

H. J. WILKER.
WRENCH.

APPLICATION FILED FEB. 23, 1912.

1,039,466.

Patented Sept. 24, 1912.

FIG. 1

FIG. 2

FIG. 3

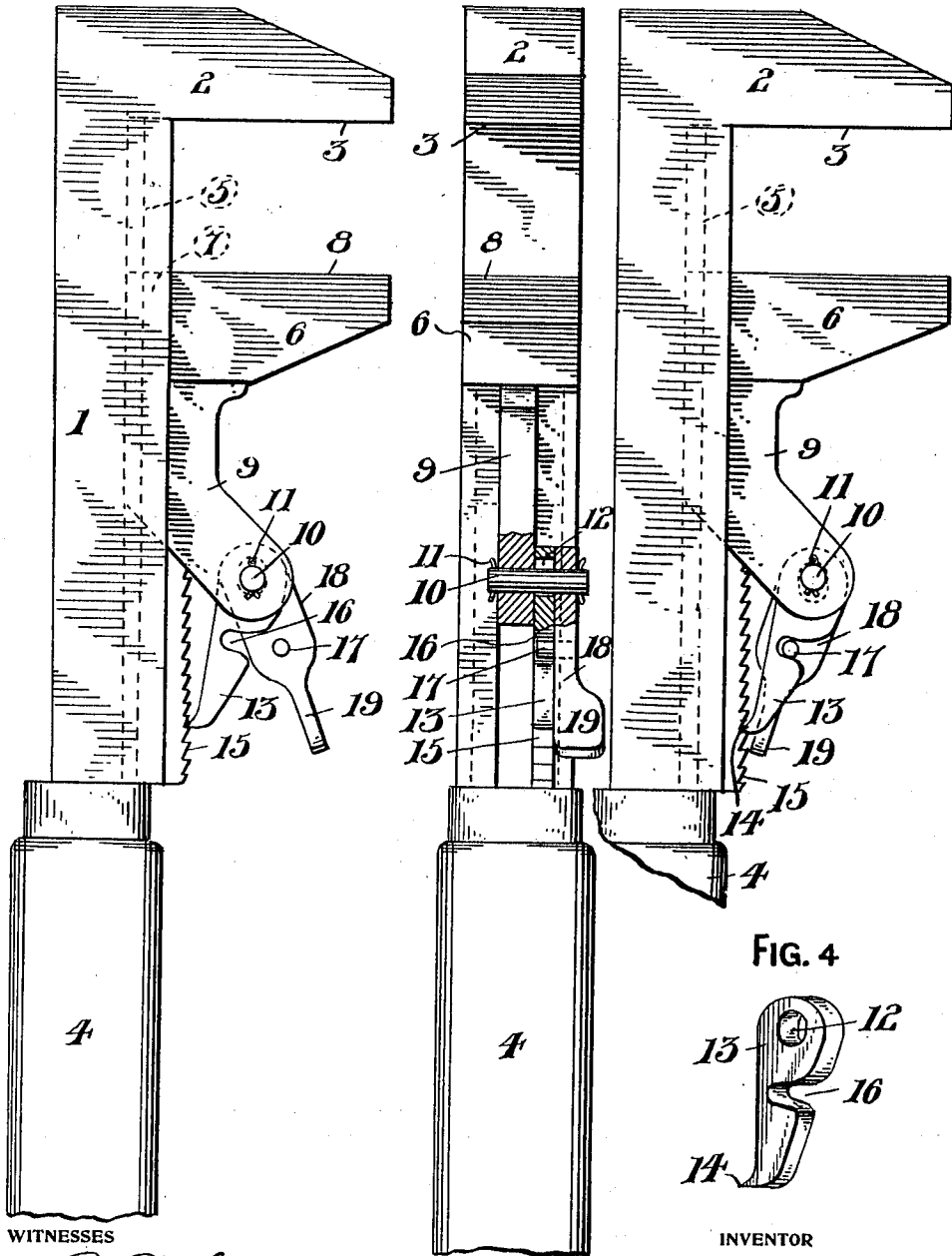
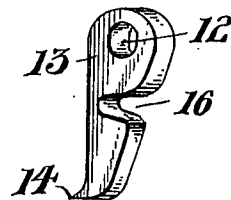


FIG. 4



WITNESSES

J. P. Hoffman,
Ralph C. Evert.

INVENTOR

H. J. Wilker.

BY *A. C. Evert & Co.*

ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY J. WILKER, OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO
CHRIST GEISH, OF PITTSBURGH, PENNSYLVANIA.

WRENCH.

1,039,466.

Specification of Letters Patent.

Patented Sept. 24, 1912.

Application filed February 23, 1912. Serial No. 679,386.

To all whom it may concern:

Be it known that I, HENRY J. WILKER, a citizen of the United States of America, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to wrenches, and the primary object of my invention is to provide a quick acting wrench consisting of comparatively few parts that are easily and quickly assembled.

Another object of this invention is to furnish a wrench with a novel adjustable jaw that can be easily and quickly locked in engagement with the shank of the wrench, whereby the wrench cannot slip when in use.

With the above and other objects in view, the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein like numerals denote corresponding parts throughout the several views, in which:

Figure 1 is a side elevation of a portion of a wrench in accordance with this invention, Fig. 2 is a front elevation of the same, partly broken and partly in section, Fig. 3 is a side elevation of the wrench showing the adjustable jaw thereof in a locked position, and Fig. 4 is a perspective view of a detached locking pawl.

A wrench in accordance with this invention comprises a shank 1 rectangular in cross section and having the outer end thereof provided with an integral jaw 2, said jaw extending from the front side of the shank 1 and presenting a flat gripping surface 3. The inner end of the shank 1 has an off-set detachable handle 4, the handle 4 being removed from the front side of the shank 1 in order to provide clearance for the adjustable jaw of the wrench. The shank 1 has the front side thereof provided with a longitudinal T-shaped groove 5, said groove extending from the inner end of the shank to the outer end thereof.

The reference numeral 6 denotes an adjustable jaw arranged upon the front side of the shank 1 and having a T-shaped shank 7 slidably mounted in the T-shaped groove

5 for connecting the jaw 6 to the shank and to further prevent accidental displacement of the jaw 6 relatively to the shank 1. The jaw 6 presents a flat gripping surface that confronts the gripping surface 3 of the jaw 2 and coöperates therewith in gripping the flat facets of a nut. The jaw 6 is provided with an angularly disposed arm 9 at the inner end thereof and mounted in the end of said arm and protruding from one side thereof is a pin 10 that is retained in engagement with said arm by a cotter pin 11.

Pivotally mounted upon the pin 10, at the side of the arm 9, is the slotted end 12 of a locking pawl 13. The pawl 13 has a tooth 14 that engages a rack bar 15 formed integral with the front side of the shank 1, said rack bar being located to one side of the groove 5 and of less length than the shank 1 in order not to interfere with the movement of the jaw 6. The front side of the locking pawl 13 has a slot 16 and adapted to engage in this slot is a pin 17 carried by the side of a lever 18 that is pivotally mounted upon the pin 10. The lever 18 has a thumb or finger piece 19 whereby said lever can be easily moved.

The locking pawl 13 swings by gravity out of engagement with the rack 16 and the jaw 6 can be freely adjusted in either direction relatively to the jaw 2. When it is desired to lock the jaw 6 relatively to the shank 1, the thumb or finger is placed upon the piece 19 of the lever 18 and said lever swung toward the shank 1. The pin 17 of said lever engages in the slot 16 of the pawl 15 and shifts the tooth 14 of said pawl into engagement with the rack 15, thereby locking the jaw 6 whereby it cannot slip while the wrench is in use.

It is thought that the operation and utility of the wrench will be apparent without further description, and while in the drawing there is illustrated a preferred embodiment of the invention, it is to be understood that the structural elements are susceptible to such variations and modifications as fall within the scope of the appended claims.

What I claim is:—

1. A wrench comprising a shank having a fixed jaw at its outer end, and one of its side edges formed with a longitudinally extending T-shaped groove of less length than the length of the shank, a rack carried by said front edge of the shank and one side of

said groove, an adjustable jaw abutting against said shank and provided with a rearwardly extending arm terminating in an outwardly disposed angular portion, said arm centrally arranged with respect to said adjustable jaw, said adjustable jaw and said arm provided with a T-shaped tongue slidably mounted in said groove, said arm disposed at one side of said rack, a pin mounted in and projecting laterally from the free end of said angular portion of said arm, a locking pawl loosely mounted on said pin and capable of engaging the teeth of the rack to prevent movement of the adjustable jaw, said pawl intermediate its ends provided with a slot, and a lever mounted upon the projecting portion of the pin and carrying intermediate its ends a protuberance capable of engaging in the slot of the pawl for shifting the latter into engagement with the rack.

2. A wrench comprising a shank, a rack projecting from the front edge of the shank, a jaw abutting against the front edge of the shank and provided with an inwardly extending arm, said arm having its inner por-

tion extending outwardly at an angle with respect to the front edge of the shank, said shank and said jaw and arm provided with means whereby the jaw and arm is slidably connected to the shank, said arm positioned at one side of said rack, a pin mounted in the front end of the angular portion of the arm and projecting laterally therefrom, a locking pawl loosely mounted on the projecting portion of said pin and capable of engaging the teeth of the rack to resist movement of said jaw, a lever mounted at one end upon the projecting portion of the pin and provided near its other end with a protuberance capable of engaging within said pawl for shifting the latter into engagement with the rack, a handle projecting from that end of the lever and provided with a pin and a jaw integral with the forward end of the shank.

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

HENRY J. WILKER.

Witnesses:

MAX H. SROLOVITZ,
CHRISTINA T. HOOD.

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

It is hereby certified that the name of the assignee in Letters Patent No. 1,039,466, granted September 24, 1912, upon the application of Henry J. Wilker, of Pittsburgh, Pennsylvania, for an improvement in "Wrenches," was erroneously written and printed "Christ Geish," whereas said name should have been written and printed *Christ Geist*; and that the proper corrections have been made in the files and records of this office, and are hereby made in said Letters Patent.

Signed and sealed this 19th day of November, A. D., 1912.

[SEAL.]

C. C. BILLINGS,
Acting Commissioner of Patents.