

W. R. KAHNS.
WRENCH.
APPLICATION FILED DEC. 9, 1921.

1,427,601.

Patented Aug. 29, 1922.

Fig. 1.

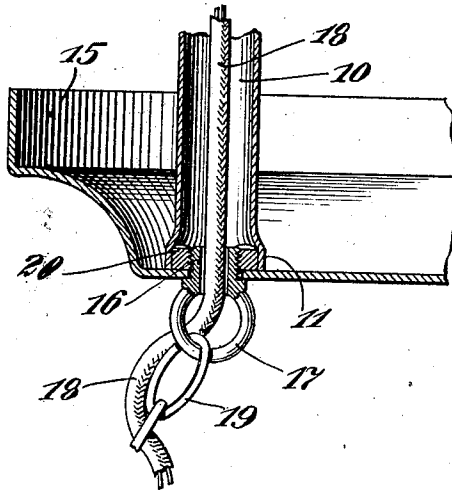


Fig. 2.

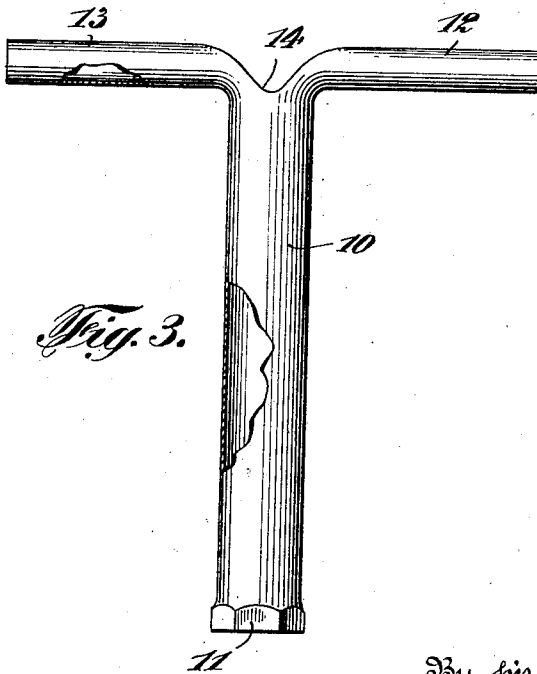
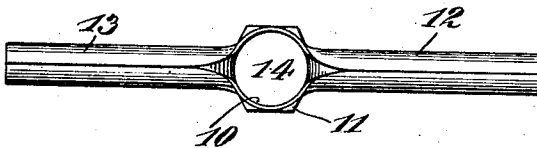
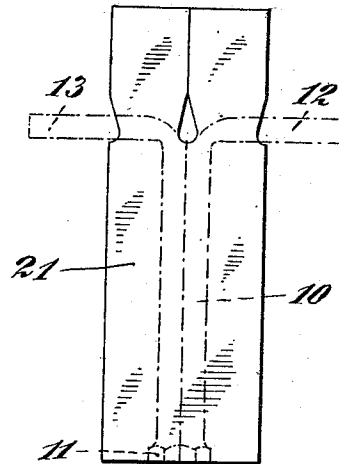


Fig. 3.

Fig. 4.



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UNITED STATES PATENT OFFICE.

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WRENCH.

1,427,601.

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To all whom it may concern:

Be it known that I, WALTER R. KAHNS, a citizen of the United States, residing at the borough of Brooklyn, in the county of Kings, city and State of New York, have invented an Improvement in Wrenches, of which the following is a specification.

My invention relates to wrenches, and while it may have a broader field of usefulness, it is particularly designed for use in assembling lighting fixture parts, such as chain hanger canopies, tube arms, hanger hooks, bowl hangers, etc., in which a nut is screwed upon a stud or hollow threaded terminal through which conductor wires extend, which wires in many instances greatly interfere with the attachment of the nuts by the wrenches commonly in use.

The object of my invention is to overcome this difficulty.

The details of the invention are herein-after particularly described.

In the accompanying drawing:—

Figure 1 is a vertical section, partly broken away, illustrating the employment of my improved wrench in assembling the parts in a chain hanger canopy.

Fig. 2 is a top plan view of my improved wrench.

Fig. 3 is an elevation of the same, a part of one handle, and a part of the shank being in section, and

Fig. 4 is a view of a sheet metal blank, showing in full lines how the same is cut out, and in dotted lines the shape to which the blank is bent or rolled to form the wrench.

Similar reference characters denote like parts throughout the several views.

Referring to the drawing, 10 indicates the shank of the wrench, having a spanner or jaw 11, at one end, and right angle extensions 12 and 13 at its other end, forming handles. The jaw or spanner 11, may be square, hexagonal or octagonal to fit various shaped nuts.

The shank 10 is hollow its entire length, having an opening 14 at its upper end between the handles 12 and 13.

The entire instrument is preferably formed from one piece of metal. It may be made

of a section of tubing by splitting the tube vertically at its center for a predetermined distance from one end, bending the split portions outwardly at right angles on each side of the shank; rolling the longitudinal edges of these parts over towards each other to form the handles 12 and 13; cutting or filing the edges of these handles on their upper parts adjacent the shank to leave a smooth and rounded edge around the substantially V-shaped opening 14, at the top of the shank; the spanner or jaw 11, at the other end being stamped or pressed to shape; or the entire tool may be cut out of a flat piece of sheet metal 21 of the proper thickness, as shown in full lines in Fig. 4 and then bent or rolled to the shape shown in dotted lines in the same figure, the jaw or spanner 11, being punched or stamped in the lower end of the blank either before or after it is rolled to the shape shown in dotted lines.

In Fig. 1 of the drawing, I have illustrated the employment of my invention in assembling the parts in a chain hanger canopy 15, which canopies are provided with a plurality of spaced holes, through which project the threaded hollow shanks 16, of the chain hooks or loops 17; the conductor wires 18, passing through the hollow shanks 16 and being braided or looped through the links of the chain 19. These chain hooks or loops are usually secured to the canopy by means of nuts 20 screwed upon their threaded shanks 16, within the canopy.

In many of these shells or canopies, it is impossible to make use of an ordinary wrench to apply the nuts to the threaded shanks of the chain hooks, and in all cases the conductor wires greatly interfere with the use of the ordinary wrench.

It will be readily understood that my invention overcomes these difficulties because the conductor wires extend through the hollow shank and out through the opening at the top between the handles so that the wrench may be applied to the nut and the same turned down to place without any twisting of the conductor wires.

While my invention is particularly designed for use in assembling the parts of lighting fixtures, it will be found advanta-

geous for use in other fields where there is a projecting portion above the nut to be operated, such for instance as spark plugs.

I claim as my invention:

- 5 1. A wrench comprising a cylindrical body having an unobstructed longitudinal passage way, provided at one end with a head to engage a nut, and at its other end with oppositely disposed right angle extensions.

2. A wrench comprising a hollow cylindrical body open at both ends providing an unobstructed passage way therethrough, with integral right angle extensions at one end, its other end being provided with a head interiorly shaped to engage a nut. 10 15

Signed by me this 30th day of November, 1921.

WALTER R. KAHNS.