

W. BERNDT.
WRENCH.

APPLICATION FILED MAY 20, 1912.

1,044,478.

Patented Nov. 19, 1912.

Fig. 1.

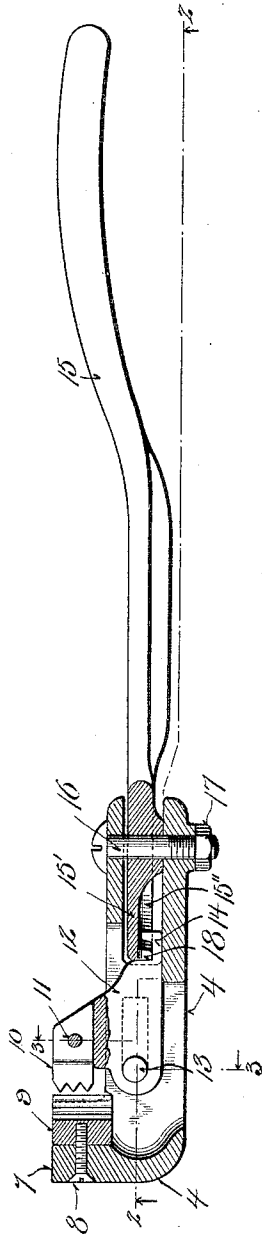


Fig. 2.

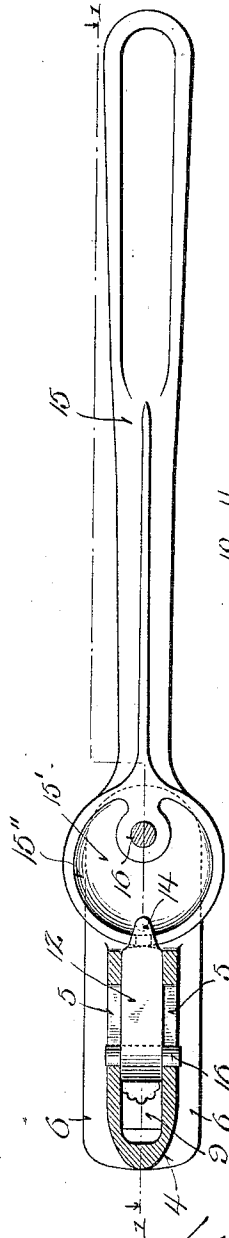
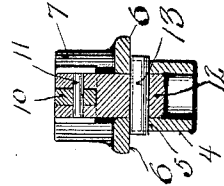


Fig. 3.



Witnessed:
Carroll Young
May Downey.

Inventor:
Wilhelm Berndt.
By *Clinton H. Young*
Attorneys.

UNITED STATES PATENT OFFICE.

WILHELM BERNDT, OF SHEBOYGAN, WISCONSIN.

WRENCH.

1,044,478.

Specification of Letters Patent. Patented Nov. 19, 1912.

Application filed May 20, 1912. Serial No. 698,370.

To all whom it may concern:

Be it known that I, WILHELM BERNDT, a citizen of the United States, and resident of town of Sheboygan, in the county of Sheboygan and State of Wisconsin, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in what is herein particularly set forth with reference to the accompanying drawings and pointed out in the claims of this specification, its object being to provide simple, economical and efficient wrenches, each having a jaw-carrier in connection with an eccentric end of a pivotal handle that is movable from either right or left to effect a grip of the wrench on a nut or other device to be held or turned.

Figure 1 of the drawings represents a partly sectional elevation, generally indicated by line 1—1 in Fig. 2, and illustrates a wrench in accordance with my invention; Fig. 2, a plan view of the wrench inverted and partly in horizontal section, the view being generally indicated by line 2—2 in Fig. 1, and Fig. 3, a cross-section of said wrench indicated by line 3—3 in said Fig. 1.

Referring by numerals to the drawings 4 indicates a hollow head casting provided with opposite side slots 5, longitudinally thereof, the upper portion of the head being laterally extended above the slots in the form of flanges 6 and vertically extended in the form of a recessed boss 7 at one end. Held in said boss, by a screw 8, is a detachable fixed jaw 9, herein shown as having a curvilinear and vertically serrated working face to grip upon pipe or other round work in opposition to a movable jaw 10 that is shown as having its working face transversely serrated. However the contour of the working-faces of said jaws may be varied from what is herein shown and described, and both jaws are detachable to provide for ready interchangeability of jaws or the substitution of new jaws for those that become unserviceable from wear or fracture.

The jaw 10 is held by a pin 11 in an upper

recess of a slide-block constituting a carrier 12 guided in the head 4, and another pin 13 extending through the block and the slots 5 of said head, the play of said block being limited in proportion to the length of said slots. The block has a rear hook extension 14 engaged by a flange 15' of a circular end 15' of a handle 15, and said end of the handle is an eccentric that turns in a forked end of the head 4 upon a pivot-bolt 16 having a nut 17 run thereon.

By removing the pivot bolt, the handle may be readily disconnected from the slide-block 12, the flange of the eccentric head of said handle being notched at 18 to provide clearance for the hook-extension of said block, and by removal of the pin 13, said block is free of the head 4 in which it is guided, the general construction of the wrench being such as to facilitate assembly of its parts and the substitution of a new for a defective part.

The tool is either a right or left hand wrench, according to the primary disposition of the handle 15 on its eccentric pivot 16 when the block 12 and jaw 10 therewith are retracted. As herein shown the block 12 and jaw 10 are full forward and the circular or cam-end of the handle 15 at full throw. Hence a swing of said handle in either direction on the pin 13 will retract said block and jaw.

I claim:

1. A wrench comprising a hollow head having an end boss and a jaw therewith, a slide-block in the head having another jaw therewith, a pin extending through the block and engaging side slots provided in said head, a handle having a circular end provided with a flange engaging a hook-extension of said block, and a pivot-bolt by which said end of the handle is coupled eccentrically to the aforesaid head within the same.

2. A wrench comprising a hollow head having an end boss, a jaw detachably secured in connection with the boss, a slide-block in the head, another jaw in detachable connection with the block, a pin extending through the block and engaging side slots provided

in said head, a handle having a circular end provided with a flange engaging a hook-extension of said block, and a pivot-bolt by which said end of the handle is coupled eccentrically to the aforesaid head within the same.

In testimony that I claim the foregoing I

have hereunto set my hand at Sheboygan in the county of Sheboygan and State of Wisconsin in the presence of two witnesses. 10
WILHELM BERNDT.

Witnesses:

A. STEIMLE,
PH. J. MUTH.

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