

G. B. WEATHERLY.
WRENCH.
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1,022,520.

Patented Apr. 9, 1912.

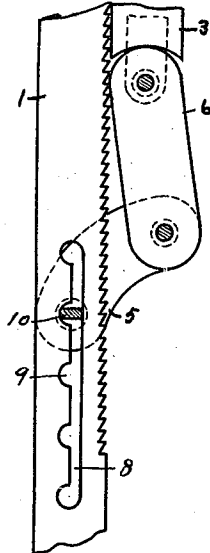
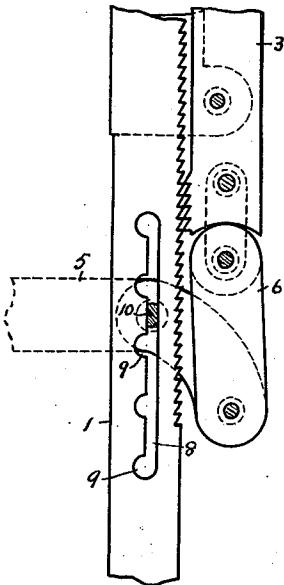


Fig 3



WITNESSES: Fig. 4

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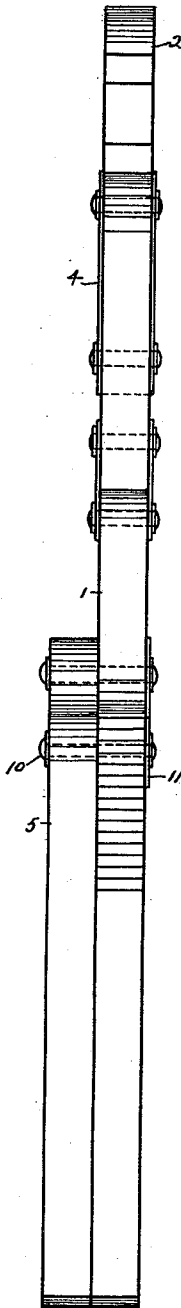


Fig 2

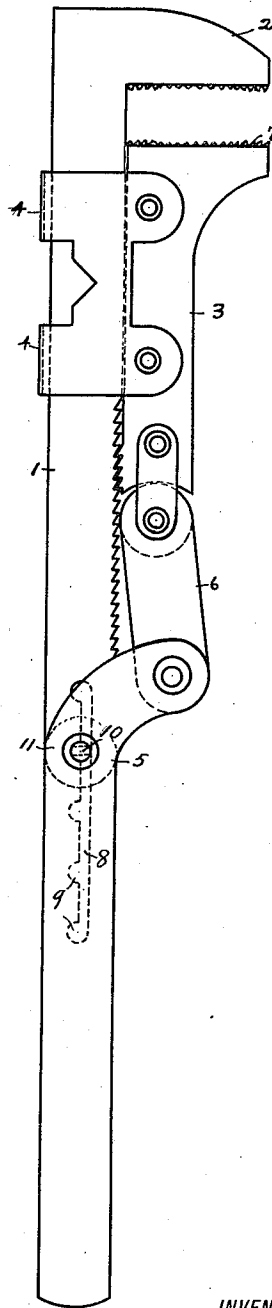


Fig. 1

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WRENCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE B. WEATHERLY, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

My invention relates to new and useful improvements in wrenches.

The object of the invention is to provide a wrench of the character described which is adjustable so as to fit any size of nut which it may be found desirable to turn thereby and which when secured upon the nut to be turned will firmly grip the same until the manipulator may desire to loosen the same from the nut.

This wrench may also be used to turn pipe.

With the above and other objects in view the invention has particular relation to certain novel features of construction and operation, an example of which is given in this specification and illustrated in the accompanying drawings, wherein:—

Figure 1 is a side elevation of the complete wrench. Fig. 2 is a front view thereof, and Figs. 3 and 4 show, respectively, fragmentary views of the mechanism for adjusting the wrench so as to accommodate it to different sizes of nuts or pipe to be turned thereby.

Referring now more particularly to the drawings, wherein like numerals of reference designate similar parts in each of the figures, the numeral 1 refers to the handle of the wrench, which carries, at one end, the laterally extending jaw 2 of the usual shape. Opposing jaw 2 is a sliding jaw 3, which is arranged to slide back and forth on the handle 1 and is slidably secured thereto by means of a yoke 4 which surrounds handle 1 and is secured to jaw 3. This yoke passes over the handle 1 loosely so as to give a limited lateral play to jaw 3 for a purpose to be hereinafter set forth. A hand lever 5 is adjustably secured to the handle 1, in a manner hereinafter to be described. One end of this lever has a decided lateral curve and is connected to the jaw 3 by means of a link 6, which is pivoted at one end to the curved end of lever 5 and at the other end to the sliding jaw 3.

It is obvious that by a suitable manipulation of the lever 5 the jaw 3 may be moved

back and forth on the handle 1 so as to adjust the wrench to any size of nut or pipe which it may be found desirable to turn thereby.

The contacting sides of handle 1 and sliding jaw 3 are provided with ratchet teeth which incline in opposite directions and the lateral movement of jaw 3 permits these teeth to disengage when it is desired to move said jaw back and forth along the handle 1 but when the wrench is engaged on nut or pipe the resistance of said nut or pipe against the operative face 7 of said jaw 3 operates to force said ratchet teeth into engagement with each other and when the teeth are engaged they hold the jaw 3 firmly against movement relative to handle 1.

The handle 1 is provided with an oblong slot 8 and extending therefrom are lateral recesses 9. The hand lever 5 is rigidly secured to a rivet 10 which extends through and which projects through the slot 8. The portion of the rivet 10 projecting through said slot is flat, as shown in Figs. 3 and 4 and the thickness of said flat portion is equal to the width of the slot 8 and when the hand lever 5 is brought at right angles to the handle 1 the rivet 10 may be slid along said slot which extends lengthwise of the handle 1 and the wrench may thus be adjusted to fit either small or large nuts or pipe and when said rivet is brought to one of the recesses 9 the hand lever 5 may be turned until it coincides in position with the handle 1 and the flat portion of the rivet 10 will engage in said recess 9 and the lever 5 will thereby be held against movement relative to the handle 1. The free end of the rivet 10 extends through a plate 11 on the opposite side of handle 1 from the lever 5 and is headed so as to secure said plate thereon and this plate firmly braces the lever 5 and it is thus firmly secured to the handle 1. If it is so desired a lever similar to the lever 5 may be pivoted to handle 1 on the side opposite said lever 5 and may also be pivoted to the jaw 3 and arranged to operate in the same manner as lever 5, the two levers operating together as a double lever, in which case the plate 11 would not be necessary.

The operative faces of jaws 2 and 3 may be roughened or toothed, so as to readily engage pipe or other round bodies.

A wrench of the character described will be found to be readily adjustable so as to

fit any size of nut or pipe which it may be found desirable to turn thereby and when secured upon said nut or pipe will be firmly held together until removed therefrom by
5 the manipulator of the wrench.

What I claim is:—

A device of the character described including a suitable handle having a longitudinal slot therein and recesses extending
10 laterally from said slot, a laterally extending jaw integral with said handle, a yoke slidably secured to said handle and a jaw carried by said yoke and having a limited lateral play relative to the handle, rack teeth
15 carried by the contacting sides of said sliding jaw and handle, a lever adjustably se-

cured to said handle, a means secured to said lever and extending through the slot in said handle and designed to move along said slot but so shaped as to project into said
20 recesses when said lever is suitably manipulated, and a pivotal connection by means of which said lever is connected to said sliding jaw.

In testimony whereof I have signed my
25 name to this specification in the presence of two subscribing witnesses.

GEORGE B. WEATHERLY.

Witnesses:

EMORY MUNFEE,
J. B. ALVIS.

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