May 24, 1932. J. T. PEARSON 1,860,116

GROUNDING DEVICE OR CONNECTER

Filed Aug. 14, 1930

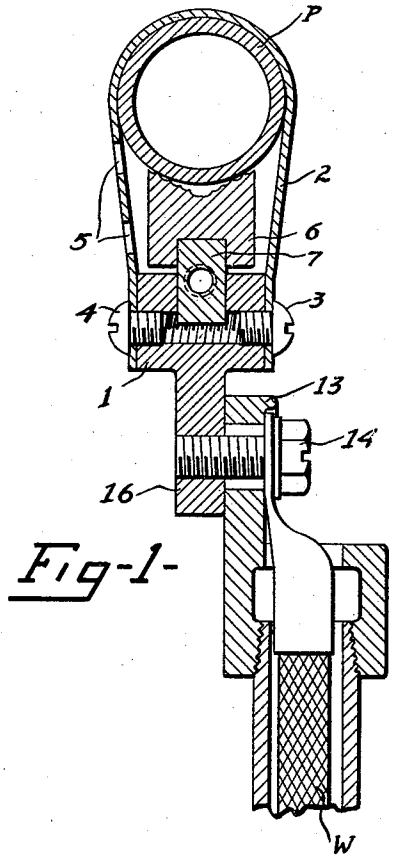


Fig-1-

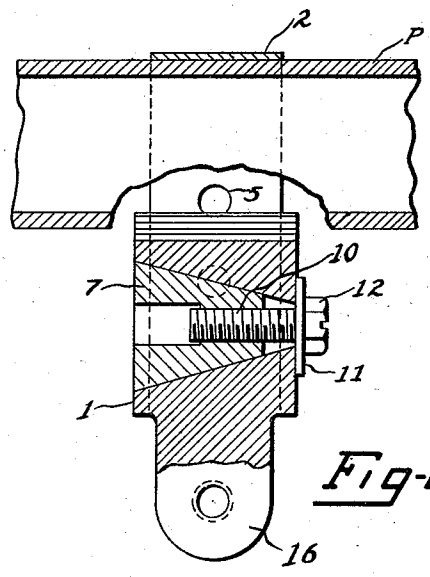


Fig-2-

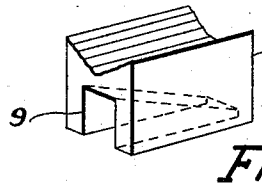


Fig-4-

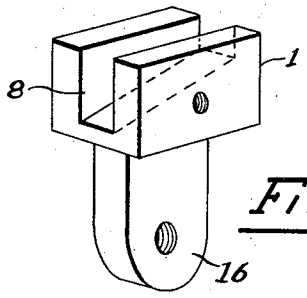


Fig-3-

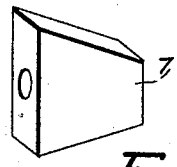


Fig-5-

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Patented May 24, 1932 1,860,116

UNITED STATES PATENT OFFICE

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GROUNDING DEVICE OR CONNECTER

Application filed August 14, 1930. Serial No. 475,210.

This invention relates to grounding devices, or electrical connecters, particularly for grounding an electric conduit system to a grounded conductor, as a water pipe, which grounding device is extremely simple in construction, readily applied to the grounded conductor, and highly efficient in use.

The invention consists in the novel features and in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawings in which like characters designate corresponding parts in all the views.

Figures 1 and 2 are vertical, sectional views of this grounding device, taken at a right angle to each other, the conduit and grounded conductor being shown in Figure 1, and parts being omitted in Figure 2.

Figures 3, 4 and 5 are detail views of the body, the movable jaw, and the wedge.

This grounding device or connecter comprises generally, a body, a fixed jaw carried by the body for engaging a grounded conductor, a movable jaw for coacting with the fixed jaw interposed between the body and the conductor, a wedge member movable between the body and the movable jaw and housed or located entirely within passages in the body and the movable jaw, and means for operating the wedge. The body is also provided with electrical or mechanical means for connection to an electric conduit to be grounded and the wire passing through the conduit.

1 designates the body, which is in the form of a block.

2 designates the fixed jaw, which is here shown as a strap anchored at its ends to the top and bottom of the body or block 1 forming a loop for receiving the grounded conductor or pipe P. The ends of the loop are secured to the body by screws 3, 4, the latter passing through any one of a plurality of holes 5 for determining the initial size of the loop, or to adjust the loop to different pipe sizes.

6 is the movable jaw which is arranged between the arms of the loop and adjacent the body 1.

7 is the wedge movable between the block or body 1 and the movable jaw 6 to separate them more or less, and cause the movable jaw to grip the pipe P, this wedge extending transversely of the block, or lengthwise of the jaw, and it is located in aligned or mating grooves 8 and 9 formed in the opposing sides of the body 1 and the movable jaw 6, the bottoms of the grooves converging toward each other and conforming to the inclined edges of the wedge 7. The wedge 7 is thus housed entirely in the passage formed by the grooves, that is, it does not project beyond the ends of the grooves or passages formed thereby.

The operating means for the wedge is a screw 10 extending lengthwise of the grooves 8, 9, and threading into the small end of the wedge, the screw having bearing means, as a washer 11 which underlies the head 12 of the screw, the washer thrusting against like end faces of the body 1 and the movable jaw.

The strap 2 is first looped around the conductor P and adjusted to the approximate size of the conductor by locating the screw 4 in one of the holes 5, and then the screw 10 operated to tighten the wedge and force the movable jaw 6 outwardly.

13 is a body member having means as a collar for receiving the conduit C to be grounded, the body 13 being adjustably secured to the body 1 by means of a screw 14 extending through the body 13 and threading into a lug 16 projecting rearwardly from the block 1. The body 13 is thus adjustable into different angular or radial positions relatively to the body 1. Also, the screw 14 is utilized to bind the wire W passing through the conduit C to the body 13.

Owing to the wedge and its relative arrangement, the grounding device, and particularly the assembly of the body 1, and the movable jaw 6, and wedge 7, is particularly economical and symmetrical, as the wedge is concealed entirely within, or between the block and the movable jaw.

What I claim is:

1. In a grounding device, a body, a fixed jaw carried by the body, a movable jaw for coacting with the fixed jaw, and a wedge member interposed between the movable jaw

and the body, the body and the movable jaw being opposed to each other and formed with a passage in their opposing faces, and the wedge being located in said passage, and means for forcing the wedge into the passage.

2. In a grounding device, a body, a fixed jaw for coacting with a conductor, the fixed jaw being carried by the body, and the movable jaw interposed between the body and the conductor, a wedge member between the body and the movable jaw, and means for operating the wedge member, the body and the movable jaw being provided with aligned grooves in their opposing faces, and the wedge member being located in the grooves.

3. A grounding device comprising a body in the form of a block, a fixed jaw comprising a strap anchored at its ends to the body, a movable jaw in the form of a block of substantially the same width as the body and located between the ends of the looped strap, the block and the movable jaw having aligned grooves in their opposing faces, a wedge member in said groove, and means for moving the wedge member including a screw threading in the wedge member and having a bearing part thrusting against like ends of the block and the movable jaw.

In testimony whereof, I have hereunto signed my name, at Syracuse, in the county of Onondaga, and State of New York, this 12th day of August, 1930.

JOHN T. PEARSON.