No. 738,015. PATENTED SEPT. 1, 1903.

J. C. DUFRESNE.

ADJUSTABLE SPANNER WRENCH.

APPLICATION FILED OCT. 29, 1902.

NO MODEL.

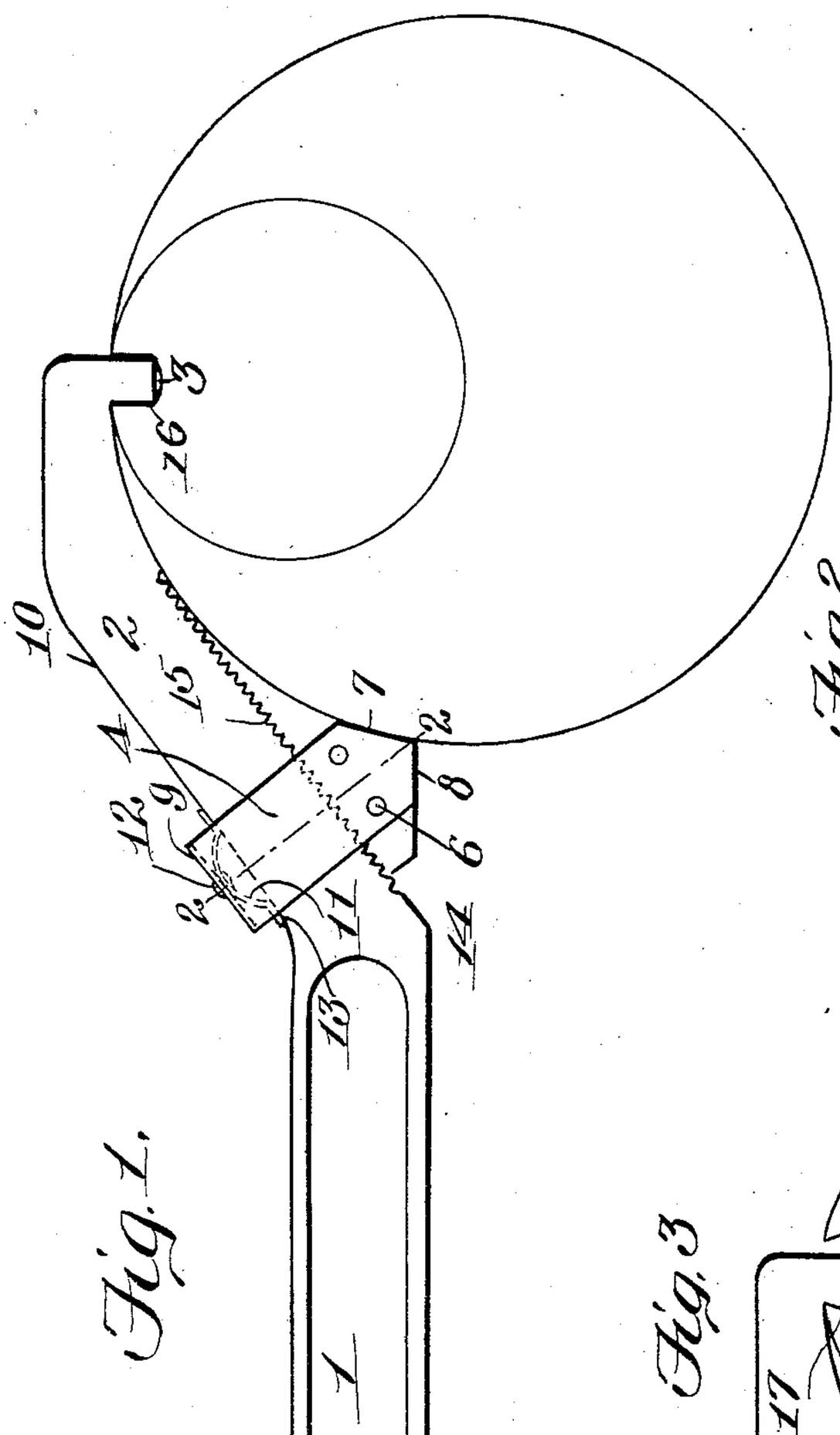

Fig. 1.

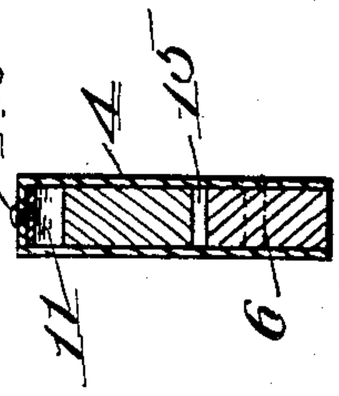

Fig. 2

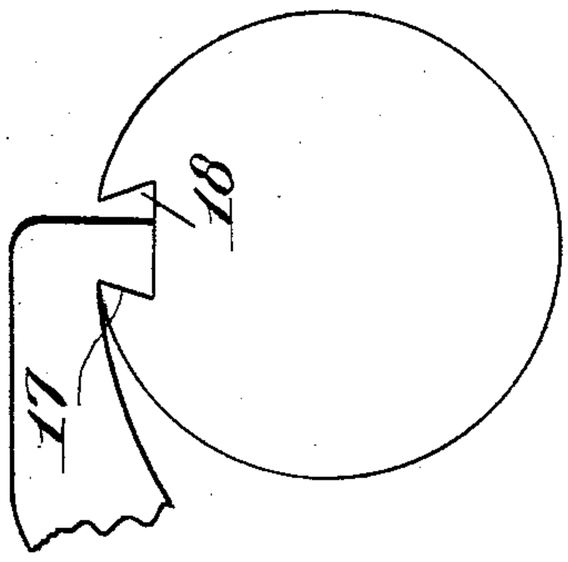

Fig. 3

Witnesses
C. D. Kesler.
Philip N. Tilden.

Inventor
Jere C. Dufresne
By
James L. Norris.
Atty.

No. 738,015. Patented September 1, 1903.

UNITED STATES PATENT OFFICE.

JERE C. DUFRESNE, OF TRENTON, NEW JERSEY.

ADJUSTABLE SPANNER-WRENCH.

SPECIFICATION forming part of Letters Patent No. 738,015, dated September 1, 1903.

Application filed October 29, 1902. Serial No. 129,329. (No model.)

To all whom it may concern:

Be it known that I, JERE C. DUFRESNE, a citizen of the United States, residing at Trenton, New Jersey, have invented a new and useful Adjustable Spanner-Wrench, of which the following is a specification.

This invention relates to spanner-wrenches, and has for its object to provide a novel, simple, and inexpensive wrench of the character described, which can be adjusted quickly and with ease to fit cylindrical objects of varying diameter, such as nut-rings, collars, sleeves, and the like.

To these ends my invention consists in the features and in the construction, combination, and arrangement of the parts hereinafter described, and particularly pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a view in side elevation of my improved spanner-wrench, showing the same applied to a cylindrical object in position to turn the latter. Fig. 2 is a transverse sectional view taken on the lines 2 2 of Fig. 1, and Fig. 3 is a detail view illustrating a modified form of pin for engaging the socket with the article to be turned.

Referring to the drawings, the numeral 1 indicates the handle of my improved wrench, which terminates at one end in a fixed jaw 2, which is formed at an angle to the longitudinal axis of the handle 1, and said jaw is provided at its end with a laterally-projecting pin 3, which may be of any suitable or preferred shape in cross-section.

Movably arranged on the jaw 2 is a sliding stirrup 4, consisting of a substantially U-shaped metallic strap, which embraces or straddles the jaw 2, and riveted or otherwise suitably secured between the free ends of said stirrup is a metallic block 5, which I term a "sliding" jaw. Said sliding jaw is rigidly secured between the free ends of the stirrup by the rivets 6 referred to, and its outer end is provided with two inclined or reversely-beveled faces 7 and 8. Arranged between the other end 9 of the stirrup and the adjacent edge 10 of the jaw is a bow-spring 11, which is riveted, as at 12, or otherwise suitably secured to the stirrup and is provided at its opposite ends with flat or straight feet 13, which bear on the smooth edge 10 of the jaw 2. The inner face or edge of the sliding jaw 5 is serrated or provided with a plurality of teeth 14, which are adapted to engage corresponding teeth 15, formed on the adjacent edge of the jaw. The spring 11, bearing upon the adjacent face 10 of the jaw 2, operates to draw the teeth of the sliding jaw into engagement with the feet of the fixed jaw 2, and thereby hold the sliding jaw immovably on the fixed jaw.

The operation of my improved wrench will be readily understood from the foregoing description. By pressing down upon the upper or closed end of the stirrup 4, the spring 11 is compressed and the teeth of the sliding jaw are thrown out of engagement with the teeth of the fixed jaw, whereupon the sliding jaw may be quickly adjusted to the desired position on the fixed jaw, and the stirrup being released said teeth will be instantly thrown into engagement with one another and the sliding jaw held fixed in its adjusted position. After the sliding jaw has been adjusted in the manner described the pin 3 is inserted in socket 16, formed in the article to be turned, and the beveled face 7 of the sliding jaw is caused to bear against the curved surface of said article. Force being now applied to the handle 1 in the proper direction to operate the tool, the pin 3 will be held in the socket 16, and the sliding jaw will bear against the side of the article and the pressure exerted to turn the article will aid in holding the teeth of the sliding jaw in intimate engagement with the teeth of the fixed jaw, thereby preventing any possibility of the sliding jaw being accidentally displaced.

As has been heretofore stated, the pin 3 may be of any suitable or desired shape in cross-section, and in Fig. 3 of the drawings I have shown one of the preferred forms wherein the pin is undercut, as at 17, so as to engage a correspondingly undercut socket 18, formed in the article to be turned, said undercut pin operating to closely fit in the socket and prevent its accidental displacement.

As shown and described, the sliding jaw is reversely beveled on its operative end, so that should one of said beveled faces become worn, marred, or injured, so as to render its

use inadvisable or undesirable, the stirrup may be slipped from off the fixed jaw 2 and turned around and replaced, thus bringing the other jaw 8 into operation. By providing the bow-spring 11 with flat or straight feet 13 said feet will permit of the stirrup being easily and quickly moved back and forth on the fixed jaw.

Having described my invention, what I claim is—

1. The combination with a handle provided at one end with an inclined fixed jaw having a laterally-projecting pin at its free end and having a series of teeth on its under edge, of a stirrup slidably arranged on the fixed jaw and carrying a sliding jaw arranged to engage the teeth on the fixed jaw, and a spring arranged to normally hold the teeth of said jaws in engagement, substantially as described.

2. In a spanner-wrench the combination with a handle terminating at one end with an inclined fixed jaw, provided at its end with a laterally-projecting pin and having teeth on its under edge, of a U-shaped stirrup straddling the fixed jaw and carrying at its lower end a sliding jaw, and a bow-spring arranged between the other end of the stirrup and the adjacent edge of the fixed jaw, said spring operating to hold the teeth of said jaws normally in engagement with each other substantially as described.

3. The combination with a handle terminating with an inclined fixed jaw provided at one end with a laterally-projecting pin and toothed on its under edge, of a substantially U-shaped stirrup straddling said jaw and having fixed between its lower ends a sliding jaw having two reversely-inclined faces, the inner edge of said sliding jaw being toothed, and a spring carried by the stirrup and operating to normally hold the tooth of said jaw in engagement, substantially as described.

JERE C. DUFRESNE.

Witnesses:
ABBIE C. DUFRESNE,
ELLERY ROBBINS.