R. C. BOOZER.

INSULATOR SUPPORT.

APPLICATION FILED JULY 11, 1914.

1,167,042.

Patented Jan. 4, 1916.

3 SHEETS—SHEET 1.

Fig. 1.

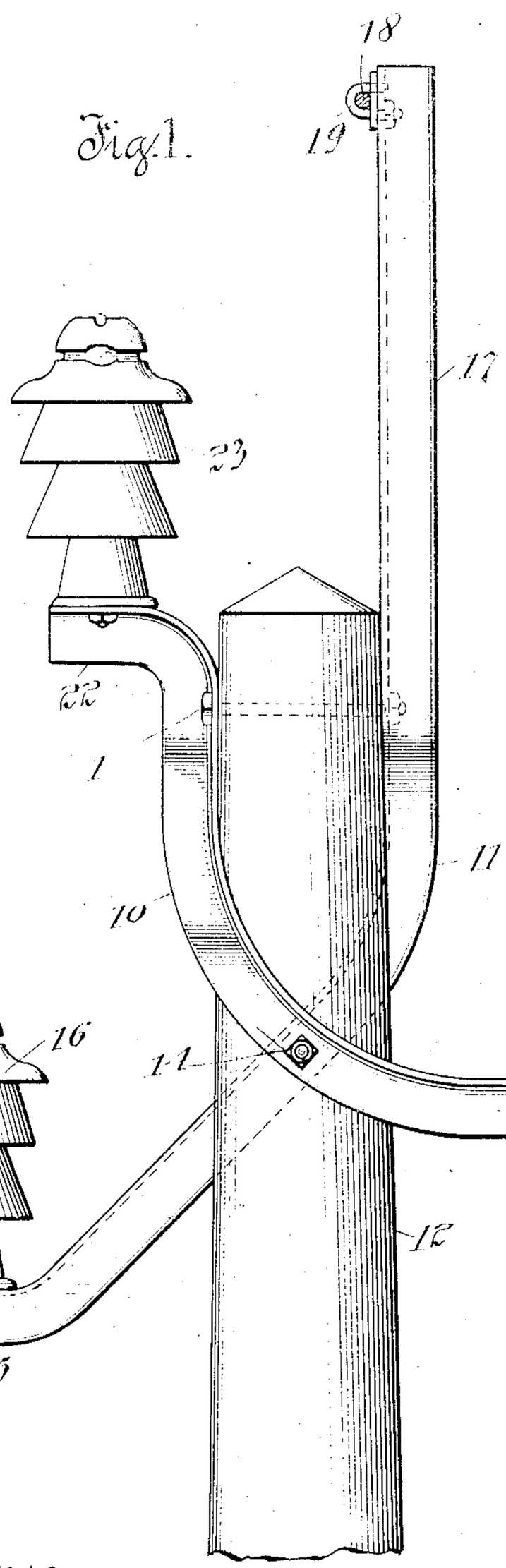
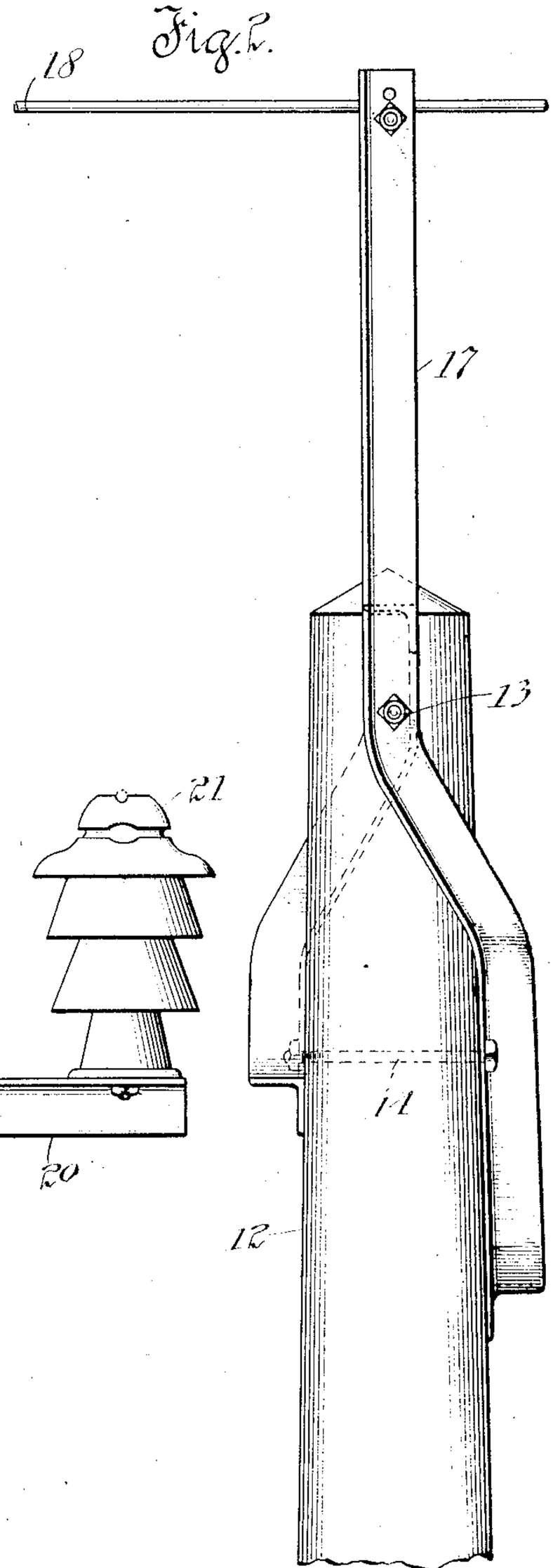


Fig. 2.



Witnesses

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3 SHEETS—SHEET 2.

Fig. 3.

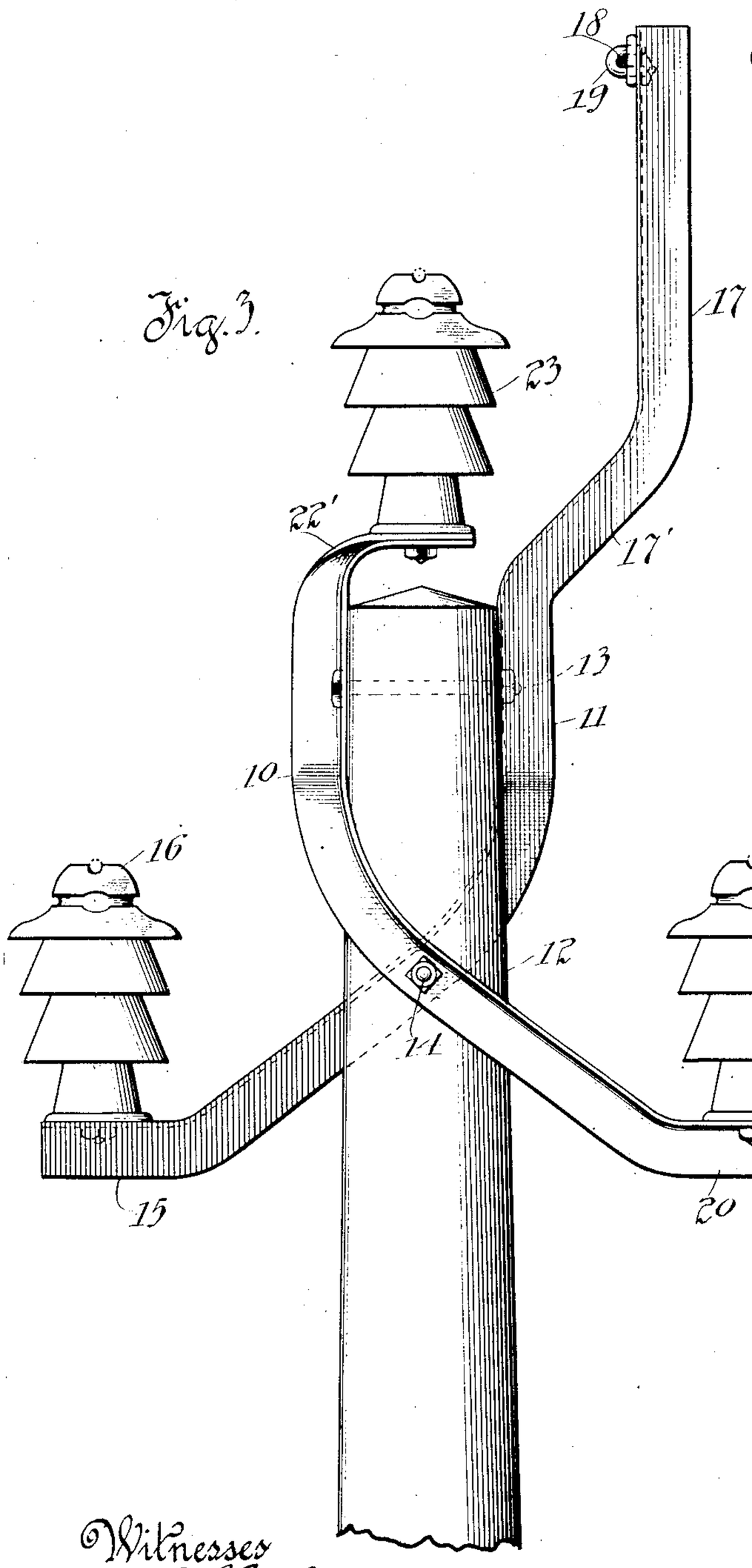
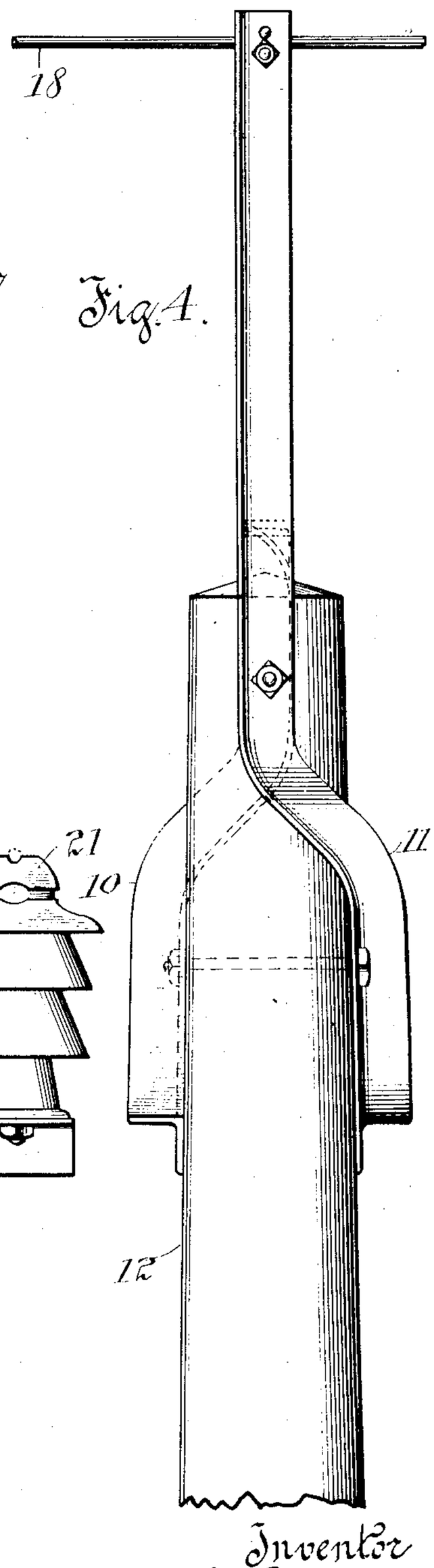


Fig. 4.



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3 SHEETS—SHEET 3.

Fig. 5.

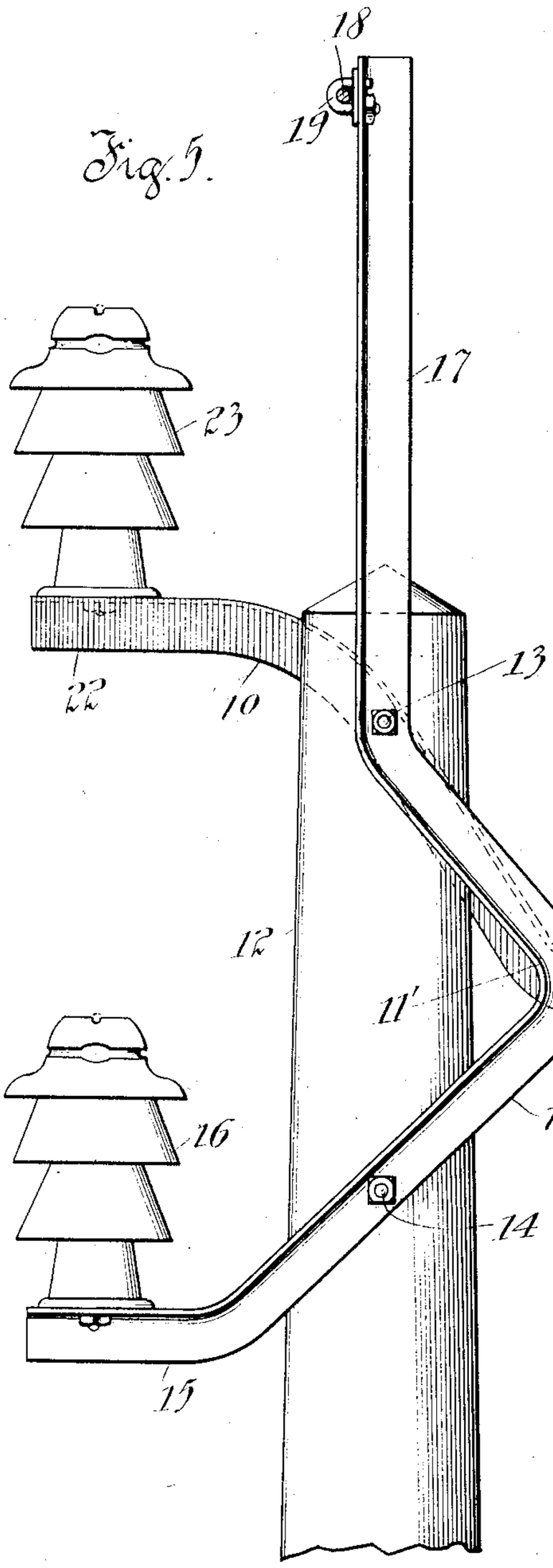
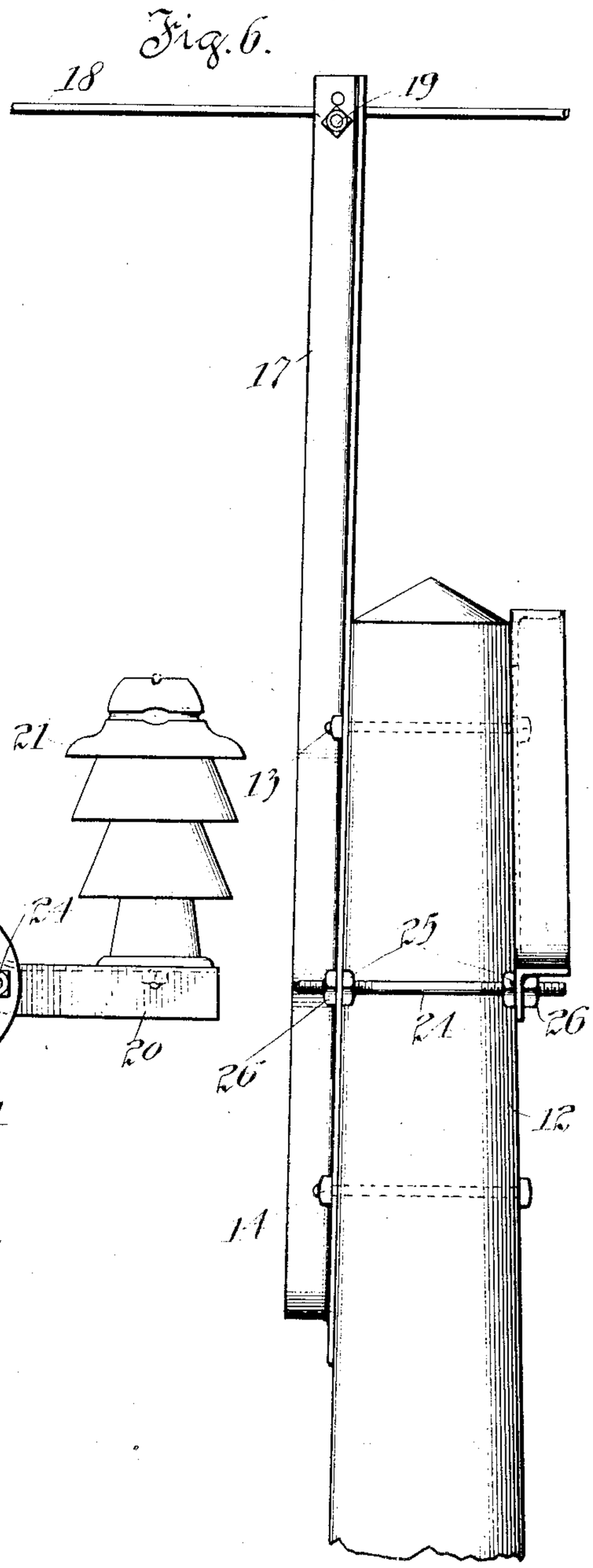


Fig. 6.



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UNITED STATES PATENT OFFICE.

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INSULATOR-SUPPORT.

1,167,042. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed July 11, 1914. Serial No. 850,335.

To all whom it may concern:

Be it known that I, RALPH C. BOOZER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Insulator-Supports, of which the following is a specification.

My invention relates to means for supporting insulators for electric wires, and has especial reference to fixtures of this character for support of wires intended to carry relatively high tension electric current upon poles.

Some of the objects of my invention are to simplify and cheapen the manufacture of such devices; increase their strength and efficiency and to generally improve their adaptability for use upon poles varying in size and to increase their durability.

My device is especially well adapted for support of wires carrying high tension current.

In power, or other long distance transmission systems the wires issuing from the power house and extending to an objective point are usually in multiples of three and it is for accommodation of such conductors that my supporting structure is preferably intended.

Other and further objects of my invention will become apparent to persons skilled in the art from a consideration of the following description when taken in conjunction with the drawings, wherein—

Figure 1 is an elevation of the top portion of a pole showing my fixture attached thereto. Fig. 2 is a similar view taken at right angles to the plane in which Fig. 1 is included. Fig. 3 is a similar view to Fig. 1, showing a slight modification, to which reference will be hereinafter more specifically made. Fig. 4 is a view thereof similar to Fig. 2. Fig. 5 is another slight modification. Fig. 6 is an elevation taken at right angles to Fig. 5.

In all the views the same reference characters refer always to the same parts.

In the preferred form, shown in Figs. 1 and 2, and in both modifications thereof, the support consists of two major portions 10 and 11 and in each instance these parts are located on opposite sides of the pole 12, and in each case only two attaching bolts 13 and 14 are placed through the poles to hold both of the members in place.

In Figs. 1 to 4 inclusive, both of the bolts engage both of the major members and said bolts pass through the pole at right angles to each other, thereby not only securing the fixtures to the pole but also preventing the pole from splitting or checking at the top, in both directions.

The J-shaped member 11 is laterally deflected at its bottom, as at 15, for support of an insulator 16 and after its attachment to the pole 12, by the bolt 14, it extends vertically into a bayonet 17, which is adapted to support a grounded guard wire 18 by means of a clip 19. The Z-shaped major member 10 extends laterally, as at 20, for support of an insulator 21, and it extends diagonally to its other terminal, and after it is attached to the pole, as by the bolt 14, it extends laterally in Figs. 1 and 5, as at 22, for support of an insulator 23.

In the modification shown in Figs. 3 and 4, the upper end of the member 10, 22′ extends directly over the top of the pole, or in other words, it is deflected to the right instead of to the left, as in the former instance, and in order that the bayonet 17 may be sufficiently separated from the insulator 23, attached to the end 22′, I deflect the bayonet portion 17, as at 17′, so as to separate this grounded guard wire support a sufficient distance from the insulator 23.

The structures shown in Figs. 5 and 6 are provided with another bolt 24, upon which are located spacing nuts 25—25 to hold the members 10 and 11 properly separated, in accordance with the thickness of the pole 12. The attaching nuts 26—26, in association with the bolts secure the major members in proper relation. To add somewhat more strength to the structure I prefer to bend the member 11 into an elbow as at 11′ which is separated from the axis of the pole 12 some distance to afford a somewhat stronger bracket support, for the insulator 21.

The entire structure is made of angle iron, as usual, and the weight of the wires carried by the structure is practically balanced and properly distributed with reference to the respective members.

To apply my fixture to a pole it is only necessary in any case to bore two holes, properly separated, through the pole through which the attaching bolts 13 and 14 are to pass. These holes may be bored through

the pole before the pole is erected or subsequently thereto, by a man upon the pole, as there is no fitting or trimming necessary for the application of the device.

While I have shown herein two modifications of my device for the purpose of indicating the direction in which my invention may depart from the preferred form, it is evident that it is susceptible of further modification within the scope and intent of the appended claims.

Having described my invention, what I claim with a view and desire to secure by Letters Patent is:

1. An insulator support comprising a member having a horizontal part at each of its ends for reception of an insulator pin, and an intermediate diagonal part for attachment to a pole, and another member having a horizontal part for reception of an insulator pin, a diagonal part for attachment to a pole and a vertical part for extension above the pole.

2. An insulator support comprising a member having a horizontal part at each of its ends for reception of an insulator, and an intermediate diagonal part for attachment to a pole, and another member having a horizontal part for reception of the insulator pin, a diagonal part for attachment to a pole, and a vertical part for extension above the pole, said members being perforated through said diagonal parts whereby both members may be secured to a pole by a single bolt.

3. An insulator support comprising a member having an intermediate diagonal part, the terminal ends whereof are adapted to receive an insulator pin, and a J-shaped member, the lower terminal end whereof is adapted to receive an insulator pin, the upper vertical end of the latter being adapted to extend above the pole, said members adapted to cross on the pole and to be secured thereto by a single bolt.

4. An insulator support comprising a member having a horizontal part at each end, for reception of an insulator pin, and an intermediate, diagonal part for attachment to a pole and another member having a horizontal part for reception of an insulator pin, a diagonal part for attachment to a pole and a vertical part for extension above the pole, said members being perforated through said diagonal parts whereby both members may be secured to a pole by a single bolt, and both members laterally deflected above said attaching parts toward the center of the pole at right angles to the said point of attachment and perforated, whereby another bolt, taking through the pole at substantially 90 degrees from the first mentioned bolt, will secure both members to the pole at the latter point of attachment.

5. A device of the character described comprising a pair of insulator supporting members, one having an intermediate diagonal portion, said members adapted to be positioned on opposite sides of a pole and attaching means for securing the members to the pole at the point of their intersections.

6. A device of the character described comprising a pair of insulator supporting members, each having an intermediate diagonal portion, said members adapted to be positioned on opposite sides of the pole, and attaching means for securing the members to the pole at the point of intersection, both members being laterally deflected at one side of said attaching means and a second attaching means passing through the laterally deflected portions and the pole at approximately right angles to the first attaching means.

7. An angle iron insulator support having a diagonal portion for attachment to a post, means passing through one leg of the angle iron for securing the support to a post, said support being laterally deflected to contact with the post at a second point and attaching means passing through the other leg of the angle at the second mentioned point.

8. An angle iron insulator support having a diagonal portion for attachment to a post, a bolt passing through the post and one leg of the angle iron, said support being laterally deflected to contact with the post at a second point, and a second bolt passing through the post and the other leg of the angle iron at approximately right angles to the first bolt.

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

RALPH C. BOOZER.

In the presence of—
MARY F. ALLEN,
FORÉE BAIN.