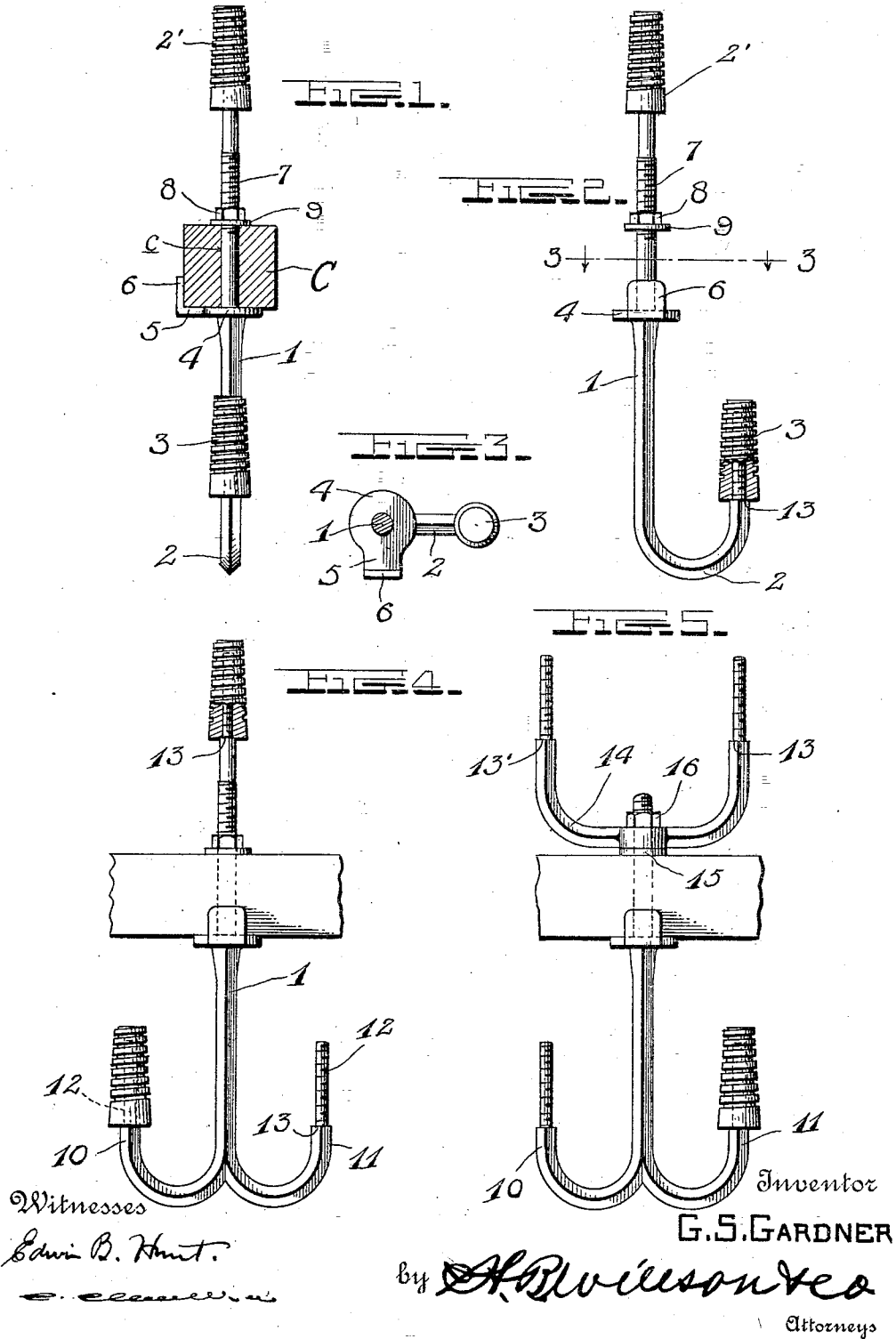


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BRACKET FOR ELECTRICAL WIRE CONSTRUCTIONS.
APPLICATION FILED JULY 29, 1915.

1,189,088.

Patented June 27, 1916.



UNITED STATES PATENT OFFICE.

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BRACKET FOR ELECTRICAL-WIRE CONSTRUCTIONS.

1,189,088.

Specification of Letters Patent.

Patented June 27, 1916.

Application filed July 29, 1915. Serial No. 42,586.

To all whom it may concern:

Be it known that I, GEORGE STAFFORD GARDNER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Brackets for Electrical-Wire Constructions; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in supports for insulators for the line wires of telegraphs, telephones and the like.

The object of the invention is to provide a simply constructed rigid, strong supporting bracket of this character provided with simple means for securing it to a cross arm whereby it is reliably held against turning relatively to said cross arm and thereby prevents tangling of the wires supported thereby.

Another object is to provide a bracket of this character which is neat in appearance and which may be made to fit any arm and dispense with all vibrations.

With the above and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawings: Figure 1 represents a front elevation of one form of this improved support shown applied with the cross arm in section; Fig. 2 is a side elevation thereof detached; Fig. 3 is a transverse section taken on the line 3—3 of Fig. 2; Fig. 4 is a side elevation showing a slightly different form of bracket; Fig. 5 is a similar view of still another form.

In the embodiment illustrated in Figs. 1 to 3, a cross arm C is shown which may be of wood or metal and has apertures or bores *c* extending transversely therethrough to receive the supporting bracket constituting this invention. This bracket as shown in Figs. 1 to 3 comprises a metal pin having a straight shank provided at its lower end with a U-shaped bend 2 on the free end of which is mounted a block 3 of wood or any other suitable insulating material exteriorly threaded to receive and hold one of the ordinary glass insulators. The upper end of the shank 1 is provided with a similar block 2' for receiving and holding another insulator.

This shank 1 is provided intermediately of its ends at any desired point, with an annular plate or flange 4 here shown cast integral therewith and from one side of which projects an arm 5 having its free end upturned to form a cross arm engaging finger 6. The arm 5 extends from the side of said shank which is arranged in a plane at right angles to the side thereof occupied by the arm 2 so that when the bracket or pin 1 is applied to the cross arm C, this arm 2 which carries an insulator will be disposed under the cross arm while the finger 6 will engage one side face thereof. The length of the arm 5 and the width of the plate 4 corresponds to one half of the width of the cross arm C so that when the shank 1 of the pin extends through the bore *c* of the cross arm, the arm 5 and plate 4 will engage the bottom of said cross arm and the flange 6 will extend upwardly and closely hug one side of said cross arm so that when the pin is thus applied, it is rigidly held against turning relatively to the cross arm and thus prevents all possibility of the wires which it supports from becoming entangled owing to the turning of the pin. The upper portion of the shank 1 above the flange or plate 4 is cylindrical while the portion below said flange is angular in cross section to facilitate its engagement by a holding tool. Between the plate 4 and the free end of the stem 1 is a threaded portion 7 on which is mounted a nut 8 and washer 9 which assist in securing and locking the pin to the cross arm with said cross arm securely clamped between the plate 4 and arm 5 and washer 9, as is shown clearly in Fig. 1.

In the form shown in Fig. 4 the construction is the same except that the shank 1 is provided at its lower end with two upturned arms 10 and 11, the terminals of which are shown arranged parallel with the stem 1, although not necessarily so and which are threaded to receive exteriorly threaded insulator receiving blocks similar to those shown in the figures above described. These threaded ends 12 as well as the end of the member 2 of the other figures is preferably reduced with a shoulder 13 formed at the base thereof against which the threaded insulator carrying blocks are designed to rest.

In Fig. 5 the bracket is shown provided with two upturned arms 10 and 11 at its lower end similar to those shown in Fig. 4,

while the upper end thereof has a U-shaped bracket 14 mounted thereon, the cross bar of said bracket being apertured intermediately of its ends and through which the threaded upper end of the shank or stem 1 extends and to which said bar is secured by means of a washer 15 disposed below the cross bar and a clamping nut 16 arranged above it. The upturned ends of this bracket are constructed similar to the arms 10 and 11 at the lower end of the shank 1, being preferably reduced and threaded to receive insulating blocks, not shown, and having a shoulder 13' at the base of said reduced portion against which said blocks are designed to rest and be supported.

From the above description, it will be obvious that the pin or shank of the supporting bracket is alike in all of the forms and that the means for connecting said pin to the cross arm is the same.

I claim as my invention:

An insulator bracket comprising an upright one piece stem whose lower end is directed laterally to carry an insulator, the

upper end of said stem being adapted to be passed through and to extend above a bore in a cross arm, a collar formed integrally with the stem and adapted to abut the lower edge of the cross arm, and a nut threaded on the upper end of said stem to engage the upper edge of said cross arm; in combination with a horizontal arm formed integrally with and extending laterally from said collar, said arm having on its free end an upwardly extending finger formed integrally therewith and adapted to engage one upright side of the cross arm, said finger serving to hold the stem against rotation while tightening the nut thereon and also to prevent turning of said stem by stress on the wire to be fastened to the insulator.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE STAFFORD GARDNER.

Witnesses:

H. B. BOOTH,
E. O. CLARK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."