

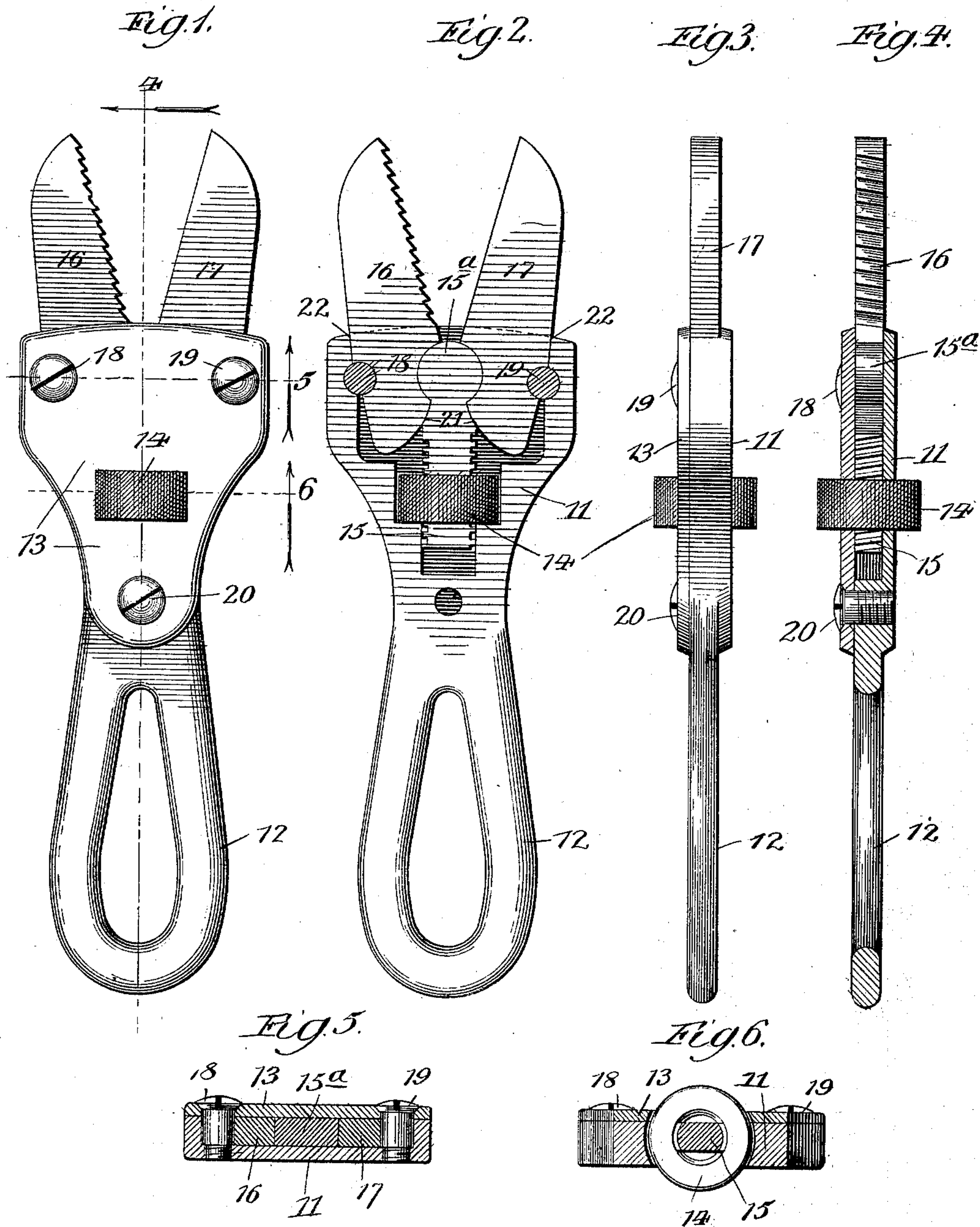
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Patented Mar. 26, 1901.

H. J. MARTIN.
ADJUSTABLE PIPE AND NUT WRENCH.

(Application filed Nov. 10, 1900.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY J. MARTIN, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE WHITMAN AND BARNES MANUFACTURING CO., OF AKRON, OHIO.

ADJUSTABLE PIPE AND NUT WRENCH.

SPECIFICATION forming part of Letters Patent No. 670,681, dated March 26, 1901.

Application filed November 10, 1900. Serial No. 36,116. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. MARTIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Adjustable Pipe and Nut Wrench, of which the following is a specification in its best form now known to me, reference being had to the accompanying drawings, in which similar figures represent the same parts throughout the several views.

My invention relates to adjustable pipe and nut wrenches, and particularly to wrenches in which the jaws are adjustable to different sizes of pipe.

The object of my invention is to provide a wrench which shall be of ornamental appearance, can be cheaply manufactured, can be easily adjusted to different sizes of pipe, and easily repaired.

In the drawings, Figure 1 is a plan view of the wrench embodying my invention. Fig. 2 shows the same view with the front of the wrench removed, so as to show the internal mechanism. Fig. 3 is a side view of Fig. 1. Fig. 4 is a side sectional view taken through the center of the wrench. Figs. 5 and 6 are sectional plan views through lines 5 and 6 on Fig. 1.

As shown in Figs. 1 and 3, my wrench consists, primarily, of the body portion 11, having a handle 12 extending therefrom. The body portion has a hollow space within it in which the moving parts are fitted and is closed by a cover 13. Through the body and cover of the wrench is a slot in which milled thumb-nut 14 fits. Through this thumb-nut and adapted to move up and down within the wrench as the nut is rotated is the screw-threaded rod 15. The upper end 15^a of this rod is circular in form, as shown in Fig. 2. The jaws 16 and 17 have their lower ends extending inside the hollow part of the wrench and have their inner faces hollowed out, so as to fit around the curved end 15^a of the rod 15. These jaws are pivoted to screws 18 and 19, which pass through the wrench and, in addition to acting as pivots for the jaws, secure the cover 13 to the body 11 of the wrench. These jaws are preferably made, as shown, one with a smooth and the other with a toothed

edge; but both may be of the latter construction, if desired. The cover is also further secured to the body of the wrench by the screw 20. In the drawings the jaws 16 and 17 only bear against the screws 18 and 19, and this is the preferred form; but manifestly the jaws might be made larger and the screws passed through holes in them without departing from my invention. The lower inside edges of the jaws are cut away in the curved face 21 and are proportioned so that when the wrench is open and the jaws bear against the body of the wrench at 22 these faces 21 will bear against the screw-rod 15, thereby bracing and strengthening the wrench.

In the operation of the wrench it is put together as shown in the drawings, and the angle between the jaws is varied by rotating the thumb-nut 14, thereby moving the rod 15 back and forth, and consequently moving the jaws about their pivots.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a wrench, the combination of a body portion having a recess therein to contain the moving parts of the wrench, a projection at each side of said recess adapted to act as a jaw-pivot, two jaws each having an indentation on its outer edge adapted to bear on one of said projections, and mechanism engaging the inner portions of said jaws whereby said jaws may be rocked on said posts and the angle between them varied.

2. In a wrench, the combination of a body portion having a recess therein to contain the moving parts of the wrench, a projection at each side of said recess adapted to act as a jaw-pivot, two jaws each having an indentation on its outer edge adapted to bear on one of said projections and a recess on its inner edge, a rod adapted to slide backward and forward within the wrench having a curved head engaging with the recesses in said jaws, and means for moving said rod backward and forward whereby the angle between the jaws is varied.

3. In a wrench, the combination of a body portion having a recess therein to contain the moving parts of the wrench, a circular post adapted to act as a jaw-pivot at each side

of said recess, a thumb-nut in a slot in the wrench-body, a rod screw-threaded through said thumb-nut having a curved end adapted to engage the jaws, and two jaws each having curved indentations on their outer edges
5 adapted to bear on one of said posts, and curved indentations on their inner edges adapted to be engaged by the curved head of said rod, whereby the angle between said
10 jaws is varied as said rod is moved back and forth.

4. In a wrench, the combination of a body portion having a recess therein to contain the moving parts of the wrench, a circular post
15 adapted to act as a jaw-pivot at each side of said recess, a thumb-nut in a slot in the

wrench-body, a rod screw-threaded through said thumb-nut having a curved end adapted to engage the jaws, and two jaws each having curved indentations on their outer edges 20 adapted to bear on one of said posts, and curved indentations on their inner edges adapted to be engaged by the curved head of said rod, whereby the angle between said jaws is varied as said rod is moved back and 25 forth, all of the parts being shaped, arranged and disposed substantially as shown and described, for the purposes set forth.

HENRY J. MARTIN.

Witnesses:

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