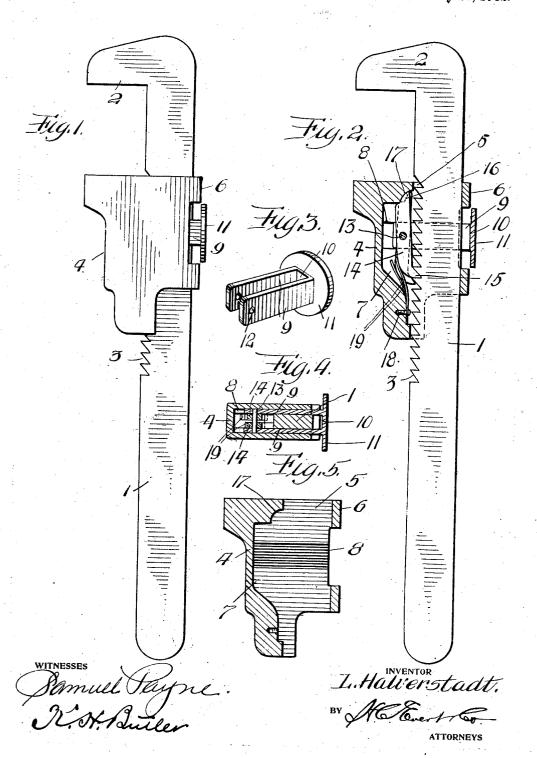
L. HALVERSTADT. WRENCH.

APPLICATION FILED JAN. 24, 1912.

1,027,203.

Patented May 21, 1912.



UNITED STATES PATENT OFFICE.

LEROY HALVERSTADT, OF LEETONIA, OHIO.

WRENCH.

1,027,203.

Specification of Letters Patent.

Patented May 21, 1912.

Application filed January 24, 1912. Serial No. 673,122.

To all whom It may concern:

Be it known that I, LEROY HALVERSTADT, a citizen of the United States of America, residing at Leetonia, in the county of Co-5 lumbiana and State of Ohio, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

the primary object of my invention is to provide a quick-acting wrench wherein simple and effective means are employed for locking the movable jaw of the wrench relative to the shank, in a manner that permits of the jaw being minutely adjusted without any danger of the jaw slipping when the wrench is used for rotating an object, as a nut.

20 A further object of this invention is to provide a wrench of that type commonly styled a "monkey" wrench, wherein the gripping or locking mechanism of the adjustable jaw is concealed and prevented from being injured by ordinary use of the wrench.

A still further object of this invention is to accomplish the above result by a combination of mechanical elements that will be 30 hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein—

Figure 1 is a side elevation of the wrench.

Fig. 2 is a similar view showing the adjustable jaw in section. Fig. 3 is a perspective view of a detached yoke. Fig. 4 is a horizontal sectional view of the wrench. Fig. 5 is a vertical sectional view of a detached

40 adjustable jaw body.

A wrench in accordance with this invention comprises a shank 1, rectangular in cross section, and having the outer end thereof provided with a jaw 2, said jaw extending at right angles to the shank 1. The front side of the shank, intermediate the ends thereof, is provided with transverse ratchet teeth 3. Slidably mounted upon the shank 1 is an adjustable jaw 4, said jaw having side walls 5 connected by straps 6, said wall coöperating with said straps in retaining the adjustable jaw body upon the shank 1. The jaw body 4 is recessed, as at 7, and the side walls 5 have the inner sides thereof provided with transverse grooves 8. Slidably arranged within the grooves 8 are

the side arms 9 of a yoke 10, said yoke having a head 11. The side arms 9 are apertured, as at 12, for a transverse pin 13 and pivotally mounted upon said pin are pawls 60 14 of different lengths. The inner ends of the pawls 14 have teeth 15 adapted to engage the teeth 3 of the shank 1, as best shown in Fig. 2, and the outer ends of said pawls are reduced, as at 16, to engage in a 65 recess 17 provided therefor in the jaw body 4.

Secured in the inner ends of the recess 7 by screws 18 or similar fastening means are the inner ends of flat compression springs 70 19, said springs engaging the inner end of the pawls 14. The tension of these springs is sufficient to normally retain the toothed ends of the pawls in engagement with the shank.

By pressing inwardly upon the head 11 of the yoke, the yoke is shifted inwardly and the pin 13 is moved to shift the pawls 14. The reduced ends 16 of the pawls are fulcrumed or pivoted against the walls of 80 the pocket 17, consequently the inner toothed ends of said pawls will be shifted out of engagement with the teeth 3 of the shank 1 and the adjustable jaw can be shifted upon said shank. It is only necessary to press upon the head 11 when it is desired to open the adjustable jaw relatively to the fixed jaw 2 of the shank 1, as the pawls 14 recede over the teeth 3 when the adjustable jaw is shifted toward the 90 fixed jaw.

It is thought that the operation and utility of the wrench will be apparent without further description, and while in the drawings there is illustrated a preferred em- 95 bodiment of the invention, it is to be understood that the structural elements are susceptible to such variations as fall within the scope of the appended claim.

What I claim is:

A wrench comprising a toothed shank having its outer end provided with a jaw, an adjustable jaw body slidably mounted upon the shank and provided with a recess, having the side walls thereof formed with 105 transverse grooves, a yoke straddling the shank and having its arms slidably mounted in said grooves, a pin mounted in the free ends of the arms of the yoke, said jaw body having a pocket opening into said re- 110 cess, toothed pawls of different lengths loosely mounted upon said pin and having

their outer ends fulcruming upon one wall of said pocket, whereby, when the yoke is shifted inwardly, the toothed ends of the pawls will be moved out of engagement with the shank, and means arranged within said jaw body for holding said toothed pawls normally in engagement with the shank.

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

LEROY HALVERSTADT.

Witnesses:
John B. Morgan,
George H. Irwin.