April 27, 1937. L. M. STINCHCOMB 2,078,424

CONDUCTOR SUPPORT

Filed Feb. 6, 1936

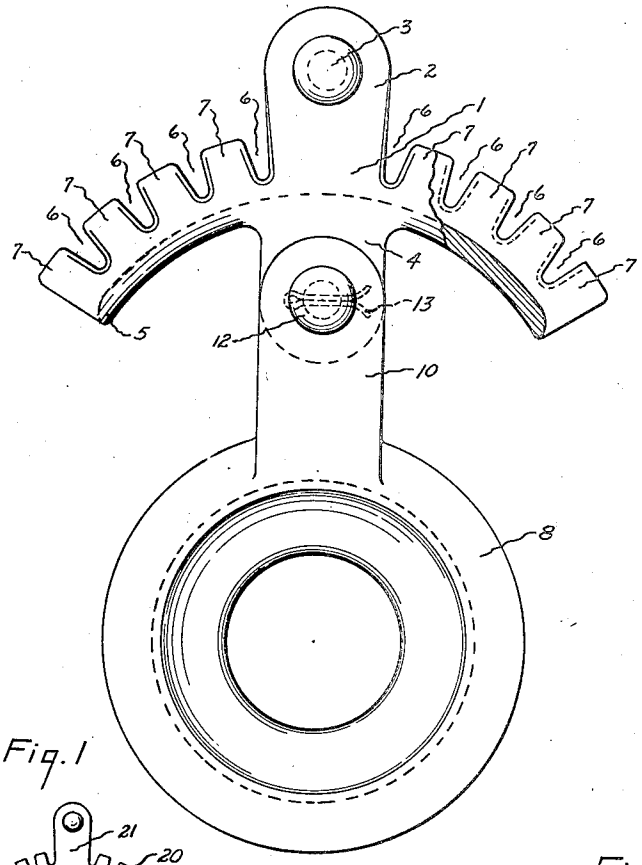

Fig. 1

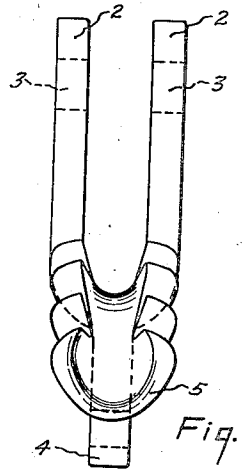

Fig. 2

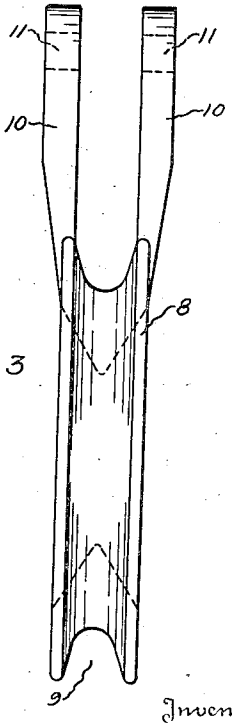

Fig. 3

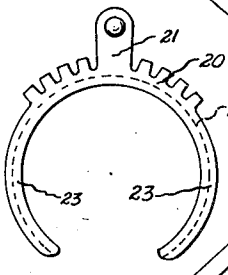

Fig. 5

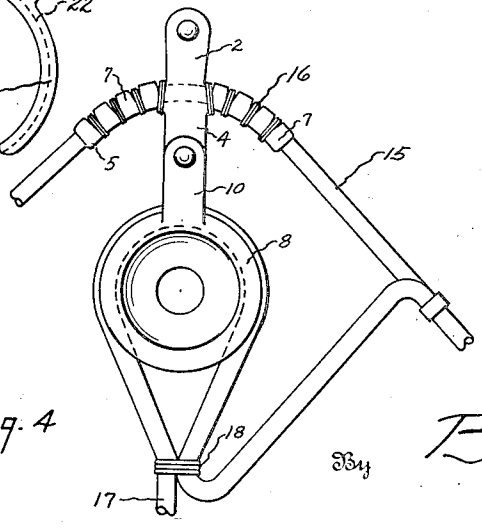

Fig. 4

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CONDUCTOR SUPPORT

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6 Claims. (Cl. 248—63)

This invention relates to supports for electrical conductors and particularly to such fittings for use in stringing electric power lines in rural districts.

When stringing an electrical conductor along a country road, for instance, which has a bend, care must be taken to avoid too sharp a bend in the conductor, particularly when aluminum conductors, which are relatively brittle, are used, to avoid damage to the conductor. Furthermore when it is necessary to tap an intersecting conductor onto the through one some device must be provided to prevent the pull exerted by the intersecting conductor from being applied directly to the through one.

According to the present invention a single device is provided to perform both functions so that only one connection to the pole is necessary. In general the device, according to the present invention, for performing these functions comprises a separate corner fitting for guiding the through conductor around the bend, the conductor being supported with a bend of a non-damaging radius and a separate end fitting detachably connected to the first fitting for bearing the pull exerted by the intersecting conductor.

An object of the invention is to provide detachable end and corner fittings as described above.

Another object is to provide the corner fitting so that a conductor may pass through it at any angle from 180 to 90 degrees or less, as desired.

A further object of the invention is to design both the corner and the end fittings so that they may be separately used.

These and other objects will be apparent from the following specification when taken with the accompanying drawing in which:

Fig. 1 is a side view of the assembled end and corner fittings having a portion of the corner fitting taken away,

Fig. 2 is an edge of the corner fitting,

Fig. 3 is an edge view of the end fitting,

Fig. 4 is a side view of the invention showing a connected through conductor and intersecting conductor supported by the assembled corner and end fittings, and

Fig. 5 is an elevation of a modification wherein the necessity of a separate corner fitting and end fitting is dispensed with.

Referring particularly to the drawing the corner fitting 1 is provided with supporting ears 2 having opposed openings 3 and an opposed connecting eye 4. Intermediate the ears 2 and the eye 4 is disposed a curved wire supporting member 5 somewhat in the shape of a channel having through the sides thereof a plurality of transverse slots 6 defining outwardly extending conductor retaining projections 7, the slots 6 being for the purpose of receiving wrapping for binding a supported wire in the member 5. The conductor receiving member 5 is preferably arcuate in shape and in length equal to a quarter of a circle. It should be observed that the corner fitting 1 may support a wire going straight through or one having any bend up to 90 degrees. Each end of the wire supporting member 5 is belled out to provide a slightly enlarged entrance to prevent chafing.

Supported from the connecting eye 4 is an end fitting 8 generally annular in form and having a peripheral channel 9. Extending in one direction from opposed sides of the peripheral channel 9 are ears 10 being provided with opposed pin receiving openings 11. The end fitting 8 is connected to the corner fitting 1 by moving the ears 10 into overlapping relation with the connecting eye 4, aligning the pin receiving openings 11 with the eye 4 and inserting therethrough a pin 12 which may be retained against removal by a cotter pin 13, for instance.

In operation, as disclosed in Fig. 4 the straight through wire or conductor 15 is disposed about the corner fitting 1 at an angle corresponding to the bend in the road along which the wire or conductor is being strung and is securely bound with a wrapping 16. It will be obvious that the curvature of the corner fitting determines the curvature of the conductor 15. Accordingly the curvature of the corner fitting should be sufficiently great to prevent damage to the conductor for which it is to be used. The intersecting conductor 17 is looped about the end fitting 8, bound to itself by a wrapping 18 and the free end secured in any suitable manner to the through conductor 15. Thus the pull exerted by the intersecting conductor 17 is transferred through the end fitting 8 to the ears 2. If desired either the end fitting 8 or the corner fitting 1 may be separately used.

In Fig. 5 a modification is disclosed wherein the end fitting 8 may be dispensed with without dispensing with its function. In this modification only a corner fitting 20 is necessary. The corner fitting 20 is provided with supporting ears 21 corresponding to the supporting ears 2 and a through support 22 corresponding to the through conductor support 5 of Fig. 1. In order to provide a support for the intersecting conductor the corner fitting 20 includes extensions 23 from

the through conductor support 22. The extensions 23 preferably are arcuate in form having the same radius and center of curvature as the through conductor support 22 and are of sufficient length to prevent any sharp bends in the intersecting conductor when it is looped around the corner fitting 20 and bound against itself in a manner illustrated in Fig. 4. The width of the support disclosed in Fig. 5 may be the same as that disclosed in the embodiment of Fig. 1 but preferably it is sufficiently wide to receive the through conductor and intersecting conductor side by side.

While the invention has been described as particularly adapted for carrying conductors in rural use it is not necessarily so limited and it is intended that the invention be used wherever feasible and for whatever purpose desired.

While the foregoing description describes a specific embodiment it is illustrative of the invention and, therefore, I do not wish to be limited except by the scope of the following claims.

I claim:

1. A device of the character described comprising a corner fitting for supporting and determining a bend in a through conductor, said corner fitting having a curved conductor receiving member, supporting means for said member extending outwardly from the midportion thereof, spaced retaining portions extending from said member for restraining lateral movement of said conductor and for receiving therebetween a conductor securing binding, an eye extending from said member at a point opposite said supporting means and in the opposite direction from said supporting means, and an end fitting connected to said eye having a U-shaped channel portion about which an intersecting conductor may be looped and anchored.

2. A device of the character described comprising a corner fitting for supporting a through conductor, said fitting having a curved bend determining portion, a plurality of spaced conductor retaining portions extending from said bend determining portion, and supporting means for said fitting, said bend determining portion being characterized by the fact that a conductor supported thereby may be secured thereto while having any one of a plurality of different bends.

3. A device of the character described comprising a corner fitting for supporting a through conductor, said fitting having a curved channeled bend determining portion, the channel in said portion being for the purpose of receiving the conductor, means defined by said channel sides for receiving a conductor securing binding, and supporting means for said fitting, said curved channeled bend determining portion being characterized by the fact that a conductor supported thereby may be secured thereto by a binding disposed in said first named means while having any one of a plurality of different bends.

4. A device of the character described comprising means for supporting a through conductor, said means having a bend determining portion, a plurality of spaced conductor retaining portions extending from said bend determining portion, said bend determining portion being characterized by the fact that a conductor supported there- be may be secured thereto while having any one of a plurality of different bends, and means including said bend determining portion for anchoring an intersecting conductor end.

5. A device of the character described comprising means for supporting a through conductor, said means having a bend determining portion, a plurality of spaced conductor retaining portions extending from said bend determining portion, said bend determining portion being characterized by the fact that a conductor supported thereby may be secured thereto while having any one of a plurality of different bends, and means structurally associated with said first named means for anchoring an intersecting conductor end.

6. A device of the character described comprising channeled means for supporting a through conductor, a support for said means between the ends thereof, said means including curved conductor bend determining portions on each side of said support, and means defined by said first named means for receiving a conductor securing binding, said first named means being characterized by the fact that a conductor supported thereby may be bound thereto by a binding in said second named means while having any one of a plurality of different bends.

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