

No. 859,173.

PATENTED JULY 2, 1907.

W. H. GARY.
WRENCH.

APPLICATION FILED APR. 11, 1907.

Fig. 1.

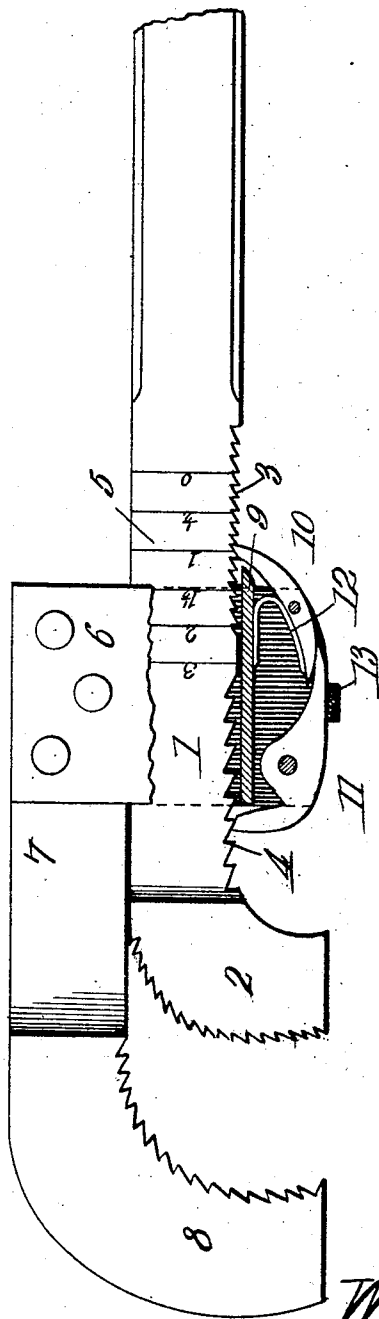
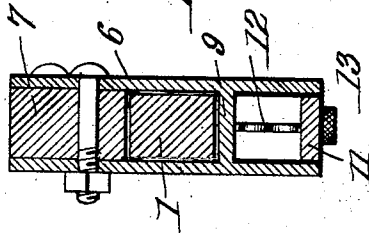


Fig. 2.



WITNESSES:

E. J. Stewart

William H. Gary

William H. Gary,

INVENTOR.

By

C. A. Snow & Co.

ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM H. GARY, OF TERRELL, FLORIDA.

WRENCH.

No. 859,173.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. GARY, a citizen of the United States, residing at Terrell, in the county of Hernando and State of Florida, have invented a new and useful Wrench, of which the following is a specification.

This invention has relation to wrenches and it consists in the novel construction and arrangement of its parts as hereinafter shown and described.

10 The object of the invention is to provide a wrench for turning pipe, rod, etc. and which comprises a relatively fixed jaw upon which is mounted a sliding head carrying a relatively movable jaw. The said jaws are provided with oppositely disposed arcuate work-engaging surfaces and oppositely disposed spring actuated 15 pawls are mounted upon the head and are adapted to engage oppositely disposed ratchet teeth provided at the edge of the shank of the fixed jaw whereby means is afforded for retaining the said head in fixed position 20 with relation to the fixed jaw.

In the accompanying drawing:—Figure 1 is a side elevation of the wrench, and Fig. 2 is a transverse sectional view of the same.

25 The wrench consists of the stock 1 which is provided at its end with an arcuate fixed jaw 2. The edge of the stock 1 lying under the laterally extending portion of the jaw 2 is provided with the ratchets 3 and 4. The said ratchets are arranged in two separate sets, the members of which are oppositely disposed to each 30 other. One of the sides of the stock 1 is provided with the scale or graduation marks 5. The head 6 receives the stock 1 and the shank 7 of the movable jaw 8 is attached to the said head. The jaw 8 is also arcuate in side elevation. The head 6 is provided with the transverse portion 9 which lies over the ratchets 3 and 4 and the pawls 10 and 11 are pivotally attached to the head 6 beyond the transverse portion 9. The spring 12 bears at one end against the portion 9 and at its other end against the end of the pawl 10 and has a tendency to

maintain the opposite end of the pawl 10 in engagement 40 with one of the ratchets 3. The inner end of the pawl 11 overlaps the inner spring actuated end of the pawl 10 and is provided upon its outer surface with a knob or push button 13. The outer end of the pawl 11 normally engages one of the ratchets 4. As the said pawls 45 10 and 11 are oppositely disposed and engage the oppositely disposed teeth 3 and 4 the said head 6 cannot be moved longitudinally along the stock 1 until the inner ends of the said pawls have been depressed against the tension of the spring 11 and the outer ends of the said 50 pawls lifted out of engagement with the ratchet teeth 3 and 4.

As the ratchets 4 are larger than the ratchets 3 it is evident that when the wrench is in engagement with a piece of work that the head 6 may move slightly along 55 the stock 1 toward the work until the end of the pawl 11 comes in contact with the next adjacent ratchet. This movement occurs when the wrench is moved in a backward direction in order to catch a new bite on the work. Thus sufficient play is permitted between the 60 jaws in order to enable them to release the work when the wrench is moved back and at the same time bringing them into firm engagement with the work when the wrench is moved forward or clockwise.

Having described my invention what I claim as new 65 and desire to secure by Letters-Patent is:—

A wrench comprising a stock having a fixed jaw and oppositely disposed ratchet teeth arranged in two sets upon one of its sides the teeth of one set being larger 70 than the teeth of the other set, a head slidably mounted on the stock, pawls pivoted to the head and extending in opposite directions and adapted to engage said ratchet teeth and a jaw carried by said head.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two 75 witnesses.

WILLIAM H. GARY.

Witnesses:

S. S. SANDFORD,
L. W. BLANTON.