Jan. 9, 1923.

1,441,990.

R. H. MARVIN.

INSULATOR CONNECTOR.

FILED SEPT. 29, 1919.

Fig. 1.

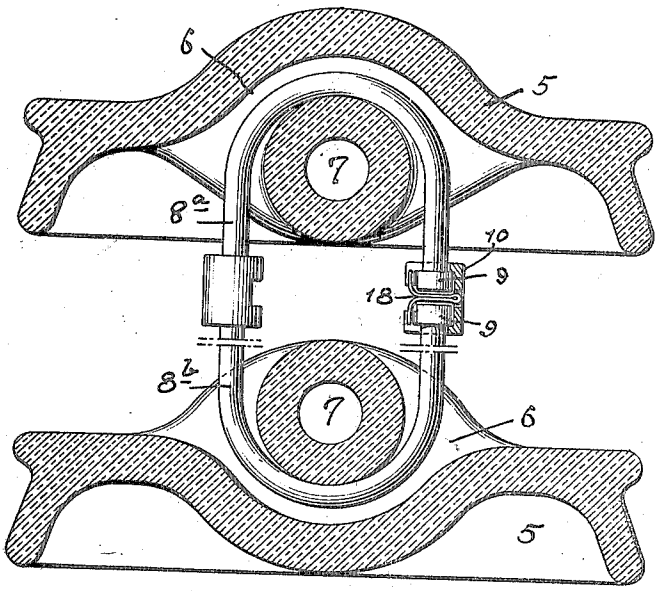


Fig. 2.

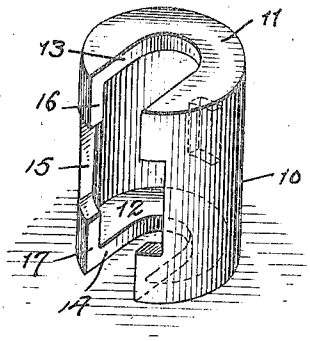
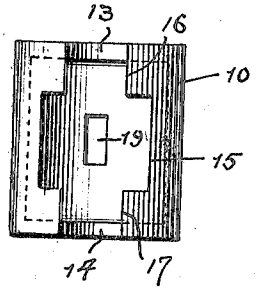


Fig. 3.



Inventor.

RICHARD H. MARVIN

By his Attorneys.

Howson and Howson

Patented Jan. 9, 1923. 1,441,990

UNITED STATES PATENT OFFICE.

RICHARD H. MARVIN, OF EAST LIVERPOOL, OHIO, ASSIGNOR TO THE R. THOMAS & SONS COMPANY, OF EAST LIVERPOOL, OHIO, A CORPORATION OF OHIO.

INSULATOR CONNECTOR.

Application filed September 29, 1919. Serial No. 327,027.

To all whom it may concern:

Be it known that I, RICHARD H. MARVIN, a citizen of the United States of America, and residing at East Liverpool, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Insulator Connectors, of which the following is a specification.

My invention relates to insulator connectors, the object of my invention being to provide a simple device for securing together the links by which insulators of the suspension type are connected together.

In the accompanying drawings—

Fig. 1 is a vertical section through adjacent units of a suspension insulator showing a link connection in which my invention is embodied;

Fig. 2 is a perspective of the connector alone; and

Fig. 3 is a side elevation thereof.

The particular construction of the insulator does not enter into my invention, and I have illustrated the well known disc type 5, the body of which is pierced by passages 6 and 7 lying in planes at right angles to each other, and through which are passed flexible metal links 8^a and 8^b, by which the units are connected. A pair of separate links, one for each insulator unit are here used, but obviously a single link of greater length engaging both insulators could be substituted if preferred. The links are provided with enlarged heads 9 adapted to engage the connector 10, to which my invention particularly relates. As here shown the link heads 9 are circular and the connector 10 is cylindrical, although the particular shape of the heads and connector may be varied if desired.

The connector 10 comprises a tubular body closed at its opposite ends 11 and 12 to form seats for the heads 9 of the links, but slotted at 13 and 14 to accommodate the shanks of the links. A lateral entry opening 15 is formed in one side of the connector to admit the heads 9 to the interior thereof, while the end slots are extended through the side walls at 16 and 17 into communication with the opening 15 to permit the shanks of the link to pass therethrough into the slots 13 and 14 on the assembly of the parts. The opening 15 is preferably of such dimensions that it will permit but one of the link heads 9 to pass therethrough, it being necessary to draw the head first inserted down against the end 11 or 12 of the connector before the other head is passed through the opening 15. This construction minimizes the danger of escape of the heads from the connector should the links become slack.

In order to further reduce the risk of escape of the heads 9 from the connector I may provide a cotter 18 adapted to be passed through the hole 19 in the wall of the connector opposite the entry opening 15. This cotter serves as a retainer and as a filler piece, which prevents the approach of the heads 9 of the links sufficiently close together to enable either to pass through the door 15 after the parts are assembled. Any other suitable filler or obstruction means may be used to prevent the escape of the heads 9 from the connector, or such means may be entirely omitted since the danger of escape from the connector is extremely remote.

The present device is simple to manufacture, readily installed, and efficient in operation. I do not limit my invention to the precise details shown, which may be variously modified without departing from what I claim as my invention.

I claim—

An insulator link connector comprising a flat-ended hollow cylindrical member, the walls of which are of substantially uniform thickness at all points, the side wall and opposite ends of said member being slotted to receive the shanks of associated link elements, said slot in the side wall of said member being notched to form a bay through which the heads of said link elements may be introduced into and seated in the wells afforded by opposite ends of said hollow member, the side wall of said member being apertured at a point opposite said bay to accommodate a filler elements introduced therethrough between the link heads to prevent their accidental escape through the bay.

In testimony whereof I have signed my name to this specification.

RICHARD H. MARVIN.