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TAP-ISOLATING CONDUCTOR SUPPORT

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Fig. 1

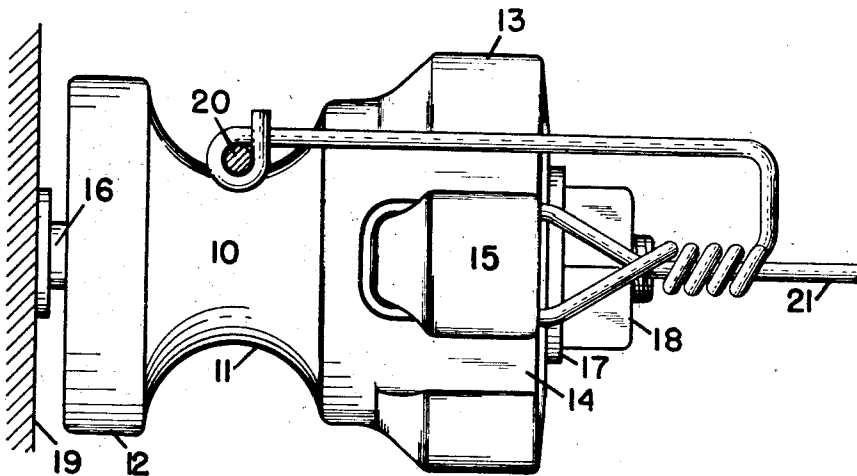
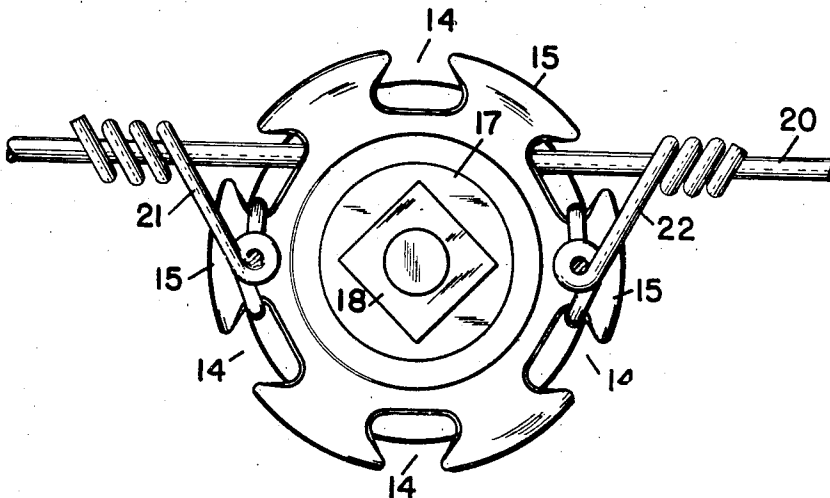


Fig. 2



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TAP-ISOLATING CONDUCTOR SUPPORT

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5 Claims. (Cl. 174-174)

This invention relates generally to conductor supports; more particularly to an article adapted for carrying an overhead line conductor together with a plurality of other conductors which may tap the line conductor.

Among the objects of the invention may be noted the provision of a unitary support such that a plurality of tap conductors may be individually deadended at the end of the support for connection as desired to a line conductor resting upon another portion of the support; the provision of means for isolating each of the tap conductors from the others and also from the line conductor without removing or otherwise disturbing any of the fastened portions of the tap conductors; and the provision of a simple and economical article adapted for use in the manner described. Other objects will appear as the description proceeds.

The invention resides in the novel construction and form of the article as exemplified in the description to follow, and the scope of the invention will be pointed out in the appended claims.

In the drawing, Fig. 1 is a side elevational view of the device in the service position; Fig. 2 is a similar front elevational view.

Horizontally positioned spools of insulating material have been, and are currently, widely used for supporting secondary or low voltage conductors in vertical configuration on wood poles. The sole purpose of installing such secondary conductors is to provide a circuit to supply a user of electricity. Since the line of poles carrying the conductors in the usual situation passes the user on one side or the other, it is necessary to provide means for supporting service conductors extending to one side or the other from the pole to the building housing the user. Heretofore separate supports have been used on the poles for this purpose, and if several users are supplied from one pole, the service conductors all have been wrapped around a single support. This construction makes difficult the disconnection of a single user of the group, in addition to requiring separate supports for the service conductors. The manner in which the present invention overcomes the above-mentioned difficulties will be apparent from the following description.

Referring in detail to the drawing, a structure fragmentarily shown at 19, which may be a wood pole, has attached thereto a mounting bolt 16, which also extends through an axial opening in the spool-shaped body 10, the latter being fastened to the longitudinally extending portion

of the bolt 16 by means of the cooperating washer 17 and the nut 18.

The vertically positioned, peripherally and circumferentially extending groove 11 provides a seat for a line conductor 20 between the vertically positioned flanges 12 and 13, which are provided adjacent the respective ends of the longitudinally extending body 10. The flange 13 is preferably greater in thickness than the flange 12, and is provided with a plurality of peripherally spaced grooves 14, which extend longitudinally entirely through the flange 13. The bottom or base of each of the grooves 14 is preferably undercut so that a taper is provided from the bottom to the entrance of the grooves, and the depth of each of the grooves is preferably not more than that of the peripheral groove 11.

As a result of the grooves 14 being constructed and arranged as described, a plurality of outwardly extending, inwardly tapering portions 15 of the flange 13 are formed, each individually providing a portion of the support for dead-ending a service conductor extending longitudinally away from the support. In the embodiment illustrated, two of the portions 15 are shown looped respectively by the service conductors 21 and 22.

It may be noted that six such conductors may be individually attached to the support as illustrated, and that each may be individually connected at spaced points to the line conductor 20. Following such an installation, any number of the service conductors may be disconnected from the line conductor 20 without disturbing the remaining conductors, since all of the service conductors are individually isolated when disconnected from the line conductor 20. It may also be noted that no additional supports are necessary in the structure 19 to accommodate the service conductors.

Embodiments of the invention other than the specific construction illustrated will be readily apparent, and it is intended that the drawing and description herein is to be regarded as illustrative rather than limiting.

I claim, as my invention:

1. A conductor support comprising a longitudinally extending body having an axial opening therethrough adapted for receiving a mounting bolt, a substantially vertical peripheral groove between the ends of said body whereby substantially vertically extending flanges are provided adjacent the respective ends thereof, and a plurality of peripherally spaced grooves extending longitudinally through one of said flanges in substantially parallel relationship with one another,

the depth of said grooves being less than that of said peripheral groove and each of said grooves being undercut so that the bottom thereof is larger than the entrance thereto, to provide a plurality of outwardly extending portions each of which is adapted for retaining on said support a conductor looped around one of said portions in isolated relationship with respect to the other outwardly extending portions.

2. A conductor support comprising a longitudinally extending body having an axial opening therethrough, a substantially vertical peripheral groove between the ends of said body whereby a narrow flange is provided adjacent one end of said body and a relatively longitudinally thick flange is provided adjacent the other end of said body, and a plurality of spaced substantially parallel outwardly tapering grooves extending longitudinally through the thicker flange, whereby a plurality of outwardly extending portions are formed between adjacent grooves, said outwardly extending portions sloping longitudinally inwardly toward said peripheral groove, the thickness of said outwardly extending portions being substantially greater than the depth of the adjacent grooves.

3. A conductor support comprising a longitudinally extending body having an axial opening therethrough, a peripheral groove positioned between the ends of said body and providing a narrow flange adjacent one end of said body and a relatively longitudinally thick flange at the other end of said body, and a plurality of peripherally spaced outwardly tapering grooves extending longitudinally through the thicker flange, to provide

a plurality of peripherally spaced inwardly tapering portions, the thickness of said thicker flange being substantially greater than the depth of said grooves.

5 4. A conductor support comprising a spool-shaped body having flanges which differ in thickness, and a plurality of peripherally spaced grooves extending longitudinally through the thicker of said flanges, each of said grooves tapering outwardly from the bottom surface thereof, the depth of said grooves being substantially less than the thickness of the grooved flange.

10 5. A conductor support comprising in a single piece a longitudinally extending body having an axially extending opening therein, a peripherally and inwardly extending groove between the ends of said body, peripherally and outwardly extending flanges at the respective ends of said body, said flanges merging with said inwardly extending groove, and a plurality of peripherally spaced grooves formed in one of said flanges whereby a plurality of outwardly extending portions are formed on said flange between the respective adjacent grooves, said grooves extending inwardly from the periphery of and longitudinally entirely through said one of said flanges and inwardly to a depth less than that of said first-mentioned groove, each of said grooves tapering outwardly from the bottom surface thereof, and each of said outwardly extending portions tapering inwardly along curved sides from the outer surface thereof to provide an individual isolated supporting portion for a conductor looped around the outwardly extending portion.

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