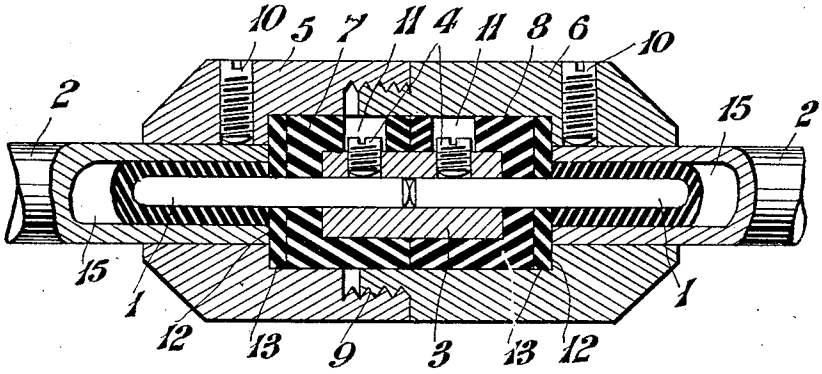
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DOUBLE POLE ELECTRICAL CONNECTER

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UNITED STATES PATENT OFFICE.

CHARLES EDWIN FOSTER, OF LETCHWORTH, ENGLAND.

DOUBLE-POLE ELECTRICAL CONNECTER.

Application filed August 6, 1924, Serial No. 730,331, and in Great Britain September 3, 1923.

This invention relates to double pole electrical connecters and refers more particularly to double pole electrical connecters of the concentric kind.

The object of the invention is the provision of an improved connecter of this kind which will be simple durable and effective and the invention may be said to consist essentially in the combination of an inner connecting element adapted to constitute the connecting means for one arm of the circuit and an outer connecting element annularly surrounding said inner connecting element and adapted to constitute the connecting means for the other arm of the circuit.

The inner connecting element may conveniently take the form of a block connecter having set screws for securing it to the two leads to be connected.

A connecter in accordance with the invention is illustrated in sectional elevation in the accompanying drawing and the same will now be described it being understood that the actual arrangement illustrated is susceptible of various modifications without departing from the scope of the appended claims.

Referring to the drawing the connecter operates by connecting together two rods or wires 1 constituting one limb of the circuit and two tubes 2 constituting the other limb of the circuit and respectively encasing said rods or wires 1. The ends of the rods or wires extend beyond the ends of the tubes which respectively encase them as shown and are connected by being inserted into an axial hole in a cylindrical metallic block 3 where they are secured by means of set screws 4. The adjacent ends of the two tubes are connected by means of cylindrical connecting elements 5 and 6 which, as shown, are axially mounted respectively upon the tubes 2, and are axially recessed at their inner or adjacent ends so as to be able to enclose the aforesaid cylindrical metallic block 3 (together with annular insulating covers 7 and 8 surrounding the same). These connecting elements 5 and 6 are screwed into engagement with one another at 9 and are then secured rigidly to their respective tubes 2 by means of set screws 10.

The annular insulating covers 7 and 8 aforementioned which surround the cylindrical block 3 respectively consist as shown of two equal pieces of pill-box formation fitting over the ends of said block and abutting together at their annular ends so as to constitute a complete closely fitting enclosure for the block 3. These pieces will of course have to be slid on the ends of the wires or rods before the same are connected in said block, and they are therefore provided with holes 11 through which the set screws 4 may be inserted and screwed up. Between the remote ends of said insulating covers 7 and 8 and the respective seatings 12 provided by the ends of the axial recesses in the cylindrical connecting elements 5 and 6 and also the ends of the tubes 2, resilient washers 13 are inserted (for instance of india-rubber) by means of which the annular ends of the insulating covers 7 and 8 are firmly held together when the connecter is screwed up.

Suitable insulating sleeves 15 are of course provided for insulating the wires or rods 1 from the respective tubes 2.

What I claim and desire to secure by Letters Patent is:—

A double pole connecter for connecting, on the one hand, two central conductors adapted on connection to establish one arm of the circuit and, on the other hand, two tubes respectively encasing said central conductors and adapted on connection to establish the other arm of the circuit, said connecter comprising a cylindrical connecting block adapted to be connected, by means of set screws, concentrically between ends of said central conductors which extend beyond the ends of the respective tubes, two cup shape connecting members adapted to be secured, by means of set screws, concentrically to said ends of said tubes and to be secured together adjacent their annular ends, two cup shape insulating elements adapted to fit over the ends of said connecting block and within said connecting members, and resilient washers located between the two external ends of said insulating elements and the internal ends of said connecting members for maintaining said insulating elements with their annular ends pressed together.

In witness whereof I affix my signature.

CHARLES EDWIN FOSTER.