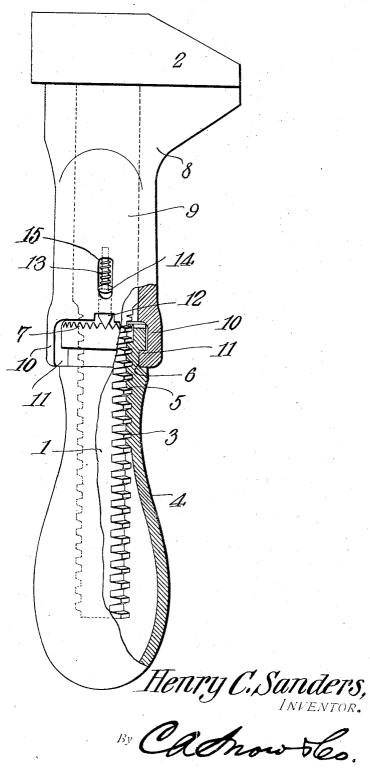
No. 895,896.

PATENTED AUG. 11, 1908.

H. C. SANDERS. WRENCH.

APPLICATION FILED DEC. 3, 1906.



ATTORNEYS

## UNITED STATES PATENT OFFICE.

HENRY C. SÄUNDERS, OF NEBO, ILLINOIS.

## WRENCH.

No. 895,896.

Specification of Letters Patent.

Patented Aug. 11, 1908.

Application filed December 3, 1906. Serial No. 346,106.

To all whom it may concern:

Be it known that I, HENRY C. SAUNDERS, a citizen of the United States, residing at Nebo, in the county of Pike and State of Illinois, have invented a new and useful Wrench, of which the following is a specifi-

This invention relates to that class of wrenches known as monkey wrenches.

The object of the invention is to improve the means for adjusting the movable jaw relative to the stationary jaw whereby positive holding of the parts adjusted to each other will be secured, and further, any 15 danger of the movable jaw having any movement, with attending loosening upon the nut, will be obviated.

With the above and other objects in view as will appear as the nature of the invention 20 is better understood, the same consists, generally stated, of a wrench comprising a threaded stock having a fixed jaw and an internally threaded completely rotatable handle to receive the threaded portion of the 25 stock. The handle is provided adjacent to that end which will be the inner one in use, with an annular groove, and in this end with an annular series of ratchet teeth. Arranged to slide or work upon the stock of the fixed 30 jaw is a movable jaw that is provided with inwardly-projecting lugs to engage the annular groove in the handle, thereby to hold the parts properly assembled and to prevent one from having longitudinal movement relative 35 to the other. In addition, the movable jaw is provided with a spring-actuated pin that is arranged to engage with the ratchet teeth, thus to hold the parts, temporarily, in any adjusted position.

The invention consists further in the various novel details of construction of a monkey wrench, as will be hereinafter fully described and claimed.

In the accompanying drawings forming a 45 part of this specification the figure is a view in elevation partly in section, of a wrench constructed in accordance with the present invention.

The wrench comprises, as usual, a stock 1 50 which is provided at one end with a jaw 2 and at its other end with interrupted threads The handle 4 is internally threaded to engage with the threads on the stock and is adapted for complete and successive rota-55 tions thereon, whereby to cause the stock to move longitudinally of the handle in securing |

adjustments. The handle is provided near that end, which will be the inner one in use, with an annular groove 6, and in this end with an annularly disposed set of ratchet 60 teeth 7. Mounted upon the stock is a fixed jaw 8, the lower end of the body portion 9 of which is provided with a plurality of spaced lugs 10 terminating in inward projecting terminals 11 that are adapted to engage with 65 the groove in the handle, and thereby hold the stationary jaw and handle against longitudinal movement relatively to each other.

In order to hold the movable jaw at any desired adjustment relatively to the fixed 70 jaw there is a locking pin 12 that is arranged to slide longitudinally in a slot 15 in one side of the stationary jaw, a spring 13 mounted upon the pin and bearing at one end against the wall of the slot and at its other end 75 against a head 14 on the pin serving to hold the inner end of the latter, and which is shown as pointed in this instance, in engagement with the ratchet teeth.

In order that the pin 12 may be properly 80 positioned to engage the teeth of the ratchet as indicated in the drawing it is necessary to extend or bulge the side faces of the body 9 of the sliding jaw. By providing these lateral extensions or enlargements the teeth are shielded and protected thereby so that there is no danger of their becoming mashed or otherwise injured as the result of the rough usage to which a wrench is usually subjected.

By the peculiar manner of assembling the 90 handle and the fixed jaw, the former is adapted for partial or repeated and complete rotations, whereby the movable jaw may be readily adjusted to cause it to occupy such position with relation to the stationary jaw as to 95 engage the object to be turned in a positive manner. Furthermore, in order to cause the wrench tightly to engage with the nut, the handle may be forcibly turned by a suitable implement for this purpose.

While the improvements herein described are simple in character it will be seen that they coact to produce a simple and thoroughly practical wrench and one that may be easily and positively clamped to the bolt or 105 the head of a nut.

What is claimed is:—

A wrench comprising a stop having a jaw at one end and provided with interrupted threads adjacent its other end, a hollow han- 110 dle surrounding and engaging the threaded portion of the stop, said handle having an

annular groove adjacent one end, said end | being provided with a circular series of ratchet teeth, a fixed jaw, a body portion extending from the jaw and slidably mounted upon the stop, spaced lugs extending from the body portion at diametrically opposite points and having inturned ends seated with in the annular groove, said body portion being bulged laterally and constituting a shield to for all portions of the toothed face of the ratchet, a spring actuated locking pin mov-

ably mounted within one of the bulged portions of the body and having a V-shaped head normally engaging the ratchet teeth.

In testimony that I claim the foregoing as 15 my own, I have hereto affixed my signature in the presence of two witnesses.

## HENRY C. SAUNDERS.

Witnesses:

C. L. MINIER, O. M. Branson.