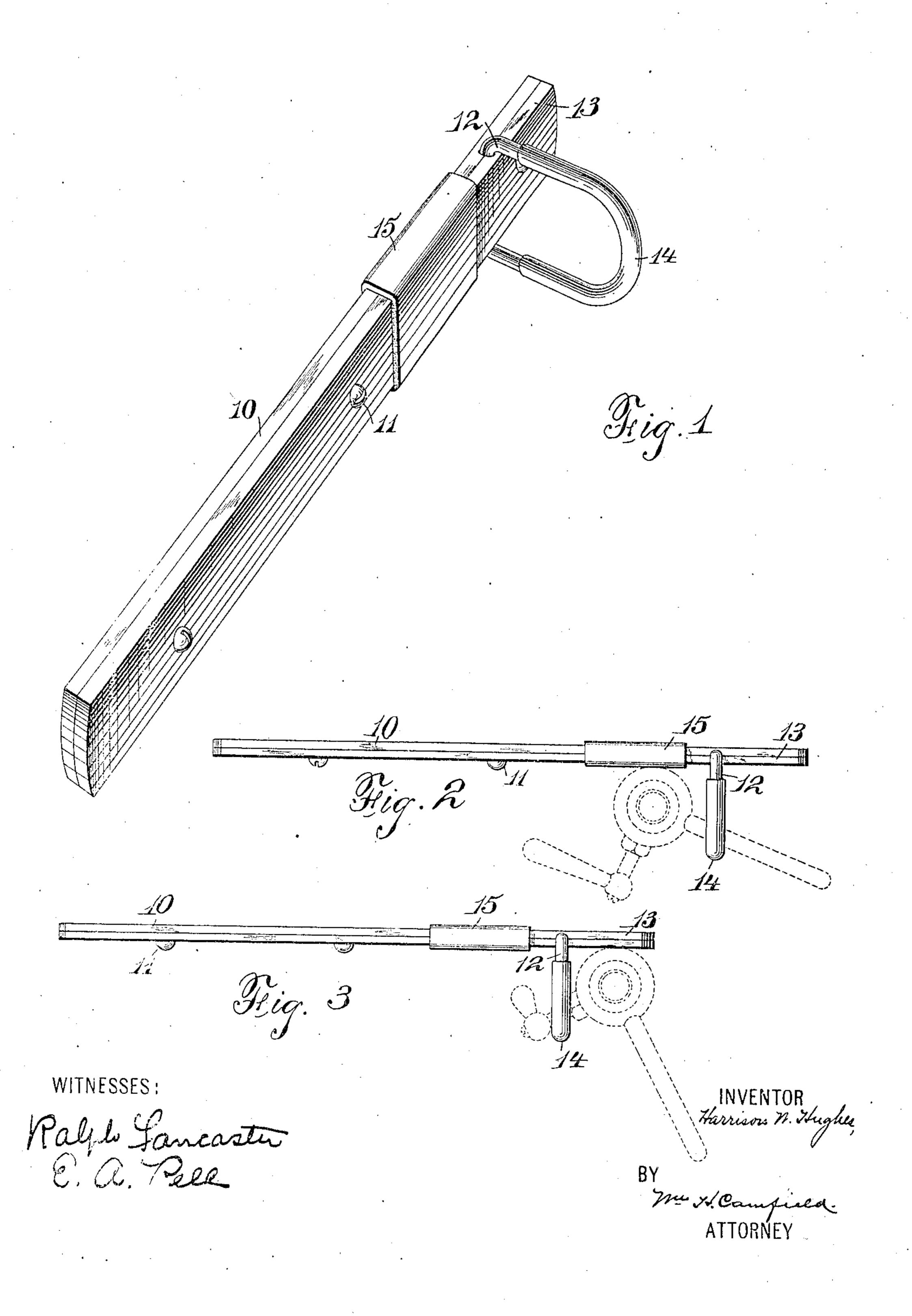
H. W. HUGHES.

WRENCH.

APPLICATION FILED MAY 7, 1906.



UNITED STATES PATENT OFFICE.

HARRISON W. HUGHES, OF SOUTH ORANGE, NEW JERSEY.

WRENCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Harrison W. Hughes, a citizen of the United States, residing at South Orange, in the county of Essex and 5 State of New Jersey, have invented certain new and useful Improvements in Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

This invention refers to an improved wrench that requires no adjustment of its parts to fit different sizes of articles to be turned and one that is very cheap to make and is easily and quickly attached or detached to a fixture.

The wrench is designed more particularly for turning objects that are smooth and that have radial or projecting portions.

The particular fixtures to which the structure is intended to be applied are faucets, and when they are nickel-plated or highly polished if a monkey-wrench is used on them they are roughened up and damaged, and when, as is often the case, there is no provision for a monkey-wrench a pipe-wrench must be used, which indents the surface and mars the faucet. This construction is designed to correct these features, and I may also provide my wrench with soft or resilient coverings at the points that will come in contact with the fixture.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the improved wrench, and Figs. 2 and 3 are plan views showing the wrench in the two different manners of application to a faucet.

The wrench is formed of a shank 10, which can be of one piece or made as shown—that is, of two strips fastened together by means of the screws 11. One end of the shank forms a handle portion, and near the end of the shank opposed to the handle portion is a member 12, that swings freely in the shank.

This structure forms an extension portion 13 on the shank, and this extension can be used as a fulcrum, as shown in Fig. 3, when it is

more convenient to apply the wrench in this way. If, however, circumstances make it advisable to use the wrench as shown in Fig. 55 2, the fulcrum will come on the shank between the swinging member and the handle portion.

If desirable, I may provide the swinging member 12 with a covering 14, such as rub- 60 ber tubing or similar material, and I can also slide the soft covering 15 on the shank at points where there is liable to be contact with the fixture to be turned.

Having thus described my invention, what 65 I claim is—

1. A wrench comprising a broad flat shank having a handle portion on one end, and a member pivoted near the other end of the shank and arranged to swing against the 70 broad side of the shank, the swinging member being of a cross-sectional shape to present a rounded surface to a projection of an element to be turned, the swinging member being also U-shaped.

2. A wrench comprising a flat straight shank having a handle portion on one end, and a member pivoted in the shank and arranged to swing against the flat side of the shank, the swinging member being adapted 80 to engage a projection on an element to be turned, a cushion on the swinging member, the shank being adapted to bear against the element to be turned and furnish a fulcrum, and a cushion on the shank where it engages 85 the element to be turned.

3. A wrench comprising a shank, having a recess in its opposed edges near one end, and a swinging member being sprung into the recesses to pivot the swinging member, the 90 swinging member forming a means for grasping a projection on an element to be turned, the shank forming a fulcrum on either side of the swinging member.

4. A wrench comprising a pair of plates to 95 form a shauk, the plates having their opposed faces recessed near one end, and a swinging member bent to form a substantially U-shaped structure and having its ends bent to enter the recesses in the plates, and means 100 for securing the plates together.

5. A faucet-wrench comprising a flat shank having a handle portion on one end, and a swinging member pivoted near the other end

of the shank, the swinging member being adapted to go over the outlet-pipe or the handle of a faucet, and the shank providing a bearing-surface on either side of the swinging 5 member to engage the body portion of a fau-cet and act as a fulcrum.

In testimony that I claim the invention

described and claimed in my application filed May 7, 1906, Serial No. 315,510, for wrenches I have hereunto set my hand.

HARRISON W. HUGHES.

Witnesses:WM. H. CAMFIELD. E. A. Pell.