

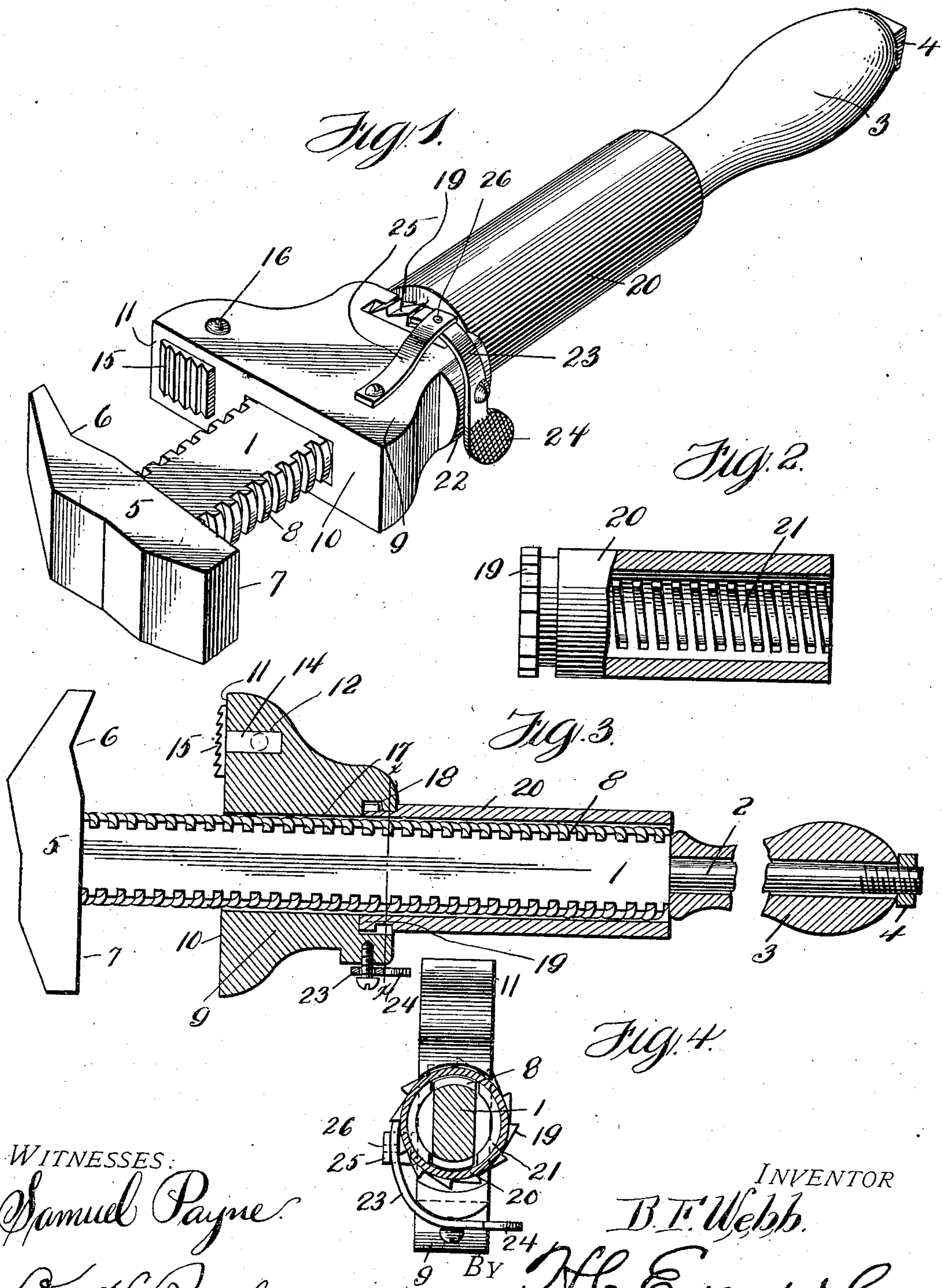
No. 877,273.

PATENTED JAN. 21, 1908.

B. F. WEBB.

WRENCH.

APPLICATION FILED MAY 3, 1907.



WITNESSES:

Samuel Payne

A. H. Butler

INVENTOR

B. F. Webb.

H. C. Everett & Co.

Attorneys

UNITED STATES PATENT OFFICE.

BENJAMIN FRANKLIN WEBB, OF SISTERSVILLE, WEST VIRGINIA.

WRENCH.

No. 877,273.

Specification of Letters Patent.

Patented Jan. 21, 1908.

Application filed May 3, 1907. Serial No. 371,585.

To all whom it may concern:

Be it known that I, BENJAMIN FRANKLIN WEBB, citizen of the United States of America, residing at Sistersville, in the county of Tyler and State of West Virginia, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to wrenches of that type commonly styled "quick acting" wrenches, and the invention has for its object the provision of positive and reliable means for effecting a quick adjustment of the
15 movable jaw of the wrench.

Another object of this invention is to provide a combined nut and pipe wrench, or a wrench adapted for gripping flat and rounded surfaces.

20 A further object of this invention is to provide a simple and inexpensive wrench which will be strong and durable and capable of withstanding the rough usage to which a wrench is subjected by machinists and similar artisans.

With the above and other objects in view, which will more readily appear as the invention is better understood, the same consists in the novel construction, combination and
30 arrangement of parts to be hereinafter more fully described and then specifically pointed out in the appended claims.

Referring to the drawing forming part of this specification, like numerals of reference
35 designate corresponding parts throughout the several views, in which:

Figure 1 is a perspective view of my improved wrench, Fig. 2 is a longitudinal sectional view of the movable sleeve constituting a portion of the adjustable jaw of the
40 wrench, Fig. 3 is a longitudinal sectional view of the wrench partly in side elevation and partly broken away, Fig. 4 is a cross sectional view taken on the line $x-x$ of Fig. 3.

45 To put my invention into practice, I construct my improved wrench of a shank 1 having a contracted cylindrical end 2 for a handle 3, said handle being secured upon the contracted cylindrical end of the shank 1 by
50 a nut 4 or similar fastening means. The opposite end of the shank 1 is provided with a fixed or stationary jaw 5 having an angular gripping surface 6 and a flat gripping surface 7. The shank 1 is provided with two flat
55 sides and with two threaded edges 8, the threads of said edges being disposed at an

angle or a pitch similar to ordinary screw threads.

Slidably mounted upon the shank 1 is an adjustable jaw 9 having flat gripping surfaces 10 and 11, the jaw 9 being provided with a socket 12 adjacent to the gripping surfaces 11, to receive the shank 14 of a serrated gripping block 15, the shank of said block being held within the jaw by a screw
60 16 or similar fastening means. The jaw 9 besides being provided with an opening 17 to receive the shank 1, is formed with a circular cut away portion 18 to receive a ratchet wheel 19 carried by a sleeve 20, said sleeve
65 being revolubly mounted in the jaw 9. The diametrically opposed inner sides of the sleeve 20 are provided with threads 21 corresponding in size and pitch to the threaded edges of the shank 1. The threads 21 are
70 adapted to engage the threaded edges of the shank 1 when it is desired to lock the adjustable jaw 9 in a fixed position, said threads being rotated to position opposite the flat sides of the shank 1 when it is desired to
80 rapidly adjust the jaw 9 upon said shank.

In order to hold the sleeve 20 in a fixed position, I provide the edge of the jaw 9 with an enlargement 22, upon which is fulcrumed a lever 23 having a serrated thumb grip 24.
85 The end of the lever is adapted to engage the ratchet wheel 19 of the sleeve 20 and in order to hold the end of the lever in engagement with said wheel, I provide the side of the jaw 9 with a flat spring or resilient piece of metal
90 25, which is secured to the lever 23 as at 26.

It will be observed that the sleeve 20 can be rotated in one direction, either to fix the jaw 9 upon the shank 1 or release the same, but when it is desired to rotate the sleeve 20
95 in the opposite direction, it is necessary to elevate the spring held end of the lever 23.

What I claim and desire to secure by Letters Patent, is:—

In a wrench, a shank substantially rectangular in cross section having its narrow oppositely disposed faces provided with threads, a fixed jaw on the outer end of said shank, a movable jaw slidably mounted on the shank and provided at its inner end with
100 an annular recess of a diameter greater than the greatest diameter of the opening through the jaw to receive the shank, a sleeve mounted on the shank and having threads disposed on opposite faces on the interior to
105 engage the threads on said shank, a ratchet wheel carried by the outer end of said sleeve

to engage in the circular recess in the inner
end of said movable jaw, and projecting be-
yond the opposite side faces of said movable
jaw, a spring lever secured to the movable
5 jaw having a thumb piece on one end and its
other end disposed to overlie the ratchet
wheel and engage with the teeth thereof, and
a spring secured to the movable jaw and said

spring lever for normally holding the latter in
locking engagement with the ratchet wheel. 10

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

BENJAMIN FRANKLIN WEBB.

Witnesses:

LYNN KIRTLAND,
IRA S. SALISBURY.