

**Oct. 1, 1940.**

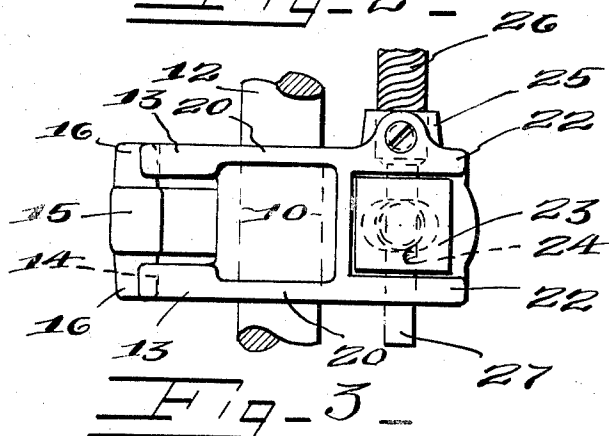
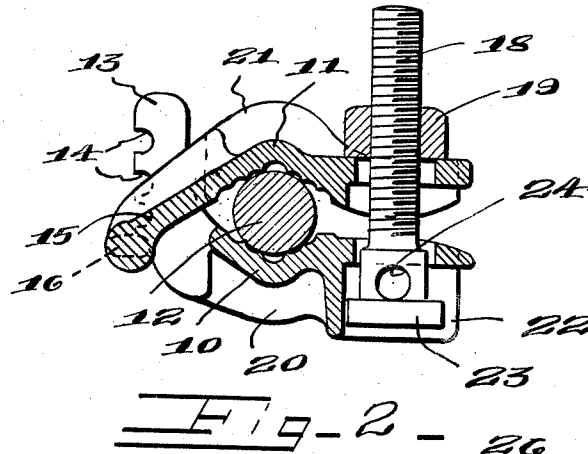
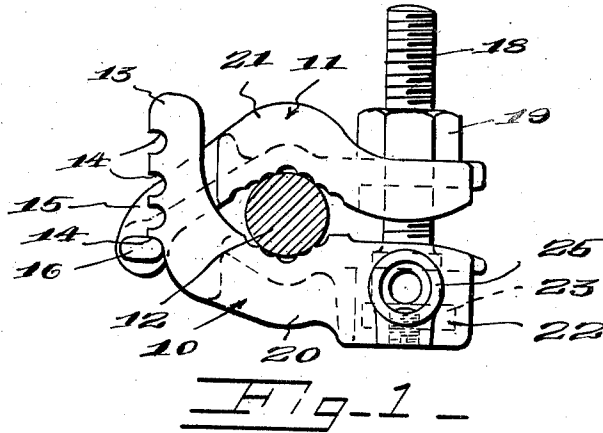
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**2,216,309**

## GROUNDING FITTING

Filed Feb. 11, 1938

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

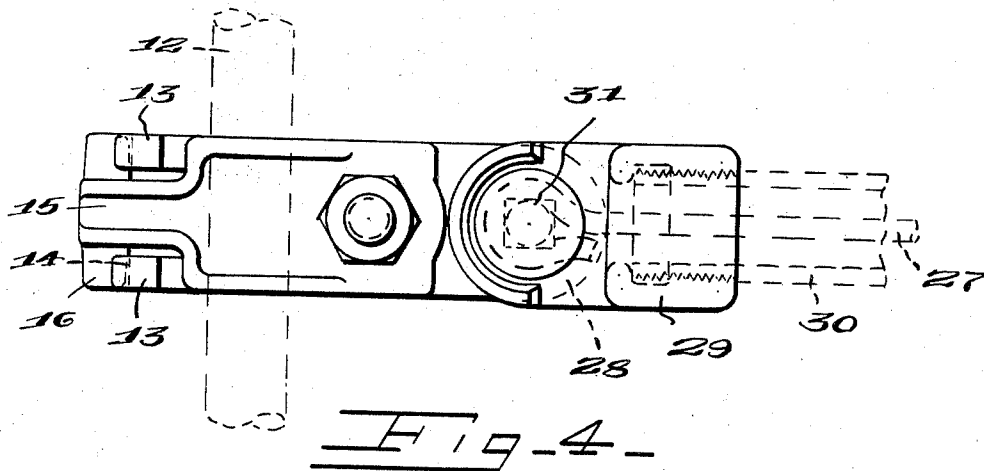
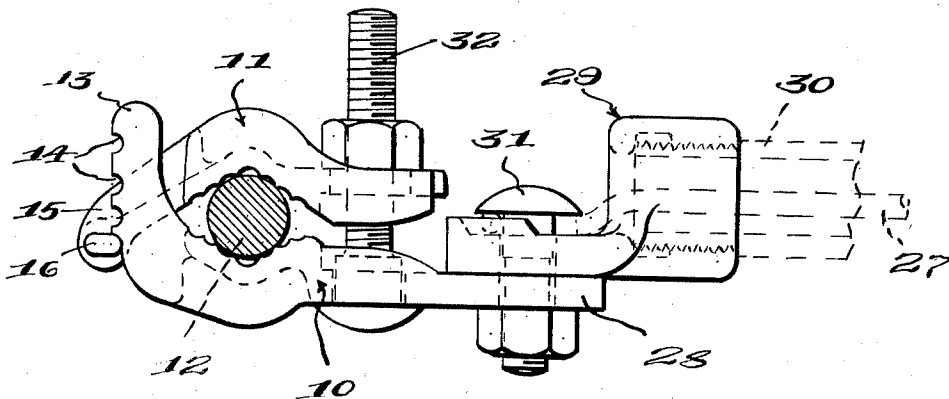


Fig-5



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## UNITED STATES PATENT OFFICE

2,216,309

## GROUNDING FITTING

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Application February 11, 1938, Serial No. 190,075

1 Claim. (Cl. 173—273)

This invention relates to electrical grounding fittings of the type commonly employed for electrically and mechanically connecting the ground wire of an electrical system and the enclosing conduit to a conductor, such as a water pipe.

The invention has as an object a grounding fitting of the type referred to which embodies a particularly economical and simplified construction, and which is conveniently adjustable for different sizes of conductors or water pipes.

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.

Figure 1 is a side elevational view of the grounding fitting embodying my invention.

Figure 2 is a vertical sectional view of the device shown in Figure 1.

Figure 3 is a bottom plan view.

Figure 4 is a top plan view including means for attachment to the conduit system.

Figure 5 is a side elevational view of the structure shown in Figure 4.

The invention consists generally of a pair of jaw members for gripping a conductor, such as a water pipe, and having cooperating means at like ends for adjustably and pivotally securing the members together, and screw means for drawing the opposite ends of the jaws together to grip the conductor, and means for securing the ground wire to one of said members.

The jaw members 10, 11 are concave in general form to partially encircle and grip the conductor 12, here shown as a solid rod, but which may consist of a pipe or tube. The jaws 10, 11 are provided at like ends with means for adjustably and pivotally connecting the same, and the opposite ends are moved toward each other to clamp the jaw members to the conductor.

As here shown, the adjustable pivot means consists of a plurality of recesses formed in one jaw, and a projection carried by the other jaw and which may be placed in the various recesses in order to accommodate different sizes in the conductor 12. The lower jaw 10 is formed with a pair of spaced apart arms 13 which extend upwardly from one end thereof toward the upper jaw 11. The rear or outer edges of the arms 13 are provided with recesses or notches 14. The upper jaw 11 is formed with a rearwardly extending projection or arm 15, and at its outer end is provided with transversely extending pro-

jections 16. The width of the arm 15 is such as to permit it to be inserted between the arms 13, and the projections 16 are received in the recesses 14, the projections 16 acting as pivot pins to permit relative movement between the jaw members.

Preferably, the arms 13 are provided with two or more recesses or pairs of notches, whereby the jaw members may be initially adjusted or secured together in pivotal relationship to accommodate different sizes of conductors as will be apparent from the drawings.

The opposite ends of the jaws 10, 11 are provided with a bolt 18 and nut 19 cooperable with the ends of the jaws to clamp the jaws firmly about the conductor 12. The jaws 10, 11 are provided with ribs 20, 21 to give the jaws necessary strength and rigidity, and the ribs 20 of the jaw 10 are continued throughout the width of the screw receiving end portions, as at 22. The bolt 18 is formed with a square head 23 cooperable with the rib portions 22 to prevent relative turning of the bolt, and the shank of the bolt, which is of obround formation, is provided with an aperture 24, one side of which is arranged tangent with the under side of the bolt head 23. One of the rib portions 22 is formed with a boss 25 having a bore to receive the armor 26 of a ground wire 27 which extends through the aperture 24 of bolt 18 and through an aperture formed in the opposite rib portion 22. The apertures in the rib portions 22 are arranged tangent with the under side of the jaw 10 whereby, when the nut 19 is tightened, the grounding wire 27 is clamped between the head of the bolt and the under side of the jaw 10 without causing any shearing of the wire.

In Figures 4 and 5, the jaw 10 is formed with a lug 28 to which is adjustably clamped a body section 29 threaded internally to receive a conduit 30 enclosing the grounding wire 27. The body section 29 is adjustably clamped to the lug 28 by bolt 31, the arrangement being such that the end of the grounding wire 27 is clamped underneath the head of the bolt 31 instead of under the head of the clamping bolt 32.

It will be observed that my grounding device is conveniently adjustable to accommodate different sizes of conductors, and due to the clamping arrangement of the jaws the same are tightly clamped on the conductor with considerable pressure avoiding the possibility of the fitting becoming loose on the conductor. The one fitting readily accommodates conductors rang-

ing from a comparatively small grounding rod to a large size water pipe.

What I claim is:

- 5 An electrical grounding fitting comprising a pair of jaw members, one of said members being formed at one end with a pair of projections arranged in parallel spaced apart relationship and extending at right angles to said member, each of said projections being formed with a plurality  
10 of notches, the notches of each projection being alined with the notches on the other projection forming a plurality of pairs of notches, said other jaw member having a projection extending between the projections of said first member  
15 and pivotally engaging any one pair of said notches on the first member, whereby said mem-

bers are fulcrumed at corresponding ends, a bolt extending through opposite ends of said members with the head of the bolt overlapping one jaw member, said last mentioned jaw member being formed with an aperture to receive the head of the bolt, said bolt being formed with an aperture extending through the shank thereof adjacent the head, and opposite sides of said recess being formed with alined apertures to receive a ground wire, a nut threaded on said bolt and operable to move said jaw members toward each other about said fulcrum to engage and grip a conductor and to clamp the ground wire between the head of the bolt and the adjacent jaw member.

CARL H. BISSELL.