

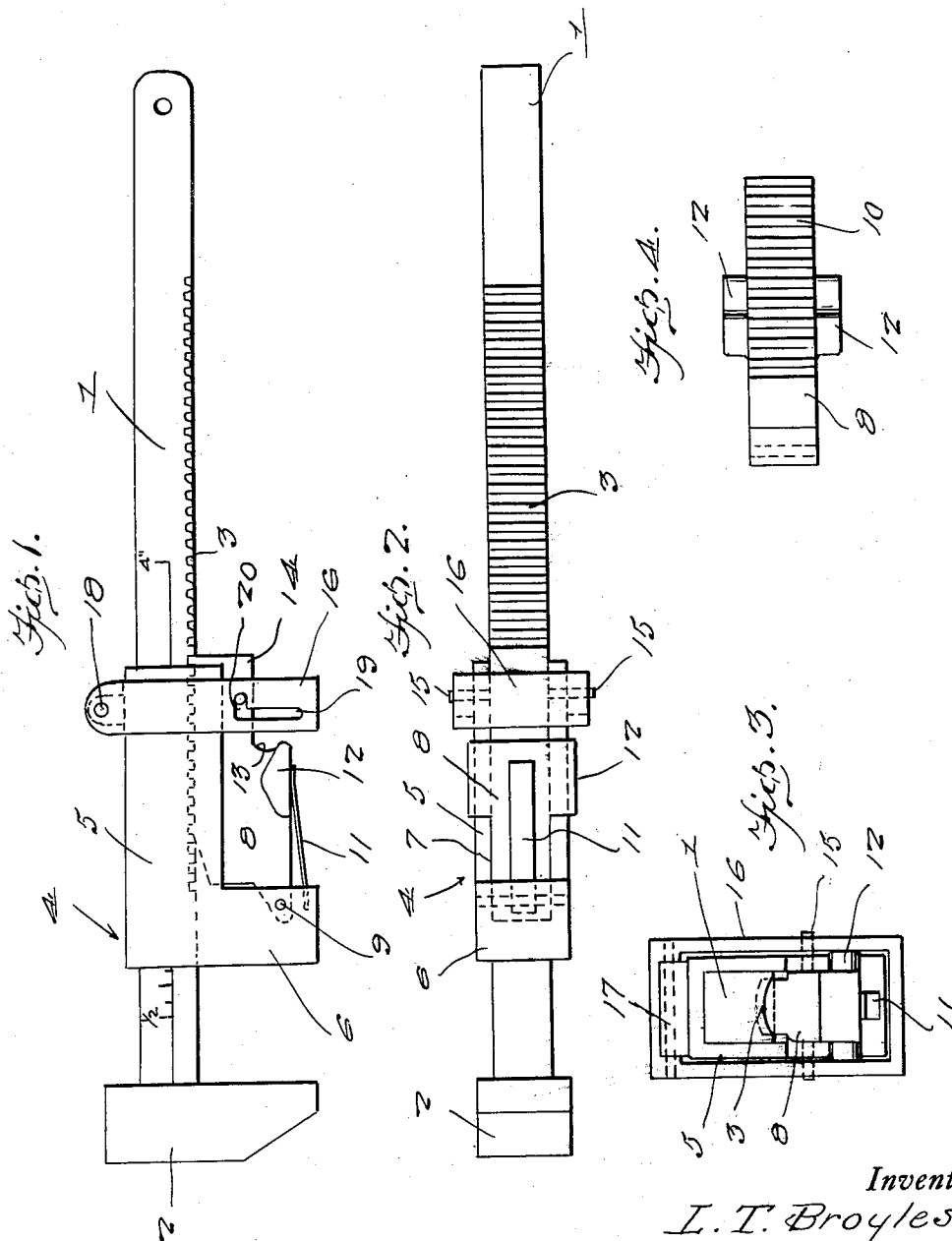
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L. T. BROYLES

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WRENCH

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Inventor

L. T. Broyles

By *Clarence A. O'Brien*

Attorney

## UNITED STATES PATENT OFFICE.

LEO TALLY BROYLES, OF ENTIAT, WASHINGTON.

## WRENCH.

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The present invention relates to improvements in wrenches, and has for its principal object to provide means for facilitating the adjustment of the slidable jaw along the shank of the wrench, additional means being provided for holding the slidable jaw in any adjusted position against accidental movement.

Another important object of the invention is to provide a wrench of the above mentioned character which is of such construction as to permit the movable elements forming a part of the device to be readily and easily operated for adjusting the slidable jaw with respect to the stationary jaw.

A further object is to provide a wrench of the above mentioned character which is simple in construction, inexpensive, strong and durable, and further well adapted to the purposes for which it is designed.

Other objects and advantages of the invention will become apparent as the nature of the invention is better understood and when taken in connection with the accompanying drawing.

In the accompanying drawing:—

Figure 1 is a side elevation of the wrench embodying my invention.

Figure 2 is an edge elevation thereof.

Figure 3 is an end view looking toward the stationary jaw formed on one end of the shank, and

Figure 4 is a detail plan view of the locking pawl.

In the drawing wherein for the purpose of illustration is shown the preferred embodiment of my invention, the numeral 1 designates the shank, the same having formed on one end the stationary jaw 2. A series of ratchet teeth 3 are formed on the inner edge of the shank as indicated at 3. Adapted for slidable movement along the shank 1 is the slidable jaw designated generally by the numeral 4. This movable jaw 4 comprises a sleeve portion 5 having a jaw forming portion 6 extending from the inner side of the sleeve at one end thereof for cooperation with the stationary jaw 2. The inner side edge portion of the sleeve 5 is cut away as illustrated at 7 to accommodate the locking pawl 8. This pawl is pivotally secured in the jaw portion 6 as at 9. Suitable ratchet teeth 10 are formed in the outer edge portion of the pawl for cooperation with the ratchet teeth 3 formed in the inner edge of the shank 1 as is clearly shown

in Figure 1 and for the purpose of holding the locking pawl 8 in engagement with the ratchet teeth 3 of the shank 1, I provide the leaf spring 11, the same being secured at one end in the jaw portion 6 of the movable jaw 4 and having its free end bearing against the outer edge portion of the pivoted pawl 8.

Laterally extending ears 12 are formed on the outer edge portion of the pivoted pawl 8 to provide finger grips whereby the pivoted pawl may be swung outwardly so that the teeth 10 of the pawl will be moved out of engagement with the ratchet teeth 3. The free end of the pivoted locking pawl 8 is cut away as indicated at 13 and extending outwardly from the sides of the reduced portion 14 of the pivoted locking pawl 8 are the pins 15, the purpose of which will be hereinafter more fully described.

It is readily obvious that when the locking pawl 8 is moved out of engagement with the ratchet teeth 3 the jaw 4 may be moved along the shank 1 for positioning the same in any desired place on the shank and for the purpose of facilitating the proper positioning of the movable jaw with respect to the stationary jaw, I provide the shank with suitable graduations in the manner as clearly shown in Figure 1.

In order that the movable jaw 4 may be held in a locked position against accidental movement from the point to which the same has been moved or adjusted, I provide a locking bail 16, the same being substantially rectangular in design and being pivotally secured at one end to a suitable boss 17 formed on the outer edge portion of the sleeve 5 which forms a part of the movable jaw 4, the pivotal connection for the bail being illustrated at 18. This bail extends around the end portion of the sleeve 5 opposite the jaw and also around the reduced portion 14 of the locking pawl 8. The bail 16 is of such length as to permit the outer edge portion of the reduced portion 14 to move outwardly within the bail. A bayonet slot 19 is formed in each side of the pivoted locking bail 16 adjacent the free end thereof for cooperation with the respective laterally extending pins 15, and when the pins are disposed in the notches 20 of the bayonet slots 19, the pivoted locking pawl 8 is held in locked engagement with the ratchet teeth of the shank 1 so that it will be impossible

to move the locking pawl to inoperative position.

By swinging the bail 16 away from the movable jaw 4 so that the pins 15 will be disposed out of engagement with the notches 20 in alignment with the elongated portions of the slots, the pivoted pawl 8 may then be swung outwardly to an inoperative position as is readily obvious from the construction shown in the drawing.

It will thus be seen from the foregoing description, that I have provided a wrench which may be readily and easily adjusted, means being provided whereby the movable jaw will be held in any adjusted position against accidental movement.

Furthermore the simplicity in which my improved wrench is constructed enables the parts to be readily and easily actuated.

While I have shown the preferred embodiment of my invention, it is to be understood that minor changes in the size, shape and arrangement of parts may be resorted to without departing from the spirit of the invention and the scope of the appended claims.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a wrench of the class described, comprising a shank, a jaw carried on one end thereof, there being ratchet teeth formed on the inner edge of said shank, a movable jaw adapted for slidable movement on said shank, a pivoted pawl associated with the movable jaw and cooperating with the ratchet teeth for holding the slidable jaw in any adjusted position on the shank, cooperating means between the free end portion of the pivoted locking pawl and said movable

jaw for holding the pawl in engagement with the ratchet teeth, said means comprising a pivoted bail carried by the movable jaw and extending around the free end portion of the locking pawl, the sides of said bail being provided with bayonet slots, and pins projecting laterally from the free end portion of the locking pawl and operable in said bayonet slots.

2. A wrench of the class described comprising a shank, a jaw carried on one end thereof, there being ratchet teeth formed on the inner edge of the shank, a movable jaw comprising a sleeve slidable on the shank, an extension at one end of the sleeve for forming a jaw, the inner edge of said sleeve being open, a locking pawl pivotally secured at one end to said extension and extending through the open inner edge of said sleeve for engagement with the ratchet teeth on the inner edge of the shank, a spring secured at one end to the extension and bearing against the outer edge of the pivoted pawl for holding the same in locked engagement with the ratchet teeth, additional means for preventing the pawl being manually moved out of engagement with the ratchet teeth, said last mentioned means comprising a pivoted bail enclosing the free end portion of the locking pawl and the adjacent end of the sleeve, said bail being pivotally secured at one end to the outer side edge of the sleeve, the sides of the bail being provided with bayonet slots, and laterally extending pins carried by the free end portion of the pivoted locking pawl and operable in the respective bayonet slots.

In testimony whereof I affix my signature.

LEO TALLY BROYLES.