March 27, 1928. 1,664,172

J. R. HOLLER

INSULATOR

Filed July 20, 1926

Fig. 1.

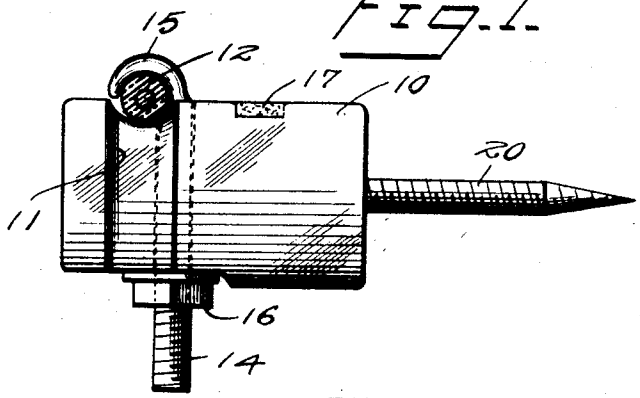


Fig. 2.

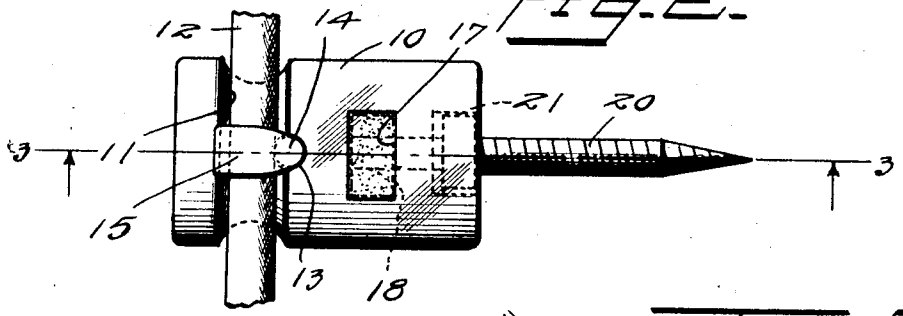
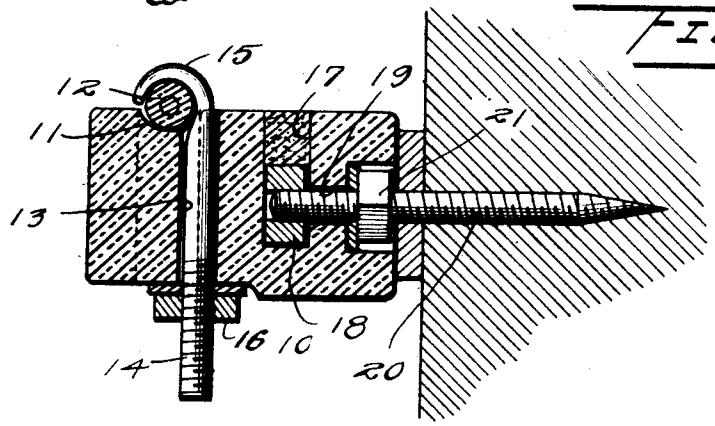


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOHN R. HOLLER, OF ELLWOOD CITY, PENNSYLVANIA.

INSULATOR.

Application filed July 20, 1926. Serial No. 123,712.

This invention relates to new and useful improvements in insulators, and particularly to insulators for supporting electric cables in mines, or elsewhere.

One object of the invention is to provide an insulator which may be easily and quickly secured to a support, or removed therefrom, without danger of breakage of the insulator.

Another object is to provide an insulator which includes a screw shank of such construction that such shank may be properly driven into the wood of a support, and the porcelain, or glass insulator body subsequently attached thereto, thereby avoiding the danger of breaking the said porcelain or glass body.

A further object is to provide a clamp, carried by the insulator body, which tightly holds the cable or wire against said body, such clamp being easily releasable to permit removal of the cable or wire.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing.

In the drawing:

Figure 1 is a side elevation of an insulator made in accordance with the present invention.

Figure 2 is a top plan view of the same.

Figure 3 is a longitudinal sectional view on the line 3—3 of Figure 2.

Referring particularly to the accompanying drawing, 10 represents the body of the insulator, which is preferably formed from glass or porcelain, and is cylindrical in shape. Formed transversely in the side face of the body, adjacent the outer end thereof, is a groove 11, in which is seated the cable or wire 12. Formed transversely through the body, at right angles to the groove, and having one end terminating in one side of the groove, is an opening 13, and disposed in said opening is a bolt 14. The end of the bolt, at the groove, is formed with a curved hook portion 15, which is arranged to embrace the cable, and press the same firmly within the groove. On the other end of the bolt is a nut 16, which is arranged to draw the bolt so that its hook end will properly hold the cable in the groove. Formed partly through the intermediate portion of the body, from the side thereof, is a recess 17, and disposed within said recess is a nut 18, said nut being held against removal by means of cement, or other suitable material molded into the recess, after the nut has been properly placed therein. Formed longitudinally and centrally in the body of the insulator, from the end remote from the groove 11, is a bore 19, and disposed in said bore is a bolt 20, the inner end portion of which is formed with threads for engagement in the nut 18, while the other end, which projects beyond the end of the body, is provided with wood screw threads, whereby to permit the bolt being driven into a wooden support. Fixed on the bolt, between the two threaded portions, are the wrench engaging faces 21, whereby the bolt may be rotated to drive its wood screw threaded end into a wooden support. After the screw has been thus driven into the wooden support, the body 10 is placed in such position that its bore receives the outer end of the bolt or screw. The body is then rotated to cause the nut to be engaged on the bolt. By this construction the fragile portion of the cable support may be applied to or removed from the screw or bolt without danger of breaking the former. Furthermore, the attaching screw or bolt may be driven into, and withdrawn from the support without interference of the body of the insulator, such operation being readily accomplished with the ordinary wrench.

What is claimed is:

An insulator comprising a body having a transverse wire receiving groove adjacent one end, a bolt disposed transversely through the body and having a hook end for holding a wire in the groove, the body having a longitudinal bore extending inwardly from one end and a transversely directed recess communicating with the inner end of said bore, said end of the body having a recess surrounding the adjacent end of said bore, a nut in the transverse recess, and a bolt disposed in the bore and having threads engaged in the nut and projecting beyond the body and provided with threads for engagement in a wooden support, said bolt having an integral enlargement provided with wrench engaging faces disposed in the end recess of the body, whereby said bolt may be driven into the support prior to application of the body thereto.

In testimony whereof, I affix my signature.

JOHN R. HOLLER.