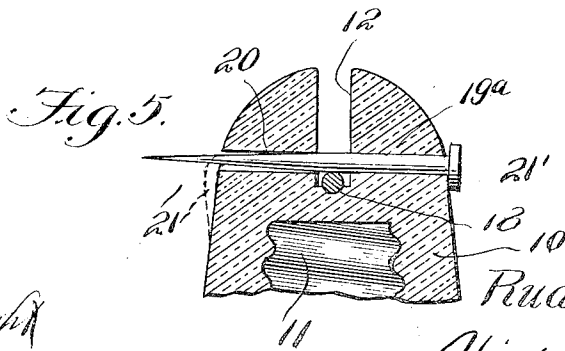
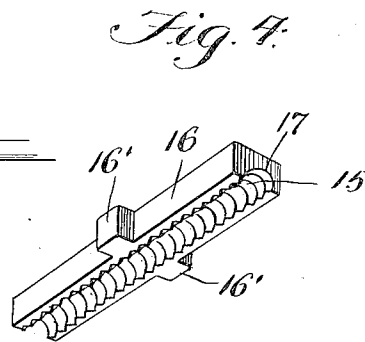
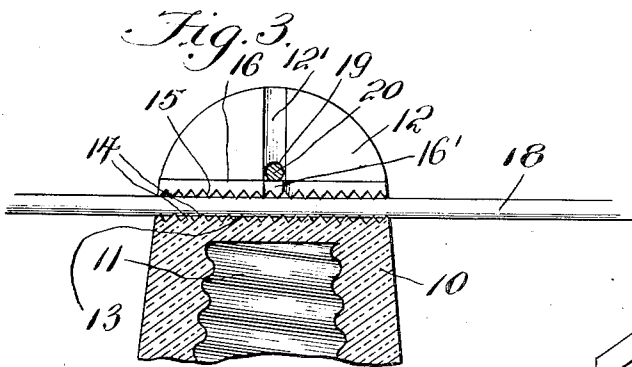
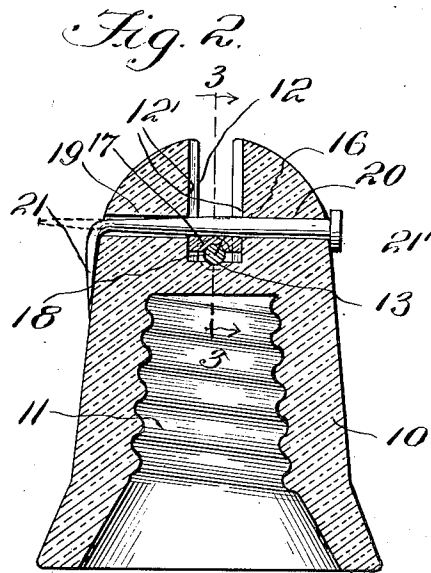


1,291,139.

2 SHEETS—SHEET 1.



WITNESSES
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1,291,139.

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2 SHEETS—SHEET 2.

Fig. 6.

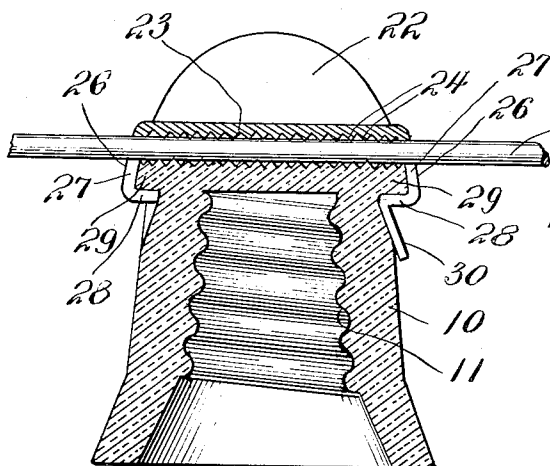


Fig. 7.

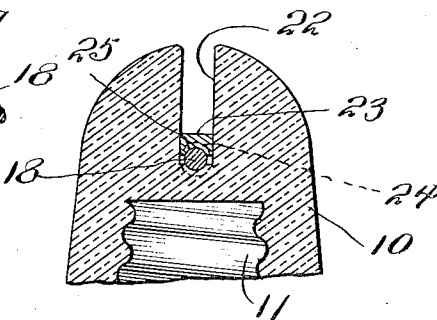


Fig. 8.

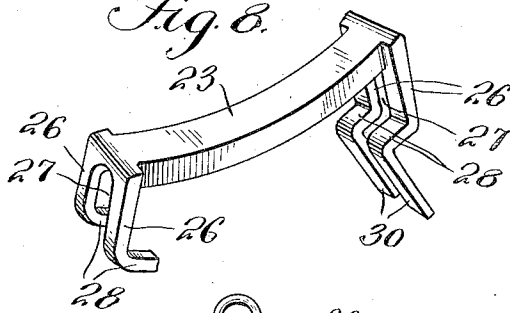
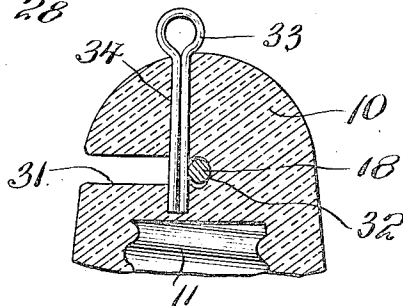


Fig. 9.



WITNESSES

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UNITED STATES PATENT OFFICE.

RUDOLPH R. REESE, OF STARTUP, WASHINGTON.

INSULATOR.

1,291,139.

Specification of Letters Patent.

Patented Jan. 14, 1919.

Application filed August 8, 1917. Serial No. 185,076.

To all whom it may concern:

Be it known that I, RUDOLPH R. REESE, a citizen of the United States, residing at Startup, in the county of Snohomish and State of Washington, have invented new and useful Improvements in Insulators, of which the following is a specification.

This invention relates to insulators for holding and supporting electrical conductors or wires securely in position without injury thereto.

An object of the invention is to provide means whereby the electrical conductor or wire may be readily secured to the insulator and clamped therein, novel clamping means being provided which will insure the holding of the wire against accidental displacement.

Another object is to provide means for securing the clamp in position, so as to securely grip the wire, the said clamp securing means having a binding action upon the clamp and within the insulator, in order to hold both elements in position.

With the above and other objects in view, the invention consists of the following novel combination and arrangement of parts hereinafter more fully described and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of an insulator constructed in accordance with the present invention.

Fig. 2 is a vertical longitudinal sectional view of the same.

Fig. 3 is an enlarged detail sectional view taken at right angles to Fig. 2 on the line 3—3 of Fig. 2.

Fig. 4 is an enlarged detail perspective view of the clamping block.

Fig. 5 is a fragmentary sectional view similar to Fig. 1, illustrating a modified form of the invention.

Fig. 6 is a sectional view illustrating a further modification.

Fig. 7 is a fragmentary transverse sectional view taken at right angles to Fig. 6.

Fig. 8 is a detail perspective view of the clamp shown in Figs. 6 and 7.

Fig. 9 is a fragmentary sectional view of still a further modification.

Referring to the form of the invention illustrated in Figs. 1 to 4 inclusive, the insulator consists of a body portion 10 formed of any suitable insulating material and is provided with a threaded socket 11, by means of which it is positioned.

The novel features of the invention reside in providing an insulator with a slot 12, which is open at the top as shown, the said slot extending across the top of the body portion of the insulator and being provided with a substantially semi-circular wire receiving seat 13 in the bottom wall thereof. Located in the bottom of the seat 13 are corrugations 14, which extend throughout the length of the slot and are adapted to engage similar corrugations 15 formed upon a clamping block 16, the length of which is co-extensive with the length of the slot 12. The block 16 is formed with corrugations 15 in a substantially semi-circular seat 17, which when the said block is positioned within the slot 12 is adapted to be seated against the wire 18 therein.

The clamping block 16 is further provided with laterally extending lugs 16', which are located upon opposite sides thereof intermediate its length and are adapted to engage grooves 12' formed in each of the side walls of the slot 12 to aid in positioning the block within the slot and to prevent longitudinal movement of the block or its accidental displacement before it is finally secured therein.

In order to securely clamp the block 16 in position upon the wire, the insulator is formed with an opening 19, which is positioned slightly above the bottom of the slot 12, the said opening being disposed at an angle from each side of the said slot 12 and its position above the bottom thereof being such as to cause the block to partially obstruct the opening for a purpose presently apparent. Adapted to be inserted within the opening 19 is a resilient pin 20, which pin is formed with a sharpened end 21, so that when it is inserted in position within the opening 19 this end will engage over the block 16 and cause it to be tightly clamped upon the wire 18, the taper of the pin 20 causing a clamping or wedging action of the pin within the opening and upon the block 16.

It will thus be seen that when the pin 20 is positioned within the opening 19 it will be securely held therein against accidental displacement and cause a downward pressure upon the block 16 to securely hold the wire clamped therein, the engagement of the corrugations 14 and 15 further acting to prevent any longitudinal movement of the block. The pin 20 is provided with a head 21' so as to limit its inward movement and

if desired the opposite end may be bent downward against the surface of the insulator to further aid in holding the parts in position.

- 5 In the modification shown in Fig. 5, the clamping block 16 is dispensed with, the pin 20 being positioned within the opening so as to cause it to engage the wire 18 to hold the same in position, due to the tapered
10 shape of said pin.

- In the modification shown in Figs. 6 to 8 inclusive, the wire receiving slot 22 is formed in a manner similar to the slot 12, but in this form of the invention there is
15 provided a resilient clamping element which is adapted to cooperate with the bottom wall of the slot 22 for holding the wire in position. This clamping element consists of a body member 23, which is slightly
20 curved throughout its length and is provided upon its under face with corrugations 24 and a semi-circular wire receiving seat 25, after the manner of the slot 22, so that the wire may be clamped between this face
25 of the resilient element and the bottom wall of the slot 22. Located at each end of the body portion 23 are outwardly and downwardly inclined arms 26, which are bifurcated to form a wire receiving slot 27, each
30 of the arms being formed with inwardly extending portions 28 for engagement with lugs 29. In order to provide for the easy manipulation of this resilient clamping element, one of the arms 26 is provided with
35 an external terminal portion 30 by means of which it may be easily removed from the insulator.

In the form of the invention shown in Fig. 9 the insulator is provided with a laterally

extending slot 31, which is adapted to receive wire, the inner end of this slot being formed with a wire seat 32 and for the purpose of holding the wire within this seat there is provided a pin 33, which is adapted to be received within the vertically disposed
45 opening 34, which communicated with the slot 31.

It is thought that from the foregoing description when taken in connection with the accompanying drawings, the construction
50 and advantages of the invention will be apparent. The right is reserved to make such changes as will fall within the scope of the appended claim.

Having described the invention, what is
55 claimed is:

An insulator comprising a body portion having a transversely disposed wire receiving slot in one end thereof and having oppositely arranged vertically disposed grooves
60 located centrally in each of the side walls of the slot communicating therewith, said grooves extending throughout the height of the slot, an elongated clamping block snugly fitting within and extending throughout the
65 length of the slot and adapted to be positioned upon the upper surface of the wire within the slot, relatively narrow laterally extending lugs projecting from each of the side edges of the block and in the same plane
70 with the body portion thereof for engagement with said grooves and a pin positioned within an opening extending transversely of the body portion across the slot and centrally above the clamping block to bind the
75 latter in position.

In testimony whereof I affix my signature.
RUDOLPH R. REESE.