No. 870,486. PATENTED NOV. 5, 1907.

H. W. WISTNER.

CONDUCTING WIRE SUPPORT AND INSULATOR.

APPLICATION FILED JUNE 13, 1906.

Fig. 1.

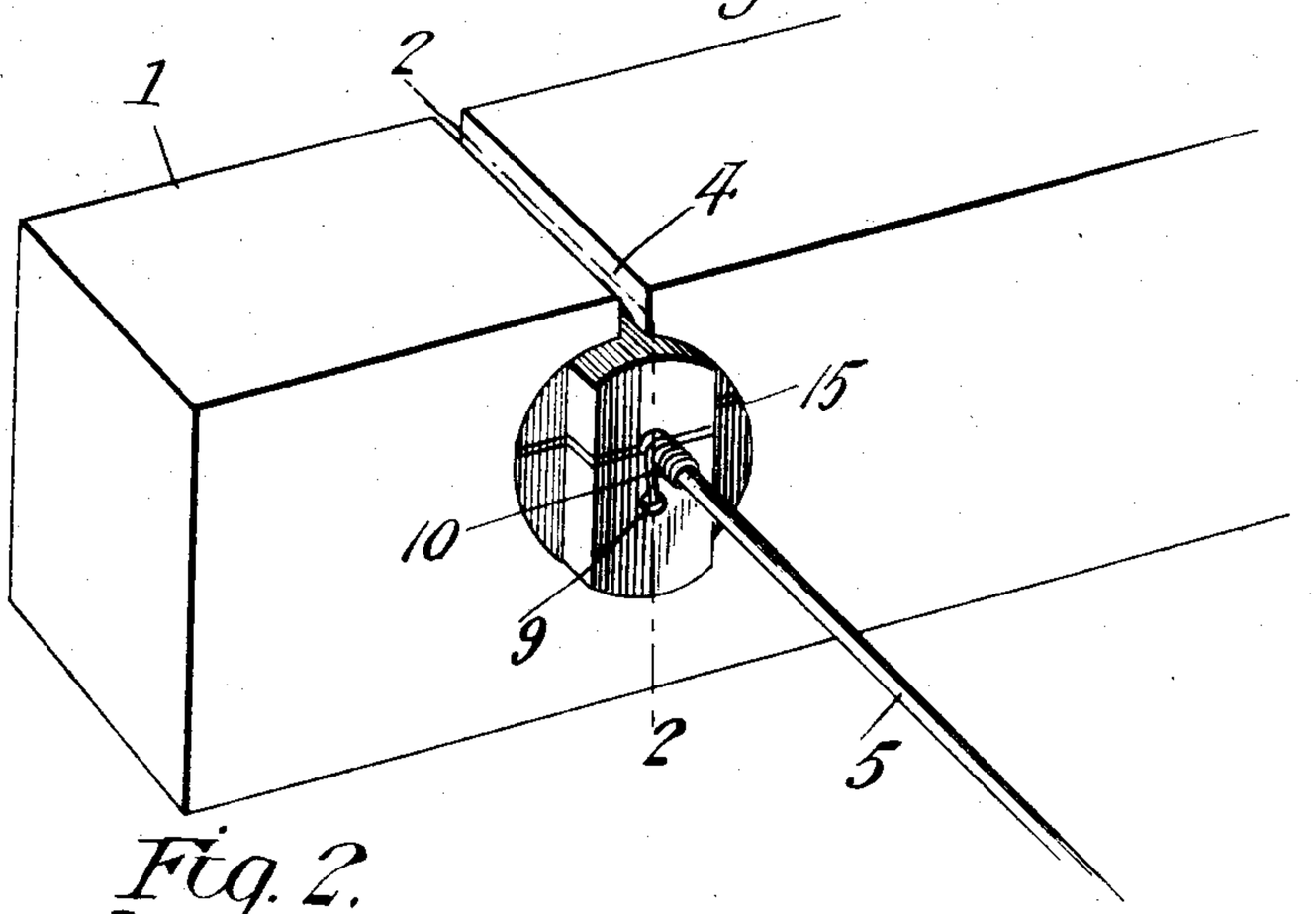


Fig. 2.

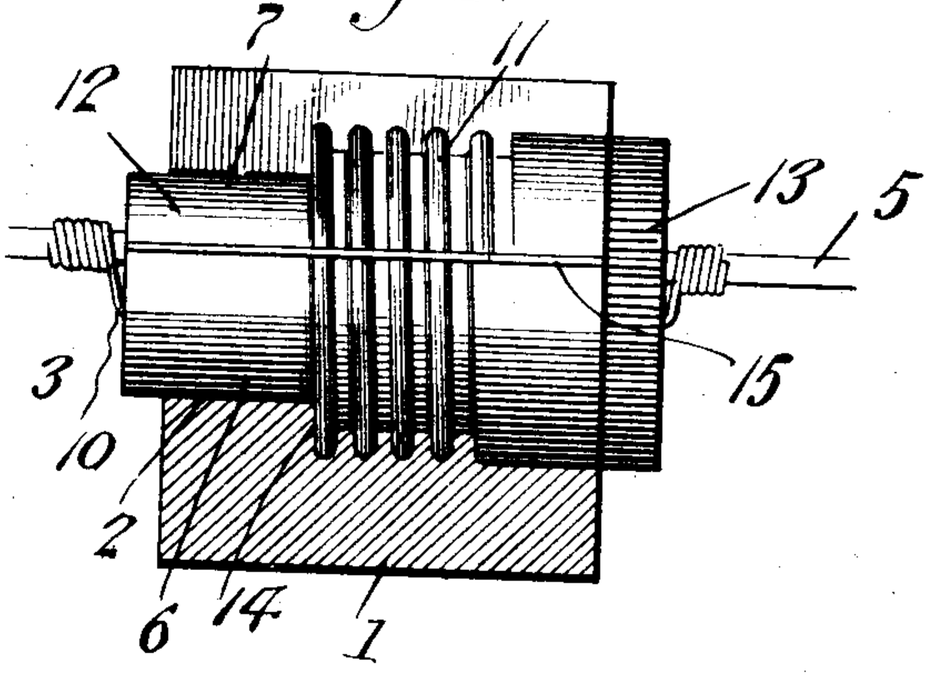


Fig. 3.

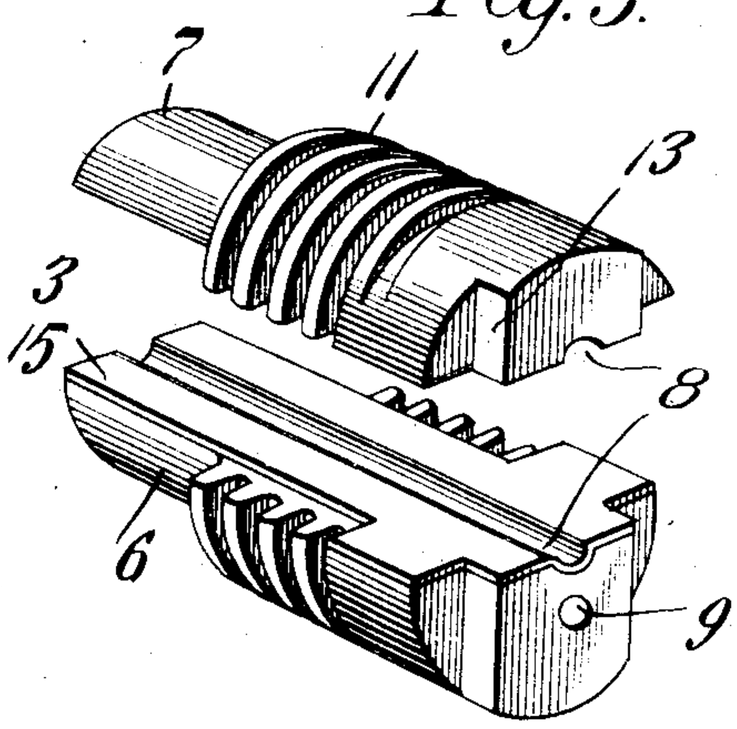
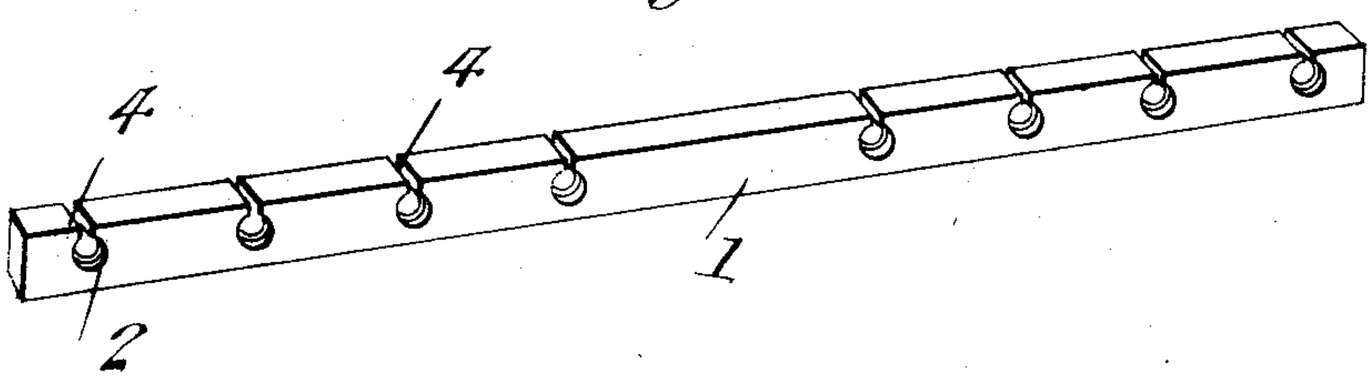


Fig. 4.



Witnesses

Geo. Ackmann Jr.

F. L. Emore

Inventor

H. W. Wistner,

By Victor J. Evans.

Attorney

UNITED STATES PATENT OFFICE.

HARVEY W. WISTNER, OF OGDEN, UTAH.

CONDUCTING-WIRE SUPPORT AND INSULATOR.

No. 870,486. Specification of Letters Patent. Patented Nov. 5, 1907.

Application filed June 13, 1906. Serial No. 321,475.

To all whom it may concern:

Be it known that I, HARVEY W. WISTNER, a citizen of the United States, residing at Ogden, in the county of Weber and State of Utah, have invented new and useful Improvements in Conducting-Wire Supports and Insulators, of which the following is a specification.

This invention relates to conducting wire supports and insulators of the type employed for supporting telegraph and other electric conducting wires and for insulating the same at their points of connection with the cross arms of a pole, and has for its objects to produce a comparatively simple, inexpensive device of this character which may be conveniently engaged with the wire and the cross arm, one wherein the insulator will be securely fixed in the arm but may be readily removed therefrom, and one whereby the conducting wire will be properly fixed to the insulator.

With these and other objects in view, the invention comprises the novel features of construction and combination of parts more fully hereinafter described.

In the accompanying drawings: Figure 1 is a perspective view of a portion of a cross arm showing a conducting wire connected therewith by means of an insulator embodying the invention. Fig. 2 is a sectional elevation, the section being taken on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of the insulator showing the sections thereof separated. Fig. 4 is a perspective view of the cross arm.

Referring to the drawings, 1 designates a support in the form of a cross arm adapted for attachment to a telegraph, telephone or other pole or support and having a plurality of transverse openings 2 internally threaded for the reception of the insulating members 3 and each provided with an entrance opening 4 through which the telegraph or other conducting wires may be introduced into the openings 2.

The insulator 3 which forms the subject-matter of the present invention is composed of glass or other suitable insulating material and divided longitudinally to present a pair of sections 6, 7, having in their meeting faces central, longitudinal grooves 8 which conjointly form an opening for the reception of the conducting wire 5, there being formed in the main section 6 an auxiliary longitudinal opening 9 adapted to receive a tie wire 10. The insulator which is provided adjacent its longitudinal center with screw threads 11 adapted for engagement with the threads within the opening 2 of the cross arm is of reduced size from said threaded portion to its rear end, thus presenting a reduced portion 12 and is provided at its forward end with a non-circular extension or projection 13 having a pair of its opposite parallel walls to be engaged by a wrench or analogous tool for screwing the insulator into or removing it from the opening 2, which is of reduced size throughout a portion of its length to receive the reduced portion 12 of the insulator and to form a stop shoulder 14 with which the corresponding shoulder on the insulator contacts when the latter is entered in place, while disposed between the meeting faces of the sections 6 and 7 is a sheet 15 of rubber or other insulating material.

In practice, the conducting wire is entered through the opening 4 into the opening 2, after which the sections 6 and 7 of the insulator are properly assembled on the wire and the insulator as a whole screwed into the opening 2, after which the ends of the wire 10, which is introduced through the opening 9, are coiled around the conducting wire, as seen in Fig. 2, thus to hold said wire against longitudinal movement. It is to be observed that owing to the insulator being provided with the reduced portion 12 it may be conveniently introduced into the opening 2 and that in the operation of securing the insulator firmly in place, the portion 13 will permit ready engagement of a wrench or analogous operating tool.

Having thus described my invention, what I claim is:

In a device of the class described, the combination of a support having an opening of different diameters, and threaded in the portion of larger diameter and provided with a slot opening radially from the said opening, an insulator having cylindrical end portions of different diameters and a thread on the inner end portion of larger diameter for engagement in the opening of the support and provided with an non-circular extremity, said insulator being composed of two parts having registering grooves for receiving a conductor and one section having a longitudinal passage adjacent the groove thereof, and a tie wire extending through the passage and adapted to be fastened to the conductor passing through the insulator.

In testimony whereof, I affix my signature in presence of two witnesses.

HARVEY W. WISTNER.

Witnesses:
JOHN STANTON,
A. B. STEVENS.