

H. E. LOGAN.
WRENCH.
APPLICATION FILED DEC. 26, 1911.

1,036,501.

Patented Aug. 20, 1912.

FIG. 1

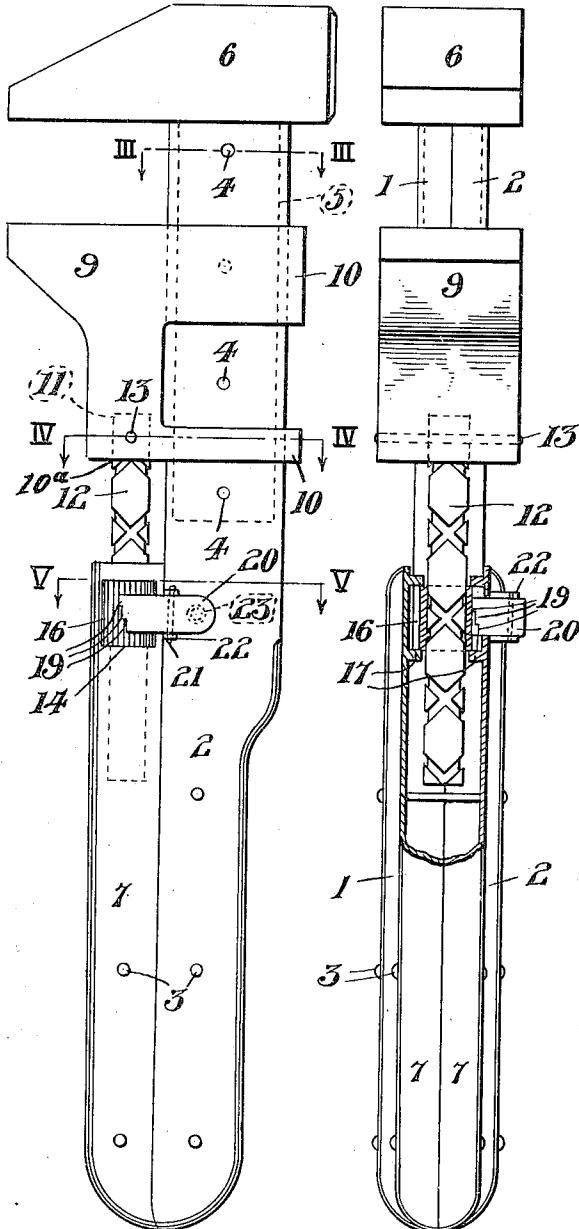


FIG. 2

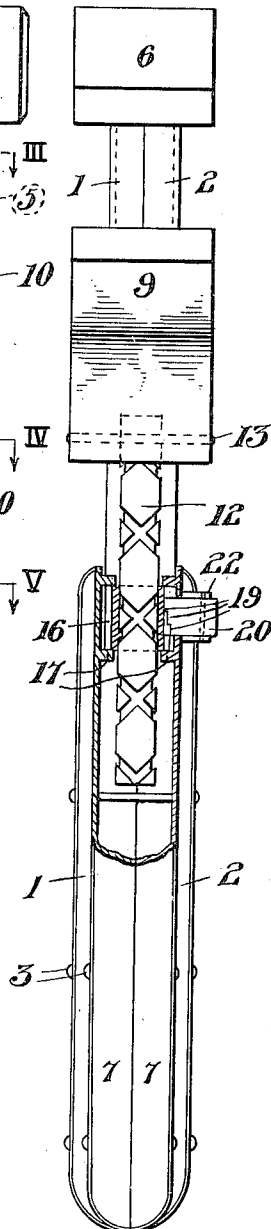


FIG. 3

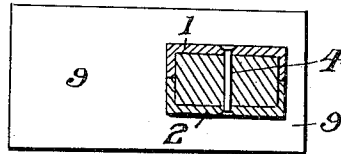


FIG. 4

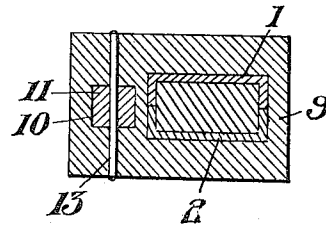


FIG. 5

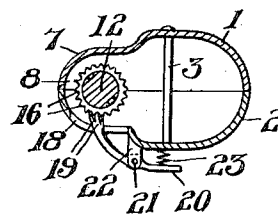


FIG. 6

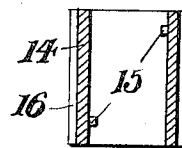
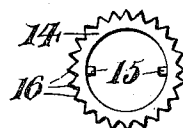


FIG. 7



WITNESSES

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WRENCH.

1,036,501.

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Application filed December 26, 1911. Serial No. 667,776.

To all whom it may concern:

Be it known that I, HARRY E. LOGAN, a citizen of the United States of America, residing at Wilksburg, 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 monkey wrench that can be easily and quickly adjusted and advantageously used for rotating nuts.

Another object of this invention is to provide a wrench embodying a novel adjusting mechanism that permits of the adjustable jaw of the wrench being easily and quickly adjusted when the mechanism is released, such release being accomplished by the thumb of the hand in which the wrench is held.

A further object of this invention is to accomplish the above results by a mechanical construction that will be hereinafter specifically described and then claimed, and 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 the wrench, Fig. 2 is a front elevation of the same, partly broken away and partly in section, Fig. 3 is a horizontal sectional view of the wrench taken on the line III—III of Fig. 1, Fig. 4 is a similar view taken on the line IV—IV of Fig. 1, Fig. 5 is a similar view taken on the line V—V of Fig. 1, Fig. 6 is an enlarged vertical sectional view of the nut forming part of the wrench, and Fig. 7 is a plan of the same.

A wrench in accordance with this invention comprises a two-part or sectional casing having the sections 1 and 2 thereof connected by a plurality of rivets 3 and 4. The outer ends of the sections 1 and 2 are rectangular in cross section, as best shown in Figs. 3 and 4 and said sections receive the shank 5 of a stationary jaw 6, said shank being held by the rivets 4. The inner ends of the sections 1 and 2 are oval and the front sides of said sections are off-set, as at 7 to provide an auxiliary casing 8 which is in communication with the main casing of the wrench.

Slidably mounted upon the rectangular

portions of the sections 1 and 2 of the casing is an auxiliary jaw 9 having straps 10 embracing the rectangular portions of the sections 1 and 2. The inner end of the jaw 9 has a rectangular socket 10^a to receive the rectangular end 11 of a double spirally grooved screw 12. The outer end of this screw is retained within the socket 10^a by a transverse rivet 13 or other fastening means. The double spiral screw 12 extends into the auxiliary casing 8, and rotatably mounted upon said screw is a sleeve 14 having inwardly projecting lugs 15 extending into the spiral grooves of the screw 12. The sleeve 14 has the periphery thereof provided with longitudinal teeth 16 and said sleeve is revolvably supported by confronting flanges 17, carried by the inner sides of the sections 1 and 2 within the auxiliary casing 8. The section 2, adjacent to the sleeve 14, is provided with an opening 18 and extending through said opening is the toothed end 19 of a locking lever 20. The lever 20 is pivotally supported by a pin 21 between two apertured lugs 22, carried by the section 2. A coiled compression spring 23 is interposed between the lever 20 and the section 2 to retain the toothed end of the lever in engagement with the teeth 16 of the sleeve 14. With the lever 20 in engagement with the sleeve 14, the latter is prevented from revolving to shift the screw, and the adjustable jaw 9 is held relatively to the rectangular portions of the sections 1 and 2. By pressing upon the lever 20 the nut 14 is released and can revolve, consequently the jaw 9 can be shifted by reason of the screw 12 riding through the revoluble nut 14.

The wrench in its entirety is made of light and durable metal and the sections 1 and 2 thereof can be pressed to the desired shape and then secured together.

What I claim is:—

1. A wrench comprising a sectional casing including an outer rectangular portion and an inner offset rounded portion to provide a longitudinally extending auxiliary casing and to further constitute a handle, a rectangular shank mounted in said rectangular portion and extending to a point in proximity to the inner terminus of said rectangular portion, means for fixedly securing the shank to and the sections of the casing together, a jaw integral with the outer end of the shank and abutting against the forward terminus of said rectangular portion,

an adjustable jaw slidably mounted upon said rectangular portion, a double spiral screw having its ends fixedly secured in the inner end of said adjustable jaw, opposing
5 said rectangular portion and extending into said auxiliary casing, a sleeve within said auxiliary casing at the forward end thereof, means within said auxiliary casing to prevent longitudinal movement of said sleeve,
10 said sleeve having its inner face provided with a pair of lugs each engaging in a groove of the sleeve, said sleeve having longitudinally extending peripheral teeth, and means carried by the rectangular portion of
15 the casing and engaging with said sleeve to prevent rotation of the same with respect to said screw.

2. A wrench comprising a main casing having its inner portion offset to form an
20 auxiliary casing and to constitute a handle, a shank extending in and secured to the outer portion of said main casing and having integral therewith a jaw abutting against the outer terminus of said main
25 casing, an adjustable jaw slidably mounted

upon the outer portion of said main casing, a screw provided with a pair of oppositely disposed spiral grooves, said screw having its forward end fixedly secured in the inner end of said adjustable jaw and its inner end
30 extending into said auxiliary casing, a sleeve arranged within the auxiliary casing, surrounding said screw and having its inner face provided with a pair of lugs each engaging in a groove, means within said aux-
35 iliary casing to prevent longitudinal movement of said sleeve, said sleeve having longitudinally extending teeth, and a pivoted spring pressed locking lever carried by said
main casing and extending in said auxiliary
40 casing and engaging with the teeth of said sleeve for locking the adjustable jaw relatively to the fixed jaw.

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

HARRY E. LOGAN.

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."