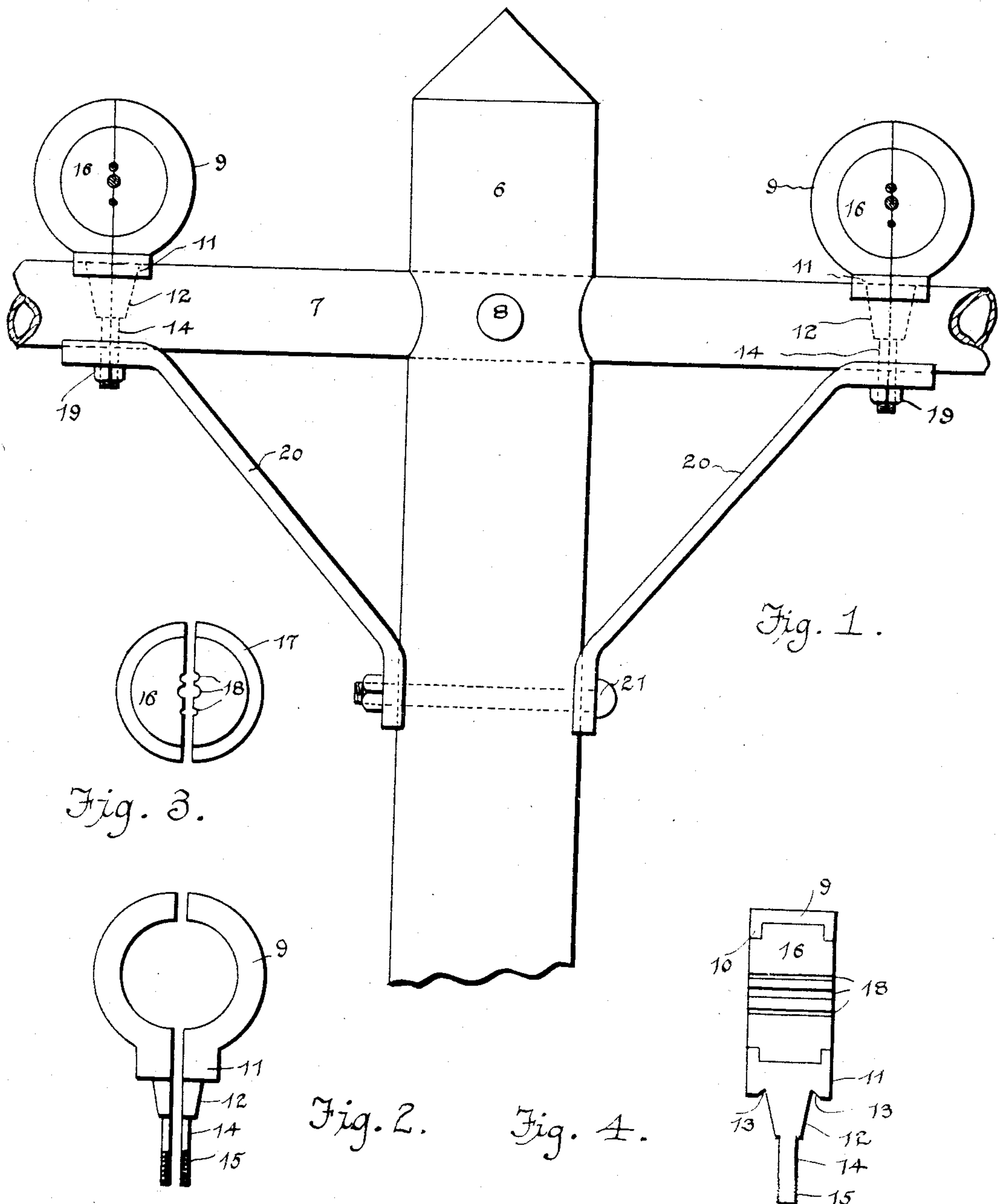


No. 793,313.

PATENTED JUNE 27, 1905.

B. B. MOSS.  
INSULATOR.

APPLICATION FILED FEB. 1, 1904.



Witnesses

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# UNITED STATES PATENT OFFICE.

BERTIE B. MOSS, OF PEKIN, INDIANA, ASSIGNOR TO LEANDER G. DAVIS  
AND MILTON HOTTEL, OF SALEM, INDIANA.

## INSULATOR.

**SPECIFICATION** forming part of Letters Patent No. 793,313, dated June 27, 1905.

Application filed February 1, 1904. Serial No. 191,494.

*To all whom it may concern:*

Be it known that I, BERTIE B. MOSS, a citizen of the United States, residing at Pekin, in the county of Washington and State of Indiana, have invented new and useful Improvements in Insulators, of which the following is a specification.

This invention relates particularly to insulators used in stringing line-wires on telegraph-poles and the like, and has for its object to provide an improved insulator characterized particularly by the fact that if the glass parts are broken the wire will not drop, but will be caught and held in the holder which ordinarily holds the glasses.

A further object is to produce a device in which the wire may be firmly and safely held without tie-wires.

A further object is to produce an insulator to which the wire may be attached and from which it may be removed very quickly without the necessity for bending any wires and without the use of any tools except a wrench.

A further object is to produce in connection with such an insulator an improved cross-arm and pole, as will be more fully described hereinafter.

In the accompanying drawings, Figure 1 is an elevation of a telegraph-pole and cross-arm provided with my insulators. Fig. 2 is an elevation of the insulator-holder. Fig. 3 is an elevation of the glass pieces which directly clamp the wire. Fig. 4 is an inner edge view of one of the half-sections, two of which form the complete insulator.

Referring specifically to the drawings, the pole is indicated at 6, and the cross-arm at 7. The cross-arm is made of pipe, which is inserted through a hole in the pole where it is fixed by a bolt 8, which extends through the pole and the pipe.

Each insulator is formed in halves, comprising a holder and the glasses held thereby. The halves of the holder are joined to form a ring 9, which on its inner side has circumferential flanges 10, also to form a stem adapted for attaching the holder to the cross-arm. The stem comprises a large portion 11, joined to a small conical portion 12, producing at 13

a shoulder which rests on the top of the cross-arm, and extending from the conical portion 12 is a smaller portion or bolt 14, the end of which is threaded, as at 15. As stated before, the holder is split centrally to produce two semicircular halves, the split being parallel to the axis of the ring, so that it will open.

The glass insulating-blocks are indicated at 16, comprising semicircular halves which join on a diametrical line to fit within the ring. The outer edges of these pieces are rabbeted, as at 17, to receive the flanges 10, whereby the glasses are held in place. They also have grooves 18 at the meeting faces which register to take the wires. A plurality of grooves are made of different sizes to receive different-sized wires.

A hole is made in the cross-arm to receive each insulator, and the upper part of each hole is beveled or countersunk to fit the conical portion 12. In setting up the insulator its stem is put through the hole in the cross-arm, and the glasses and line-wire being put in place a nut 19 is applied to the threads 15, which nut when tightened draws the stem down into the hole, and the conical portion 12, entering the appropriate enlarged or countersunk portion of the hole in the arm, produces a wedge action which binds the parts together tightly. To remove the line-wire, it is simply necessary to loosen the bolt 19 and lift the holder somewhat from the arm, when the halves can be sprung apart and the wire slipped out at the top.

Preferably a brace 20 is used between the post and the arm, and this brace has a hole which receives the stem 14, so that the nut 19 clamps the brace to the arm. The other end of the brace is clamped against the post by a bolt 21, which extends through the post, and thus serves to clamp a brace on each side.

It is to be noticed that in case the glasses 16 should be broken by stones thrown by small boys or otherwise the wire will not leave the holder, but remains held in the ring. No tie-wires of any kind are needed. New glasses may be inserted by taking off the nut 19 and separating the halves of the ring a sufficient distance to allow the new glass to be slipped in.



A holder constructed in accordance with the invention may be readily used on wooden cross-arms or posts by making the stem longer, according to the thickness of the arm or post, 5 and various modifications may be made within the scope of the invention, which is not limited otherwise than is indicated in the following claim.

What I claim as new, and desire to secure 10 by Letters Patent, is—

The combination with a pole, of a cross-arm

on the pole, braces between the pole and cross-arm, and insulators having stems which extend through the cross-arm and braces, with nuts on said stems binding the parts together. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERTIE B. MOSS.

Witnesses:

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JORDAN NEWLON.