

F. WOODMANSEE.
INSULATOR SUPPORT.
APPLICATION FILED FEB. 8, 1904.

927,701.

Patented July 13, 1909.

Fig. 1.

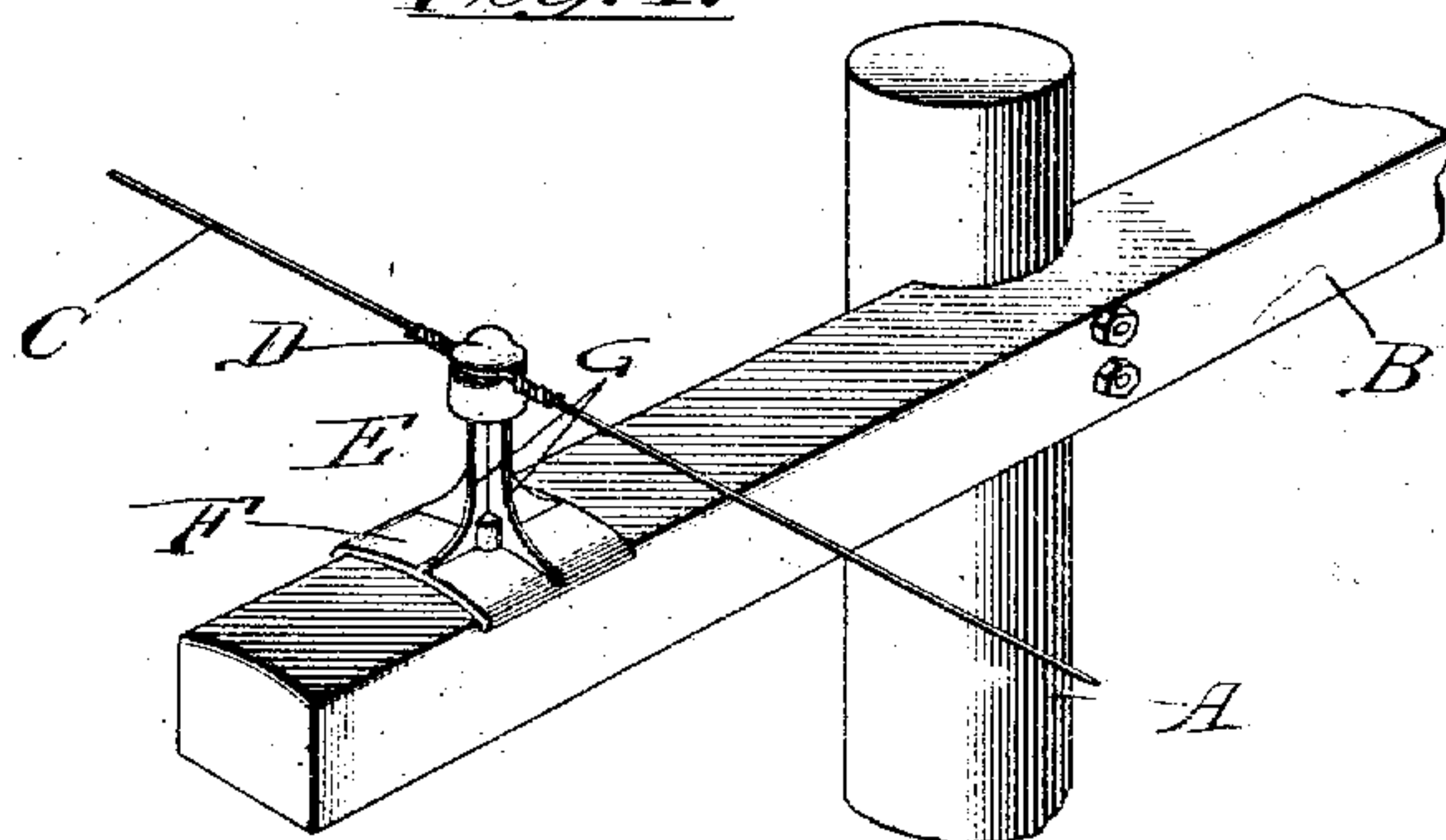
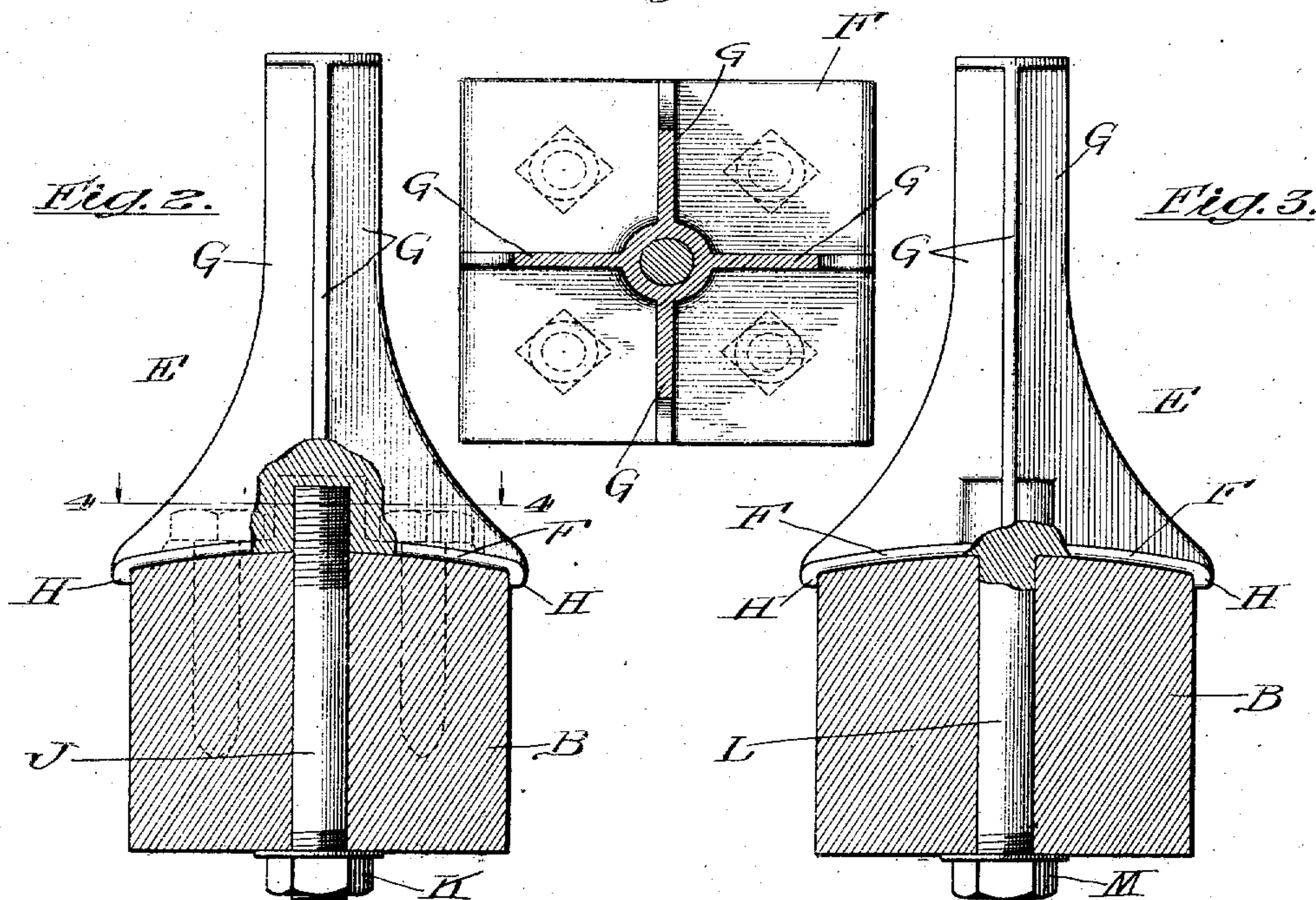


Fig. 4.



Witnesses:

Robert H. Allen

Emil C. Wettrmann

Inventor
Fay Woodmansee
By *Brown & Parby*
Attorneys

UNITED STATES PATENT OFFICE.

FAY WOODMANSEE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO JOHN W. PORTER, OF CHICAGO, ILLINOIS, AND ONE-HALF TO ELECTRIC SERVICE SUPPLIES COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

INSULATOR-SUPPORT.

No. 927,701.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed February 8, 1904. Serial No. 192,572.

To all whom it may concern:

Be it known that I, FAY WOODMANSEE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Insulator-Support, of which the following is a specification.

This invention relates to insulator supports.

10 The object of the invention is to provide a support for the insulators of telegraph or telephone wires or cables, or other conductors, which is simple in construction, inexpensive in manufacture, and efficient in
15 operation.

A further object of the invention is to provide an insulator support which is held against rocking or lateral displacement.

20 A further object is to provide an insulator support which is strengthened and braced in the direction of the application of the strain imposed thereon by the telegraph, telephone or other wire, cable or conductor.

25 A further object is to provide an insulator support which efficiently sheds the water or moisture.

Other objects of the invention will appear more fully hereinafter.

30 The invention consists substantially in the construction, combination, location and relative arrangement of parts, all as will be more fully hereinafter set forth, as shown in the accompanying drawing, and finally pointed out in the appended claims.

35 Referring to the accompanying drawing, and to the various views and reference signs appearing thereon,—Figure 1 is a view in perspective, parts broken off, of a telegraph pole and cross arm, and showing the application thereto of an insulator support
40 embodying the principles of my invention. Fig. 2 is a view in side elevation of an insulator support embodying the principles of my invention, and showing one form
45 of applying the same to the cross arm of a telegraph pole, the cross arm being shown in transverse section and the insulator being partly broken away and in section. Fig. 3 is a view similar to Fig. 1, showing a
50 modified construction embraced within the scope of my invention. Fig. 4 is a view in section on the line 4, 4, Fig. 2, looking in the direction of the arrows.

The same part is designated by the same

reference sign wherever it occurs throughout 55 the several views.

In stringing telegraph, telephone or other wires, cables or conductors, it is customary to support such wires, cables or the like upon glass or other suitable insulators carried by 60 cross arms on the telegraph or other poles, the glass or other insulators being mounted upon supports suitably fixed to the cross arms. My present invention relates particularly to insulator supports of this nature. 65 In devices of this class it is desirable to brace or strengthen the insulator support in the direction of the strain imposed thereon by the weight or pull of the wire, cable or the like. It is also desirable to provide against 70 axial or lateral displacement of the insulator support, and to provide means for shedding rain or moisture deposited upon the support. It is among the special purposes of my present invention to provide a construction and 75 arrangement of parts wherein these and other desirable objects are accomplished in a simple manner.

In the accompanying drawing reference sign A designates a telegraph or other pole, 80 and B a cross arm carried thereby, C a telegraph, telephone or other wire, cable or conductor, D the insulator, and E designates generally the insulator support. This support comprises a base F, substantially square 85 or rectangular in outline, and somewhat curved or inclined in transverse section, as clearly shown in end view in Figs. 2 and 3. The upright part of the insulator support is preferably formed integrally with the 90 square base, but I do not desire to be limited or restricted in this respect. The insulator is received upon the upper end of the upright part of the support, and in order to brace and strengthen the support I prefer to 95 form the upright portion thereof with webs or flanges G, as shown. These webs or flanges are formed lengthwise of the upright portion, and they are of decreasing width from the square base F toward the free end, 100 In fact, these webs or flanges form the upright or projecting portion of the support. As shown, these flanges or webs are arranged at right angles with each other, although I do not desire to be limited to this arrange- 105 ment, nor to the number of webs or flanges, as the same may be altered or varied without departure from the spirit and scope of

my invention. In order to enable the insulator support to efficiently withstand the strain imposed thereon by the weight or pull of the telegraph, telephone or other wire, cable or the like, I arrange the flanges, or a portion of them, in the plane or direction of pull of the wire, cable or the like, thus bracing and strengthening the insulator support in the direction of such pull.

By slightly curving or inclining the surface of the base F transversely, as shown, it serves as a water shed to shed rain, moisture or the like, and prevent the accumulation of the same thereon and the consequent rust and corrosion thereof. This curvature or inclination of the base F also enables the edges thereof to slightly engage or fit over the upper edges of the cross arm B, or to otherwise fit the contour of said arm thereby preventing the insulator support from turning axially or laterally with respect to the cross arm, and hence holding and maintaining the webs or flanges G in proper relation with respect to the line of strain imposed thereon by the pull of the wire or cable. If desired, and in order to still further insure the engagement of the edges of the square base F over the edges of the cross arm, I may provide the edges of the base F with depending lips or ribs H (see Figs. 2 and 3), said lips or ribs fitting snugly over the edges of the cross arm, and bearing against the sides of the cross arm. I do not desire, however, to be limited or restricted in this respect, as the desired engagement of the edges of the base over the edges of the cross arm may be sufficiently accomplished without providing the edges of said base with ribs or lips.

The insulator support may be applied to the cross arm B, or other support, in any convenient manner. In the form shown in Fig. 2, a bolt J is passed through a hole in the cross arm, and one of the threaded ends thereof is screwed into a threaded socket formed in the base F. A nut K, applied to the other end of bolt J, serves to clamp the insulator support upon the cross arm or other support B. It is obvious that the in-

ulator support may be secured to the cross arm in many other ways. For instance, and as shown in Fig. 3, the insulator support may be cast or otherwise formed with an extension or rod L, which is designed to be received through a hole in the cross arm B, and a nut M, applied to the projecting threaded end thereof and bearing against the cross arm, serves to draw the base of the insulator support firmly against the cross arm B, in the same manner as in the case of the nut K in the form shown in Fig. 2, or the base F may be secured to the cross arm by screws or otherwise, as is obvious.

While I have described my insulator support as applied to the cross arm of a telephone pole, it is obvious that it may be applied to any other suitable support. I do not desire, therefore, to be limited or restricted in this respect. It is also obvious that many variations and changes in the details of construction and arrangement would readily suggest themselves to persons skilled in the art and still fall within the spirit and scope of my invention. I do not desire, therefore, to be limited or restricted to the exact details of construction and arrangement shown and described. But

Having now set forth the object and nature of my invention, and constructions embodying the principles thereof, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent, is:

An insulator support having a base portion rectangular in outline and an upright portion or post formed integrally therewith, said base portion being transversely curved to form a water shed, and the upright portion having tapering webs or flanges formed longitudinally thereon and adapted to receive the insulator.

In witness whereof, I have hereunto set my hand this 6th day of February 1904, in the presence of the subscribing witnesses.

FAY WOODMANSEE.

Witnesses:

E. C. SEMPLE,
S. E. DARBY.

Correction in Letters Patent No. 927,701.

It is hereby certified that in Letters Patent No. 927,701, granted July 13, 1909, upon the application of Fay Woodmansee, of Chicago, Illinois for an improvement in "Insulator-Supports" were erroneously issued to "John W. Porter and Electric Service Supplies Company" as assignees of said invention: Whereas said Letters Patent should have been issued to the inventor, *said Woodmansee, and Electric Service Supplies Company*, as assignee of one-half interest, they being sole owners of said invention, as shown by the record of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 9th day of November, A. D., 1909.

[SEAL.]

E. B. MOORE,

Commissioner of Patents.

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