, which are disposed on opposite sides of the shank 1. The arms 8 and 9 are connected on the rear side of the shank 1 by a pin or bolt 10, which is adapted to engage any one of the notches 2. Upon the side of the shank 1 opposite the pin 10 the arms 8 and 9 are connected by a cross-piece 11, which serves to prevent said arms from becoming disengaged from the shank 1.

Pivotally mounted between the ends of the arms 8 and 9 is one end of a link 12, the opposite end of which is pivotally mounted between a pair of ears or lugs 13, formed upon the movable jaw 5.

The manner of using the improved wrench will be apparent from the foregoing description in connection with the drawings.

In its particular combination and arrangement of parts and in its precise details of construction the wrench of this invention constitutes an improvement over prior devices of a similar character.

Changes in the precise embodiment of invention illustrated and described may be made within the scope of the following claim without departing from the spirit of the invention or sacrificing any of its advantages.

Having thus described the invention, what is claimed as new is—

A wrench comprising a shank formed on its rear edge with notches, a fixed jaw on the shank, a movable jaw having a passage there-through adapted to receive the shank, said passage being slightly wider than the shank and being so arranged as to lie at an angle with respect to the shank when the operating-faces of the fixed and movable jaws are in parallel relation with each other, a lever having angularly-disposed arms fitting around the shank, a pin connecting the arms on the rear side of the shank and adapted to engage the notches, a cross-piece connecting the arms on the opposite side of the shank, and a link pivotally mounted between the arms and pivotally connected with the movable jaw, substantially as described.

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

WILLIAM H. FLOTO.

Witnesses:

W. T. HOBLITZELL,
F. B. BLACK.