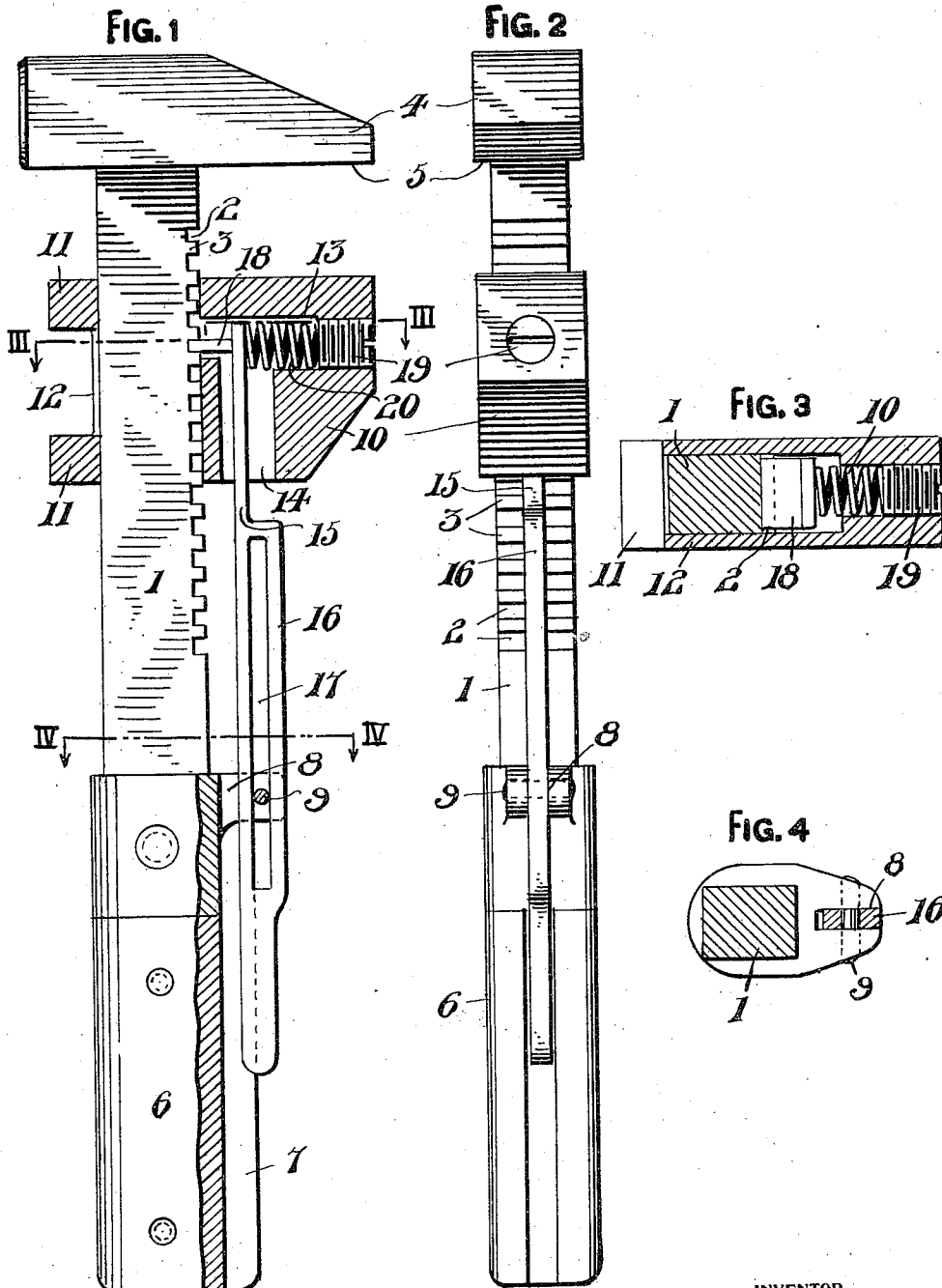


M. J. ST. JOHN.
WRENCH.

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1,046,892.



WITNESSES

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WRENCH.

1,046,892.

Specification of Letters Patent.

Patented Dec. 10, 1912.

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To all whom it may concern:

Be it known that I, MAICHEL J. ST. JOHN, a citizen of the United States of America, residing at Amsbry, in the county of Cambria 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 more particularly to that type commonly styled a "quick-acting" wrench, wherein the adjustable jaw is constructed and arranged for rapid adjustment.

The primary object of my invention is to provide a wrench of the above type consisting of comparatively few parts that are easy to assemble, inexpensive to manufacture, not liable to injury for ordinary use, and highly efficient for the purposes for which they are intended.

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.

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 a wrench partly broken away and partly in section. Fig. 2 is a front elevation of the same. Fig. 3 is a horizontal sectional view taken on the line III—III of Fig. 1, and Fig. 4 is a similar view taken on the line IV—IV of Fig. 1.

A wrench in accordance with this invention comprises a shank 1, rectangular in cross section and having the front side thereof provided with transverse grooves 2 that provide equally spaced teeth 3. The outer end of the shank 1 has a stationary jaw 4 presenting a flat gripping surface 5 at right angles to the front side of the shank 1. The inner end of the shank 1 has a handle 6 and said handle is provided with a longitudinal groove 7. The handle 6 also has parallel lugs 8 that are connected by a transverse pin 9.

Slidably mounted upon the shank 1 is an adjustable jaw body 10 that has straps 11 embracing the shank 1 and said straps are connected by side plates 12, said straps and said side plates cooperating in retaining the adjustable jaw body 10 upon the front side of the shank 1. The adjustable jaw body 10 has a transverse opening 13 and a longitudinal opening 14, the latter being in communication with the former and the former in communication with the front side of the shank 1.

Extending through the opening 14 into the opening 13 is the outer end 15 of a movable arm 16, said arm having the inner end thereof extending into the groove 7 of the handle 6. The arm 16 is slotted, as at 17 to provide clearance for the transverse pin 9, and said pin movably holds the arm 16 relatively to the shank 1. The end of the arm 16 within the opening 13 is provided with a transverse tooth 18 adapted to engage in one of the grooves 2 between the teeth 3 of the shank 1.

The outer end of the opening 13 has the walls thereof screw threaded to receive a plug 19, and interposed between said plug and the end of the arm 16 is a coiled compression spring 20. The tension of the spring 20 is sufficient to retain the tooth 18 of the arm 16 in engagement with the shank 1, and by pressing inwardly upon the inner end of the arm 16, the tooth 18 is moved out of engagement with said shank, and the adjustable jaw body 10 can be easily and quickly shifted upon the shank. The pin 9 serves as a fulcrum for the slotted arm 16 and the groove 7 of the handle 6 provides clearance for a movement of the inner end of the arm.

It is to be understood that the structural elements of my invention are susceptible to such changes as fall within the scope of the appended claims.

What I claim is:—

1. In a wrench, the combination with a toothed shank, a stationary jaw carried by the outer end thereof, a grooved handle carried by the inner end of said shank, and a fulcrum pin carried by said handle, of an adjustable jaw body slidably mounted upon the front side of said shank, straps carried by said adjustable jaw body and embracing said shank, said adjustable jaw body having openings formed therein, a slotted arm movably mounted upon the fulcrum pin of said handle and extending into said openings, a tooth carried by the end of said arm within said openings and engaging the teeth of said shank, and means arranged within one of said openings for retaining the tooth of said arm normally in engagement with said shank.

2. In a wrench, the combination with a

toothed shank, a stationary jaw carried
thereby, a handle carried by the inner end of
said shank and having a longitudinal groove
formed therein, lugs carried by said handle
5 and a fulcrum pin carried by said lugs, of
an adjustable jaw body slidably mounted
upon the front side of said shank, said ad-
justable jaw body having a longitudinal and
a transverse opening formed therein, a
10 slotted arm movably mounted upon said ful-
crum pin and extending into the groove of
said handle, said arm having one end thereof
extending through the longitudinal opening
of said adjustable jaw body into the trans-
15 verse opening thereof, a tooth carried by the

end of said slotted arm within said trans-
verse opening of said adjustable jaw body
and engaging said toothed shank, and a
spring arranged in the transverse opening
of said adjustable jaw body and bearing 20
against the end of said arm to retain the
tooth thereof normally in engagement with
said shank.

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

MAICHEL J. ST. JOHN.

Witnesses:

JOSEPH MADIGAN,
EDW. MORGAN.

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