Dec. 28, 1937. O. S. FLATH 2,103,773

PARKWAY CABLE OUTLET TOP MEMBER

Filed March 9, 1935

Fig. 1.

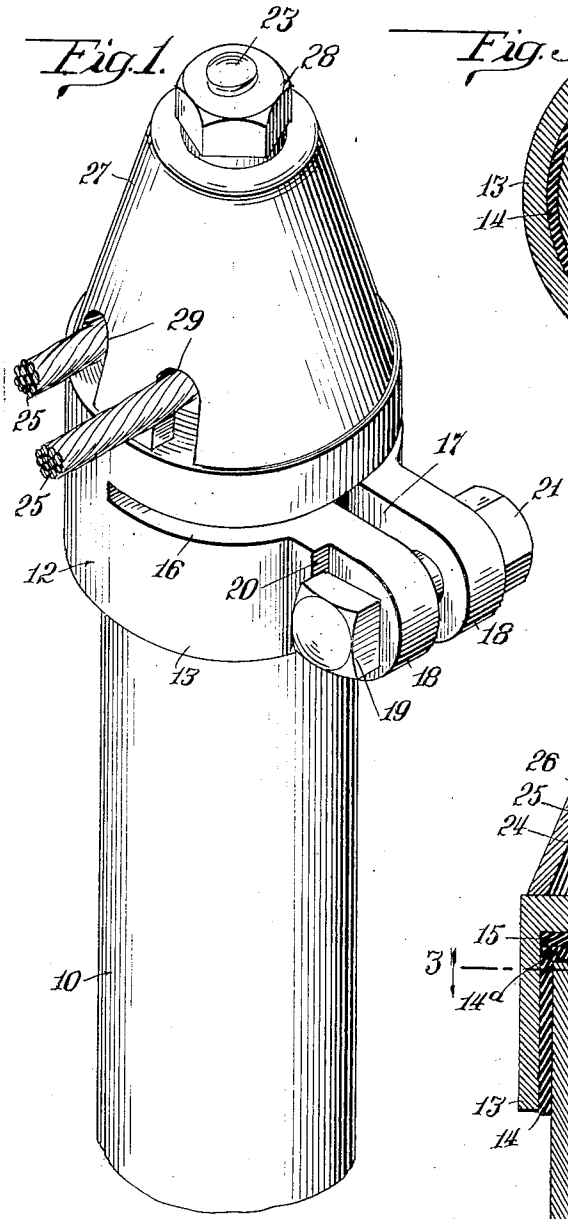


Fig. 3

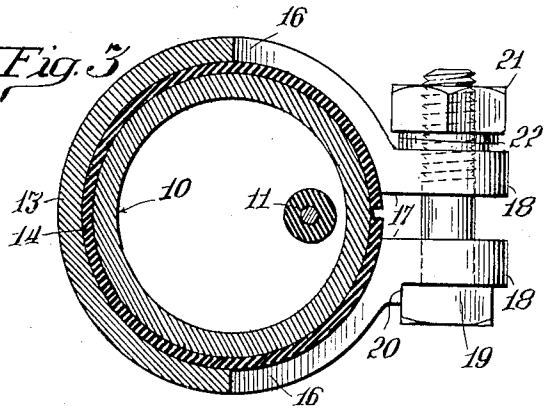
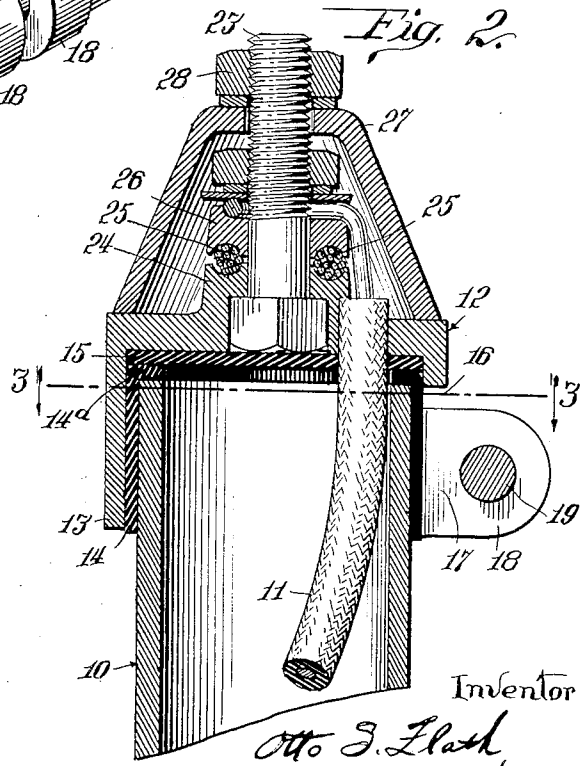


Fig. 2.



Witnesses
Milton Senour
H. A. Elwell.

Inventor
Otto S. Flath,
By George Heidenreich
Attorney

Patented Dec. 28, 1937 2,103,773

UNITED STATES PATENT OFFICE

2,103,773

PARKWAY CABLE OUTLET TOP MEMBER

Otto S. Flath, Chicago, Ill.

Application March 9, 1935, Serial No. 10,166

1 Claim. (Cl. 247—1)

My invention relates to a parkway cable outlet used in connection with the current conducting cables employed by railroads along the right-of-way, with the outlet adapted to receive the end of a cable coming from some distant point and to effect electrical connection or relation between the cable wire and the wires which lead to the track and referred to as the track wires.

The invention has for one of its objects the provision of a conductor plate or member adapted to be arranged on top of a suitable hollow support or stand and formed so as to effect a firm gripping relation therewith; the conductor plate or member in addition to having means whereby the cable wire and track wires are secured in place and conducting relation provided is also adapted to receive a suitable top cap or hood for properly shielding the cable and track wire holding elements and conductor portion of the plate or member.

The invention generally stated comprises, in conjunction with a suitable supporting element or hollow stand, a suitable top plate adapted to fit the upper end of the hollow stand and provided with a contractible portion adapted to effect gripping relation with the upper end of the hollow stand; said top plate being provided with cable wire and track wire clamping means whereby a conducting relation between these wires may be established, while the top plate is also adapted to properly hold suitable insulation between the plate and the hollow stand.

The aforementioned objects, as well as others, will be readily comprehended from the following detailed description of the exemplification of the invention disclosed in the accompanying drawing, wherein:

Figure 1 is a perspective view of the upper end of a hollow stand and my improved top plate secured thereto, together with portions of a pair of track wires.

Figure 2 is a vertical sectional view of the upper end of the stand with my improved top plate or member.

Figure 3 is a cross sectional view taken substantially on the line 3—3 of Figure 2.

My invention relates to the top or conductor plate construction used in connection with a well known type of support or stand of tubular construction as shown at 10.

The support is usually buried in the ground and the lower end supported in a suitable stand or support so formed that the parkway cable leading from a battery well or house may be led upwardly through the stand 10 as shown at 11 in Figure 2.

The top of the tubular stand 10 is provided with an outlet head or wire holding member 12 which is provided with an annular skirt or depending flange 13 adapted to encircle the upper end of the tubular stand 10, see Figure 2.

It is essential to firmly secure the top plate or member to the stand against accidental removal, while at the same time permit the removal of the member 12 when occasion requires.

The skirt or depending flange defines a circle sufficiently large to receive the upper end of the tubular stand 10 and to fit down over the upper end of the stand and to also enclose a suitable insulating collar or element 14 between the skirt or flange and the tubular stand 10. The depth of the skirt or flange 13 is also sufficient to permit insertion of an insulating disc or element 15 between the plate portion 12 and the upper edge of the stand 10 and still afford a sufficient pipe or stand encircling portion to enable a firm clamping engagement to be effected.

In order to permit a firm clamping engagement to be obtained and to compensate for slight variations in the size of the tubular stand or pipe section 10, the skirt portion 13 of the top member 12, at a slight distance beneath the upper or plate portion of the member 12, is provided with the circumferentially disposed cutaway portion or slit 16, extending almost half way around the skirt portion 13 of the member 12, as shown in Figure 3.

The skirt portion 13 is also slit vertically at 17; the slit 17 extending from the circumferential slit 16 down to the perimeter of the skirt; and the skirt on opposite sides of the vertical slit 17 and beneath the circumferential slit 16 is provided with the laterally disposed lobes 18, 18.

The lobes 18, 18 are provided with registering holes to receive the bolt 19. The skirt portion 13, adjacent one of the lobes 18 is shown provided with a shoulder 20 which is so arranged relative to the bolt-hole in the lobe that one side of the bolt-head will be disposed adjacent to the shoulder 20 and thus rotation of the bolt 19 will be prevented. The opposite end of the bolt is provided with a nut 21 and nut locking washer at 22; the split skirt or flange being drawn together by screwing up of nut 21.

It is apparent that a greater restriction or drawing in of the split skirt can be accomplished by reason of the additional circumferentially disposed split or kerf 16 than would otherwise be possible and hence the top member adapted to

greater variations in the tubular stand 10 and firmer clamping relation obtained.

The insulation member or disc 15, as shown in Figure 2, extends throughout the bottom of the member 12 and initially holds the assembly bolt 23 in place before the wire holding nuts and washers have been applied thereto. This bolt 23 extends upwardly through a central opening in the member 12, with the head of the bolt disposed in the socket about the opening in the member. The upper face of the member 12 is shown with a grooved boss portion 24 and the ends of two track wires 25, 25 clamped in the grooves by a conductor element 26; and on top of this element the end of the parkway cable 11 is clamped in place by the washer and nut.

Disposed over this assembly is a hood or cap 27 which is held in place by the nut 28; the cap 27 on one side is shown provided with a pair of openings 29 for passage of the track wires 25 therethrough.

The construction of the upper or wire holding portion of the member 12, and the arrangement of the assembly bolt 23 with the cap 27 are similar to the same elements disposed in my previous application Serial Number 687,445 which has matured into Patent No. 2,041,055 granted May 19, 1936; but the construction of the stand-engaging portion of member 12 differs from those disclosed in said application.

My present member 12, by reason of the intersecting kerfs or slits, namely a circumferentially disposed kerf and a vertically arranged kerf extending downwardly from the circumferentially disposed kerf to the lower perimeter of the member, merely requires one pair of lobes 18, thus not only reducing the expense of manufacture but presenting a structure adapted to adjust itself to greater variations in the diameter of the stand and which will effect a greater binding relation with the stand through the use of a single bolt and nut.

I also prefer to form the single piece or cylindrical insulating element 14 at its upper end with an inturned flange 14a adapted to overlap the upper end of the stand 10 as shown in Figure 2. This flange portion will position and hold the insulating element 14 in place during assembly of the outlet structure; the flange will hold the element 14 in place while the top member 12 is telescoped over the end of the stand. In order to obviate undue buckling of the insulating element 14, it is slit on one side as shown in Figure 3 and the slit preferably arranged coincident with the slit 17 in the skirt of the member 12.

It is evident that the insulating disc 15 instead of being placed on top of the flange 14a of element 14 as shown in Figure 2 may be placed on the upper end of the stand 10 and the element 14 then put in place with its flange on top of the disc 15. That is to say, these elements 14 and 15 may be arranged in either of the two ways mentioned without in any way effecting their insulating properties.

As the upper end of the stand and the top plate are constantly exposed along a railroad track where contact with the exposed top plate may frequently occur, it is quite essential to provide means whereby a firm gripping relation between the top plate and stand may be provided so that disruption of the electrical connections will be prevented, which at the same time provide a firm relation which may be easily released should occasion require.

The construction shown is believed to be the best embodiment of the invention whereby the aforementioned conditions can be accomplished, although slight changes in the upper face of the top plate may be made without departing from the spirit of my invention.

What I claim is:

In a parkway cable outlet involving a tubular stand, a top member composed of a top plate portion coextensive with the top of said tubular stand so as to cover the top of the stand and having a depending skirt portion integral with the entire perimeter of the top plate and disposed about the upper end of the tubular stand, the top plate being provided with a bolt receiving opening and with a cable-wire receiving hole, the depending skirt portion on one side and at a distance beneath the top plate portion being provided with a circumferentially disposed kerf extending substantially half way about the skirt portion, a vertically disposed kerf extending downwardly from said circumferentially disposed kerf, intermediate of the ends thereof, to the lower perimeter of the skirt, a pair of outwardly extending apertured lobes on opposite sides of the vertically disposed kerf, and means disposed through said lobes and adapted to force said lobes toward each other and thereby contract the skirt portion beneath the circumferentially disposed kerf into clamping relation with the tubular stand.

OTTO S. FLATH.