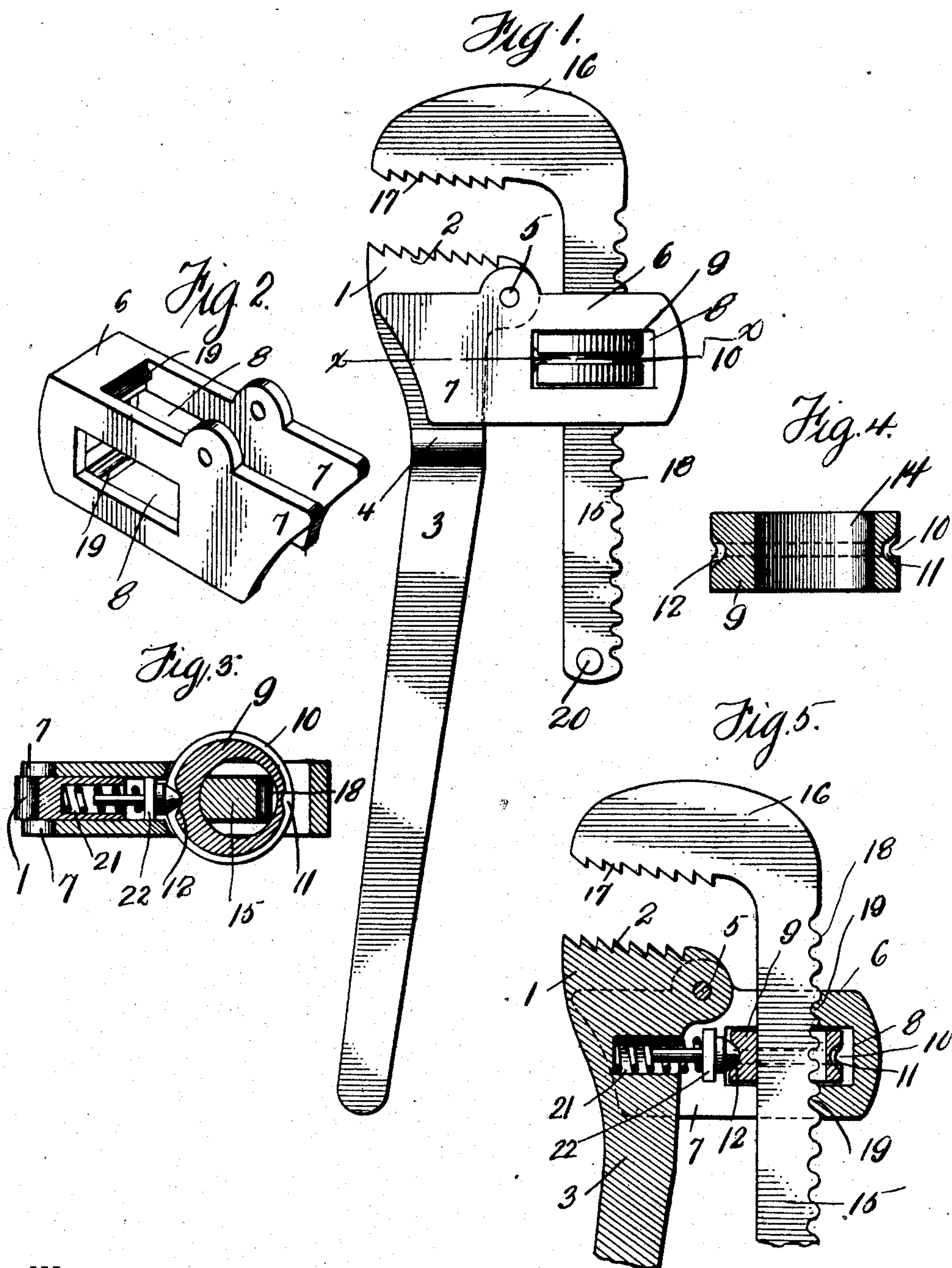


No. 864,521.

PATENTED AUG. 27, 1907.

L. J. EYTH.
WRENCH.

APPLICATION FILED MAR. 8, 1907.



WITNESSES:

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LOUIS J. EYTH, OF BUTLER, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH TO J. C. ABER AND ONE-FOURTH TO MATTHEW YOST, OF BUTLER, PENNSYLVANIA.

WRENCH.

No. 864,521.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed March 8, 1907. Serial No. 361,325.

To all whom it may concern:

Be it known that I, LOUIS J. EYTH, a citizen of the United States of America, residing at Butler, in the county of Butler and State of Pennsylvania, have
5 invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to wrenches, and the invention has for its primary object to provide a wrench that
10 can be easily and quickly adjusted.

Another object of this invention is to provide a simple and inexpensive wrench particularly designed for use upon curved surfaces, such as pipes and tubes.

With the above and other objects in view, which will
15 more readily appear as the invention is better understood, the same consists in the novel construction, combination and 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 designate corresponding parts throughout the several views, in which:

Figure 1 is an elevation of my improved wrench, Fig. 2 is a perspective view of a housing comprising
25 part of the wrench, Fig. 3 is a horizontal sectional view of my improved wrench, taken on the line $x-x$ of Fig. 1, Fig. 4 is a vertical sectional view of a lock nut used in connection with the wrench, Fig. 5 is a vertical sectional view of a portion of a wrench.

To put my invention into practice, I construct my improved wrench of a jaw 1 having a serrated or toothed gripping surface 2. The jaw 1 is provided with a lever or handle 3 having side shoulders 4, the object of which will presently appear.

Pivottally connected to the jaw 1 by a pin 5 is a housing 6, said housing having side arms 7 adapted to embrace the jaw 1, engage the shoulders 4 and limit the outward movement of said housing. The housing 6 is provided with transverse openings 8 to receive a
40 horizontally disposed lock nut 9, said nut being provided with a peripheral groove 10 having diametrically opposed recesses 11 and 12.

Extending through the central opening 14 of the nut 9 and through the housing 6 is the shank 15 of a movable jaw 16. The movable jaw 16 is provided with a toothed or serrated gripping surface 17 while the rear edge of the shank 15 is toothed, as at 18 to engage the teeth 19 of the housing 16. The lower end of the shank 15 is provided with a transverse detachable pin
50 20 to prevent the movable jaw from becoming accidentally disengaged from the housing 6.

The nut 9 is employed to hold the shank 15 of the movable jaw in engagement with the teeth 19 of the housing 6, and to hold said nut in engagement with said shank, I provide the jaw 1 with a recess 21 containing a
55 spring-held plunger 22 normally engaging said nut.

The opening 14 of the nut 9 is eccentric with relation to the periphery of said nut, in consequence of which the nut has one side heavier than its opposing side, the heavy side being provided with the recess 12. 60

When the plunger 22 is in engagement with the recess 12, the toothed shank 15 is held in engagement with the teeth 19 of the housing 6, and the jaw 16 held stationary with relation to said housing but capable of movement with respect to the jaw 1. The spring-
65 pressed plunger 22, however, holds the serrated gripping surface 17 of the jaw 16 normally parallel with the serrated gripping surface 2 of the jaw 1. The housing 6 can be swung inwardly to raise the serrated gripping surface 17 of the jaw 16 when it is desired to place the
70 wrench in engagement with an object.

Should it be desired to adjust the jaw 15, the nut 9 is rotated half a revolution, until the spring-pressed plunger 22 engages in the recess 11. This movement of the nut allows the shank 15 of the jaw 16 to recede
75 from the teeth 19 of the housing 6 and the jaw 16 can be adjusted and then locked in its adjusted position by again rotating the nut 9 to the position shown in Figs. 3 and 5 of the drawings.

I do not care to confine myself to the exact configuration of the housing 6 or to the shoulders 4 for limiting the outward movement of the spring-pressed housing. Such other changes in the size, proportion and minor details of construction, as are permissible by the appended claims, may be resorted to without departing
85 from the spirit and scope of the invention.

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

1. A wrench consisting of a recessed toothed jaw having a lever and shoulders carried thereby, a housing pivottally
90 connected to said jaw and limited in its movement by the shoulders of said lever, a nut revolubly mounted in said jaw and having an opening/ eccentrically formed therein, said nut having diametrically opposed recesses, a spring-pressed plunger mounted in the recess of said toothed jaw, and adapted to engage in one of said recesses, a toothed shank movably mounted in said housing and passing through said jaw, teeth carried by said housing and adapted to engage said shank, and a toothed jaw carried by said toothed shank. 95

2. In a wrench, the combination with a toothed recessed jaw having a lever, a housing pivottally connected to said toothed jaw, a nut revolubly mounted in said housing and having an opening eccentrically formed therein, a spring-pressed plunger carried by the toothed jaw and adapted to
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engage said nut, a toothed shank passing through said nut and adapted to interlock with said housing, a toothed jaw carried by said shank, and means to limit the outward movement of said housing.

- 5 3. In a wrench, the combination with a toothed jaw, of a housing pivotally connected thereto, a nut revolubly mounted in said housing and having an opening eccentrically formed therein, a toothed shank mounted in said opening and adapted to interlock with said housing, a

toothed jaw carried by said shank, and means carried by 10 the first named jaw to hold said nut in a fixed position.

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

LOUIS J. EYTH.

Witnesses:

FRANK KOHLER,
JAMES M. CLINTON.