## G. H. WATSON. WRENCH.

APPICATION FILED AUG. 10, 1909. Patented July 12, 1910. 964,346. INVENTOR: WITNESSES: GEORGEH,WATSON Blanche C. Crowley Yrayce E. Grall By Louis Bagget Co This AT TYS

## UNITED STATES PATENT OFFICE.

GEORGE H. WATSON, OF MARSHALL, MICHIGAN.

## WRENCH.

964,346.

Specification of Letters Patent. Patented July 12, 1910.

Application filed August 10, 1909. Serial No. 512,208.

To all whom it may concern:

Be it known that I, George H. Warson, a citizen of the United States, residing at Marshall, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to an improvement in wrenches and the object is to provide 16, means whereby a movable jaw will be caused to engage a pipe due to the fact that it is constantly forced forward.

The invention consists of certain novel features of construction and combinations of parts which will be hereinafter described and pointed out in the claim.

In the accompanying drawings: Figure 1 is a view in side elevation; and Fig. 2 is a

top plan. A represents the handle, which is provided with a rigid jaw at its outer end as. at 1 and a movable jaw 2, preferably Lshape, is received through an opening er slot, 3, in the handle. The shank 4 of the 25 jaw 2 is provided with a series of openings or holes 5 whereby the jaw can be adjusted and held in position in the handle by a pin 6, which passes through the handle and through one of the openings in the shank 30 of the jaw 2. The jaws 1 and 2 are both provided with gripping surfaces 7, 7. Lugs 8, 8 are formed on the handle and are provided with openings, through which a rod 10 extends. A coil spring 11 encircles the 35 rod and one end of the spring bears against the innermost lug and the other end of the spring bears against a washer 12 on the rod, which is held by a pin 13 passing through the rod. The pres-40 sure of the spring constantly forces the rod outward so that it will constantly engage the shank 4 of the jaw 2. The spring, however, will permit of the jaw being moved rearwardly to obtain another grip upon the 45 pipe. By the tension of the spring the jaw

will normally be pressed into engagement with the pipe.

By providing the movable rod, which is spring controlled and having it constantly engaging the movable jaw, I am enabled to 50 use my wrench on different size pipes without adjustment of the jaw for the reason that the movable rod acts as an adjuster in constantly moving or tending to force the movable jaw forward.

It is evident that more or less slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, hence I do not 60 wish to limit myself to the exact construction herein set forth, but:

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is:

A wrench comprising a handle having a jaw formed on one end longitudinally thereof, said handle having a transverse slot formed therein, and openings formed through the walls of the slot, an L-shaped 70 jaw having a plurality of openings in its shank, a pin passing through the openings in the handle and an opening in the shank for pivotally connecting the movable jaw to the handle, lugs on the handle, a rod 75 slidably mounted in the lugs having one end in engagement with the shank of t' movable jaw, a spring encircling the rod, one end bearing against the lug, and means on the rod for engaging the other end of the 80 spring whereby the rod is held against the jaw for constantly forcing the jaw in a forward direction.

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

GEORGE H. WATSON.

Witnesses:
Bertha Smith,
II, E. Winson.