L. E. HENDEE.

INSULATOR SUPPORT.

APPLICATION FILED JAN. 3, 1918.

**1,268,972.**

Patented June 11, 1918.

Fig. 1

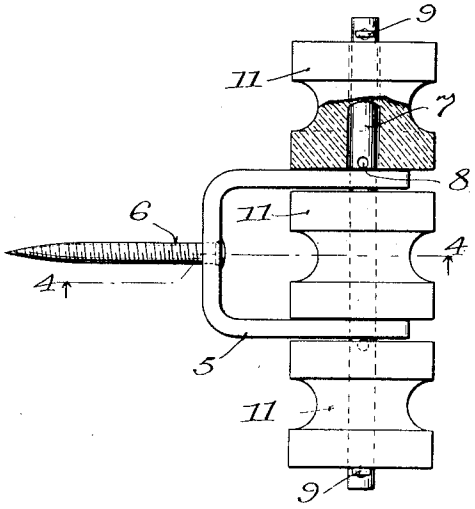



Fig. 2.

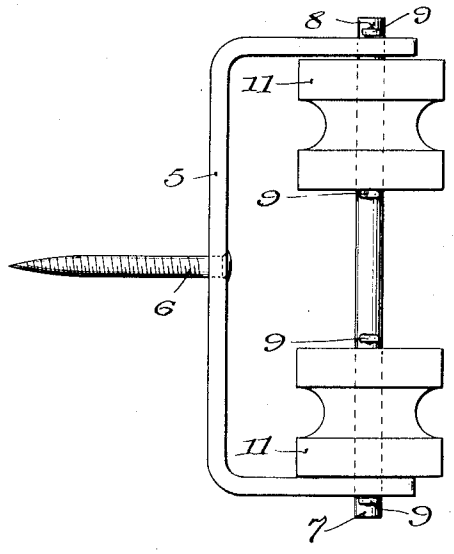



Fig. 4.

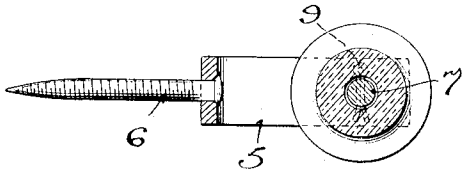
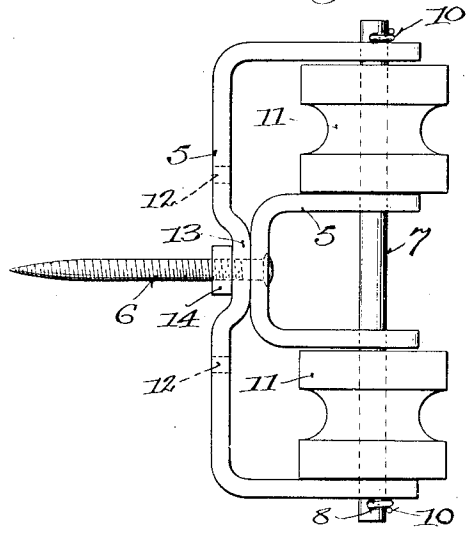



Fig. 3.




Inventor
Lem E. Hendee

By Mouell, Kenny & Finch
Attorneys.

# UNITED STATES PATENT OFFICE.

LEM E. HENDEE, OF MILWAUKEE, WISCONSIN.

## INSULATOR-SUPPORT.

1,268,972. Specification of Letters Patent. Patented June 11, 1918.

Application filed January 3, 1918. Serial No. 210,138.

*To all whom it may concern:*—

Be it known that I, LEM E. HENDEE, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Insulator-Supports, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

The invention relates to supports for insulators.

In running lines for electrical transmission for different kinds of work it has formerly been the practice to use brackets having integral arms to which the insulators are secured. The difficulty with these one piece brackets is that special brackets have to be obtained for supporting two, three or more insulators and no provision is made to provide the same bracket for different arrangements of insulators. To obviate the disadvantages of these former constructions it is the object of this invention to provide a standard bracket with simple spacing members and fastening means whereby any desired numbers of insulators as used in practice may be mounted on the bracket and in any desired arrangement so that the insulator support may be furnished as a standard unit to support different systems of wiring.

The invention is further designed to provide an insulator support differing specifically in construction from that shown and described in my co-pending application Serial No. 169,558 filed May 18, 1917.

The invention is further designed to provide a U-shaped bracket having a fastening screw rigidly connected thereto and an insulator supporting rod removably secured to the arms of said bracket, the bracket being readily put in place by screwing its fastening screw into the side of a building or other support.

A further object of the invention is to provide a double U-shaped bracket that is, a U-shaped bracket within a U-shaped bracket and means for detachably securing them together so that the bracket may be used for either two wire or three wire service, the arrangement producing a strong construction.

The invention further consists in the several features hereinafter set forth.

In the drawings:

Figure 1 is a view of the device embodying the invention showing one form of bracket, parts of one of the insulators being broken away;

Fig. 2 is a similar view showing a larger bracket;

Fig. 3 is a view showing a modified form of bracket;

Fig. 4 is a central horizontal sectional view through the device.

In Figs. 1, 2 and 4, the bracket consists of a U-shaped member 5 provided with a fastening screw 6 which is rigidly secured to the transverse portion of the member 5 by riveting the end of the screw therein though the bracket could be cast around the head of the screw or otherwise suitably rigidly secured. A member or rod 7 is removably mounted in the arms of the bracket and is provided with a plurality of spaced apart holes 8 for receiving cotter pins 9 or pieces of bent wire 10. These holes 8 are spaced substantially the length of an insulator apart though they may be farther apart, as in Fig. 1, to accommodate the interposed arms.

The rods 7 are designed to removably receive the usual spool insulators 11, said insulators being secured on the rod 7 between adjacent pins 9 and being spaced from each other if desired by said pins.

In Fig. 1 the size of the bracket is such as to accommodate a single insulator between the arms and this type of bracket may be employed for a single insulator using a short rod though by using a longer rod so that portions project from the sides of the arms I am able to use one, two or three insulators.

In Fig. 2 the spread of the arms of the bracket is such as to accommodate three insulators therebetween and in this instance also the rod may be extended beyond the sides of the arms, as in Fig. 1, to accommodate other insulators or secure a greater variety of arrangements.

The brackets are readily fastened into place by simply screwing the screw fastening 6 into a suitable support.

In Fig. 3 I have shown a strong construction which is very useful in practice. This consists of a U-shaped bracket 5 similar to that of Fig. 2 having a similar rod 7 upon which the insulators are mounted and this rod may be extended beyond the sides of the arms, as in Fig. 1 to accommodate other insulators and where a two wire circuit is used such an arrangement is preferred and in that case the bracket may be fastened to its

support by screws or bolts (not shown) passing through holes 12. When a three wire circuit is desired the bracket of Fig. 1 is passed through an opening in the raised portion 13 of the bracket 5 and is secured thereto by a nut 14 on the threaded screw 6, the arms of this smaller bracket receiving the rod to space the insulators apart. With this construction the preferred three wire circuit arrangement is to place the insulators upon extensions (not shown but similar to Fig. 1) of the rod on the outside of the larger bracket and place the third insulator on the rod between the arms of the smaller bracket. With this construction both parts may be sent to the user and he may put up the larger bracket for two wire service and then if at any future date the party wants a three wire service the rod 7 is removed and the smaller bracket attached to the larger one, the rod replaced, and the insulators arranged as just described.

Of course it will be understood that the screw 6 of the smaller bracket shown in Fig. 3 may be cut off flush with the outer face of the nut 14 in which case the screws passing through the holes 12 would secure the bracket in place or the bracket of Fig. 1 may be attached to the larger bracket without the nut 14 by passing its screw 6 through the central aperture in the larger bracket and screwing it directly into the support.

What I claim as my invention, is:

1. An insulator support comprising a U-shaped bracket, a second U-shaped bracket disposed within the first bracket and detachably secured thereto, the arms of said brackets being disposed in spaced relation to each other, a rod removably mounted in the arms of said brackets, and insulators removably mounted on said rod.

2. An insulator support comprising a U-shaped bracket having an opening therein, a second U-shaped bracket disposed within the first bracket and having a threaded member passing through said opening and detachably secured to said first bracket, the arms of said brackets being disposed in spaced relation to each other, a rod removably mounted in the arms of said brackets, and insulators removably mounted on said rod.

In testimony whereof, I affix my signature.

LEM E. HENDEE.