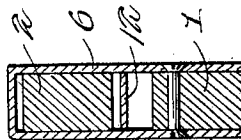
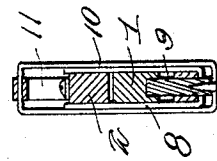
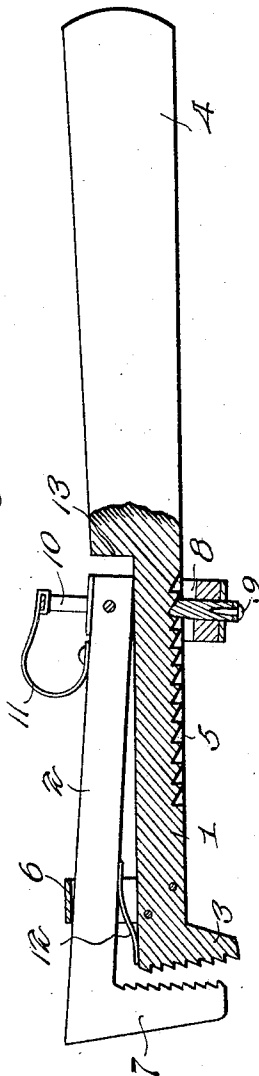
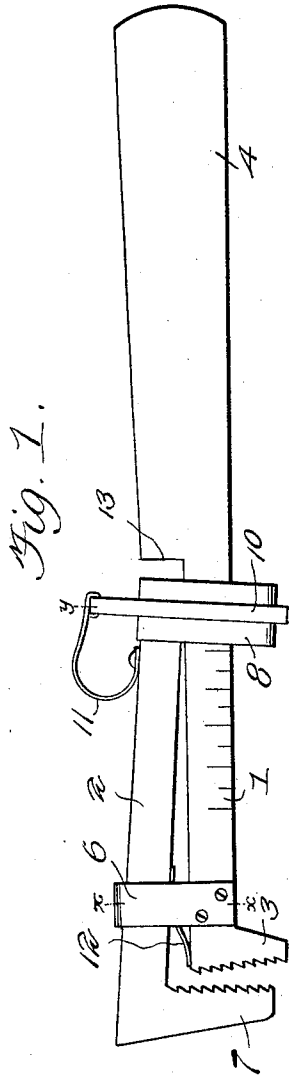


B. T. GOUGH.  
WRENCH.  
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1,050,645.

Patented Jan. 14, 1913.



Witnesses

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# UNITED STATES PATENT OFFICE.

BRONNIE THOMAS GOUGH, OF ST. PETERSBURG, FLORIDA.

WRENCH.

1,050,645.

Specification of Letters Patent.

Patented Jan. 14, 1913.

Application filed October 7, 1911. Serial No. 653,438.

*To all whom it may concern:*

Be it known that I, BRONNIE THOMAS GOUGH, a citizen of the United States, residing at St. Petersburg, in the county of Hillsboro and State of Florida, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention provides a tool of the wrench type which admits of the jaws being quickly and positively adjusted to the work and which in operation enables the jaws to release the work when moving the wrench to a new position, the jaws firmly closing upon the work when the wrench is advanced to turn the work in the required direction.

The invention consists of the novel features, details of construction and combination of parts, which hereinafter will be more particularly set forth, illustrated in the accompanying drawing, and pointed out in the appended claim.

Referring to the drawing, forming a part of the specification, Figure 1 is a side view of a wrench embodying the invention. Fig. 2 is a view similar to Fig. 1, partly in section. Fig. 3 is a section on the line  $x-x$  of Fig. 1. Fig. 4 is a section on the line  $y-y$  of Fig. 1.

Corresponding and like parts are referred to in the following description, and indicated in all the views of the drawing, by the same reference characters.

The wrench comprises two members 1 and 2 which are relatively movable. The member 1 consists of a bar and is provided at one end with a fixed jaw 3 and at its opposite end with a handle 4. The front side of the member 1 has a plurality of ratchet teeth 5 and a scale graduation appears on a side of the member to admit of the movable member being properly set. A loop 6 is secured to the forward end of the member 1 and gives direction to the member 2 and holds it in proper position.

The member 2 consists of a bar and has a jaw 7 at one end to cooperate with the jaw 3, the two jaws being toothed to make positive engagement with the work and prevent slipping of the tool. The member 2 is slidable through the loop 6 and is pivotally connected at its inner or rear end to a slide 8, which is mounted upon the member 1. Movement of the slide 8 on the member 1 determines the space between the two

jaws 3 and 7 and said slide is adapted to be secured to hold the member 2 in the required adjusted position. The slide 8 may be connected to the member 2 in any manner so as to move therewith and yet admit of the member 2 having an oscillatory movement so that the wrench when in operation may ratchet to alternately release and grip the work in the well known manner. A pin 9 is mounted in the slide 8 and is adapted to engage the ratchet teeth 5 to hold the slide in the adjusted position. The pin 9 is connected to a link 10, which embraces opposite sides of the slide 8 and is connected at its rear end to a spring 11, which is connected at one end to the member 2. The spring 11 normally exerts a pressure to move the link 10 backward and thereby hold the pin 9 in engagement with the ratchet teeth 5. A spring 12 normally presses the front portion of the member 2 away from the forward end of the member 1. This spring has one end connected to the member 1 and its opposite end enters the loop 6 and bears against the inner side of the member 2 and presses the same outward. The front portion of the member 1 is reduced, which results in the formation of a shoulder 13 at the outer end of the handle 4. This shoulder 13 constitutes a stop to limit the rearward movement of the member 2.

In practice the wrench may be set to the required size of work by moving the member 2 upon the member 1, the scale of graduations admitting of the member 2 being properly set in advance. When moving the member 2 outwardly the link 10 is depressed to cause the pin 9 to clear the ratchet teeth 5 and when the member 2 has been moved to the required position pressure is released from the link 10, thereby admitting of the spring 11 moving the link 10 to cause the pin 9 to engage with a tooth of the plurality of teeth 5. When the handle 4 is moved forward the two jaws 3 and 7 close upon the work, but when the handle is moved backward to enable the jaws 3 and 7 to obtain a fresh grip upon the work the latter is released, the operation of the tool being readily comprehended.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which

the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claim appended hereto.

10 Having thus described the invention what is claimed as new, is:—

15 A wrench comprising a fixed member having a jaw at one end and provided along its front side with a plurality of ratchet teeth, a second member mounted upon the fixed member and having a sliding and a pivotal movement, a slide connected with the inner

end of the second member and embracing the fixed member, a pin carried by the slide and adapted to engage the ratchet teeth of the fixed member, a link slidable upon the said slide and having the pin attached thereto, and a spring interposed between the said link and second member to hold the pin in engagement with a ratchet tooth and to press the second member against the fixed member.

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

BRONNIE THOMAS GOUGH.

Witnesses:

JAMES W. BOOTH,  
CALLIE THOMAS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."