Aug. 3, 1926. 1,594,927

H. P. CHANDLER

CONDUCTOR SUPPORT

Filed Sept. 23, 1925

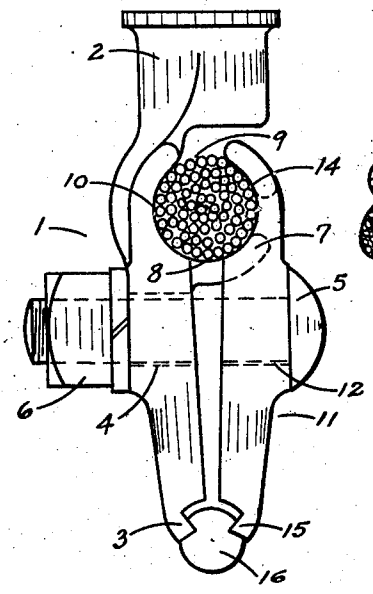

Fig.-2

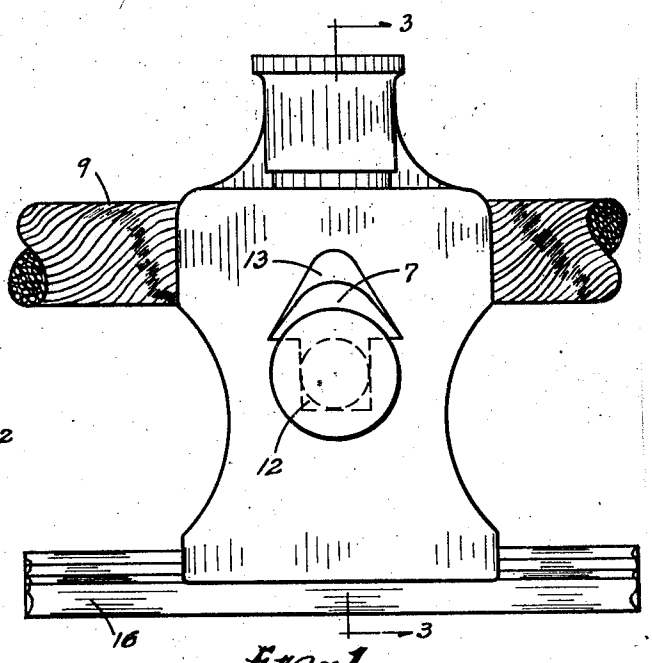

Fig.-1

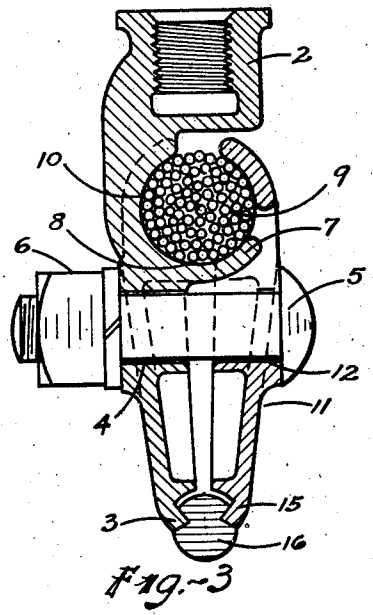

Fig.-3

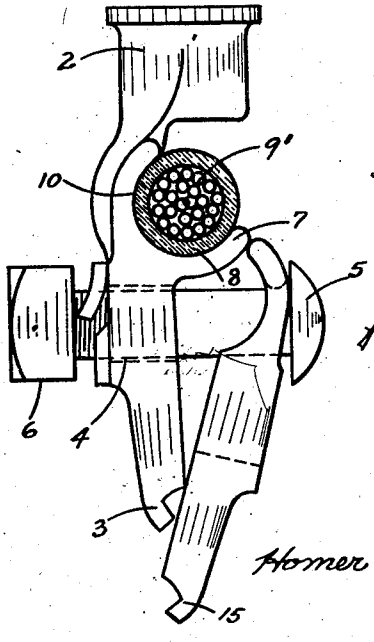

Fig.-4

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UNITED STATES PATENT OFFICE.

HOMER P. CHANDLER, OF MANSFIELD, OHIO, ASSIGNOR TO THE OHIO BRASS COMPANY, OF MANSFIELD, OHIO, A CORPORATION OF NEW JERSEY.

CONDUCTOR SUPPORT.

Application filed September 23, 1925. Serial No. 58,076.

My invention relates to a supporting device for electric conductors and has particular reference to a device for supporting a trolley wire and simultaneously therewith a cable known as a feeder conductor if it is electrically connected to the trolley conductor through the medium of the supporting device or otherwise, but which may be insulated from the supporting device and trolley wire if desired.

One of the objects of my invention is to provide a device which can be secured to an overhead support and which will support the conductor independently of the clamping means or trolley wire and for securing the conductor and trolley wire in position and which is or is not electrically connected with the trolley wire when the trolley conductor is clamped into position depending whether the conductor is insulated or not.

My invention resides in the new and novel construction, combination and relation of the various parts hereinafter fully described and shown in the drawing.

In the drawing:

Fig. 1 is a side view of my invention in combination with a trolley wire and a feeder conductor.

Fig. 2 is an end view of Fig. 1.

Fig. 3 is a view in partial section taken on the line 3—3 of Fig. 1.

Fig. 4 is an end view of my invention in which the clamping members are shown in a position to receive the conductor which is shown as insulated from its support.

In the preferred embodiment of my invention I employ a body member 1 which is provided with a boss 2 and which is usually internally threaded to receive the threaded stud of an overhead support. The lower end of the body member 1 is provided with a lip 3 to engage one of the side grooves in a trolley wire. This lip 3, however, may be arranged to receive a perfectly round sectioned conductor or trolley wire if desired. The body member 1 is also provided with a transverse passage 4 to receive a transverse bolt 5 and nut 6 thereon.

Projecting from the inner face of the member 1 is a lip 7 which forms a curved seat 8 to receive and support the conductor 9 or 9′ which is insulated (Fig. 4).

The clamping member 1 is further provided with a longitudinal groove 10 the surface of which coincides with the seat 8 of the lug 7 to provide a further means of receiving and gripping the conductor 9 or 9′.

The support is also provided with a clamping member 11 which has a transverse opening therein and having one portion 12 of the opening to register with the opening 4 in the member 1 for the reception of the bolt 5. The transverse opening is also provided with a portion 13 into which projects the lug 7. The clamping member 11 is provided with a longitudinal groove 14 having a circular seat and which cooperates with the groove 10 to receive and clamp the conductor 9 or 9′ and there is also provided at the lower end of the member 11 a lip 15 to engage a groove in one side of the trolley wire 16.

The installation and operation of my invention consists usually in first installing the member 1 upon a support by either rotating the device into engagement with a hanger or support already installed or rotating the hanger or support into engagement with the member 1 and then positioning the hanger or support in place. The nut 6 is then loosened up but not entirely removed from the bolt 5 and this will permit the clamping member 11 to be moved away from the member 1 and lowered as shown in Fig. 4 thereby leaving the seats 8 and 10 free to receive the conductor 9 or 9′. After the conductor 9 or 9′ has been positioned as shown in Fig. 4, the clamping member 11 is restored to its normal position and the trolley wire 16 is then positioned between the lips 3 and 15 and the bolt and nut 5 and 6 operated to draw the clamping member 11 into engagement with the conductor 9 or 9′ and trolley wire 16 and hold them positioned after which a wrench may be applied to the nut 6 and the parts drawn into secure clamping engagement.

It will be noted that prior to the installation of the trolley wire 16 the conductor 9 or 9′ may be positioned independent of the trolley wire 16, therefore, when the

operator is installing the device in connection with the two conductors it is only necessary for him to consider one conductor at a time, that is, he first positions the conductor 9 or 9′ in place and he is then free to give attention only to the positioning of the trolley wire 16 and it will be readily understood that this is a considerable advantage when installing a pair of conductors or wires.

It is usual in installing conductors of this character to stretch the conductors out for a considerable distance and then to draw them into a reasonably taut condition and where my invention is employed it assists in supporting and positioning the conductor 9 or 9′ independent of the trolley wire 16 and if the conductor 9 or 9′ is of considerable size it permits the conductor to be drawn much tighter before the clamping member 11 is drawn into position as it is common practice to place the supporting devices quite frequently along the length of the conductor.

My invention being made of metal acts as a means of electrically connecting the conductors 9 and 16 and, therefore, if the conductor 9 is the one connected to the source of power and since it is not insulated, it acts as a feeder cable to the trolley 16 through the medium of my improved support.

If desired the conductor 9′ may be bare and a short length of insulating material surround the conductor when the support is used thereby insulating the conductor from the support as effectively as though the conductor were insulated throughout its length, and this short length of insulating material may be a short length of rubber hose, or a tube of porcelain, mica, fibre, etc., all well known to those skilled in the art.

There are other modifications which will suggest themselves to those skilled in the art, but I do not wish to be limited otherwise than by my claims.

1. A supporting device for a pair of conductors comprising a body member and means to secure it to a support, means on the body member to support a conductor, means on the body member to engage a second conductor and clamping means to engage both conductors and cooperate with the body member to engage the two conductors and clamp them in position against relative movement.

2. A supporting and electrically connecting device for two spaced conductors comprising a pair of clamping members to engage and grip the conductors and means on one member to support one conductor independent of the other conductor prior to the clamping of the two conductors.

3. A supporting device for a pair of spaced conductors comprising a pair of separate cooperating clamping members to receive and clamp the conductors, one of the members having means to support one of the conductors independent of the other clamping member and means rotatably adjustable in a transverse direction to move the members into clamping engagement with both conductors.

4. A supporting and electrically connecting device for a pair of spaced conductors comprising a pair of clamping members to engage and grip the conductors, means on one member to support one conductor independent of the other member and means to move the clamping members into clamping engagement with the conductors.

5. A pair of clamping members adapted to engage and clamp a pair of spaced conductors, means interposed between the conductors to hold the members in clamping position and means on one member to support one conductor independent of the other member.

6. A support for a pair of conductors comprising clamping means to engage the conductors and hold them in fixed relation and means to support one conductor prior to the two conductors being clamped in fixed relation.

7. A support for a pair of conductors comprising a pair of clamping members to engage the conductors and hold them in fixed relation, means to support one conductor independent of one member and means to permit one member to be moved out of engagement with the one conductor and the said conductor removed from the device without disassembling the members.

8. A hanger for a plurality of conductors comprising a pair of clamping members, a support secured to one member, means on one member projecting towards the other member to receive and support one of the conductors independent of the other member and means to move the members into clamping engagement with the conductors.

9. A hanger for a plurality of conductors comprising a pair of clamping members having registering grooves to receive the conductors, means to move the members into clamping engagement with the conductors and means on one member to permit it to be moved with its grooves out of registration with the grooves of the other member.

10. A hanger for a plurality of conductors comprising a pair of clamping members having registering grooves to receive the conductors, means to move the members into clamping engagement with the conductors and means on one member to permit it to be moved with its grooves out of registration with the grooves of the other member and without disturbing the relation of one conductor to the other member.

11. A support for a pair of conductors comprising clamping means to engage the conductors and hold them in fixed relation, means to support one conductor prior to two conductors being clamped and means to insulate one conductor from the clamping means.

12. A support for a pair of conductors comprising a pair of clamping members to clamp the conductors in fixed relation and means to support one conductor independent of the other conductor.

In testimony whereof I affix my signature.

HOMER P. CHANDLER.