April 12, 1938. G. GORT 2,113,787

PARKWAY CABLE OUTLET

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Fig. 3

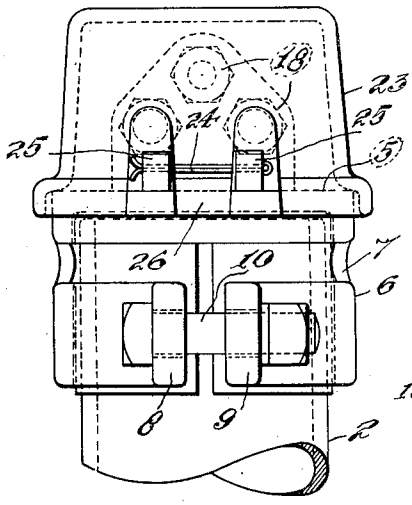


Fig. 1

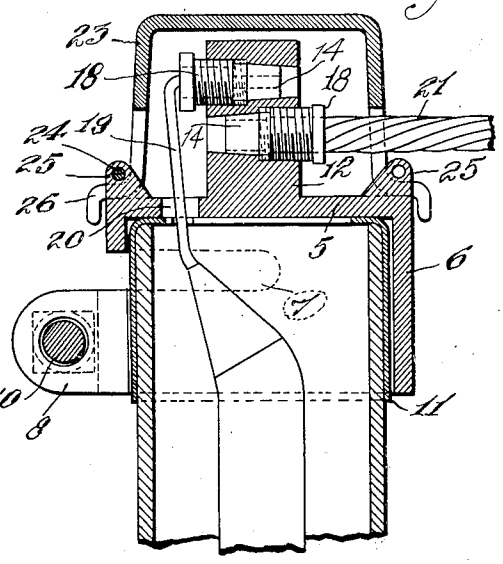
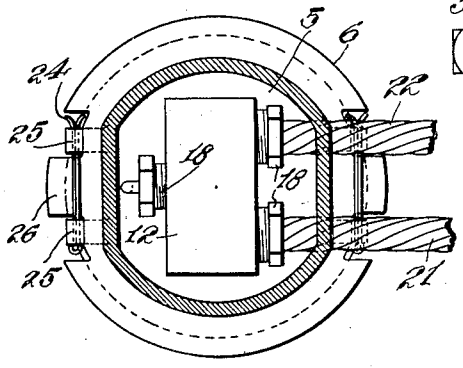
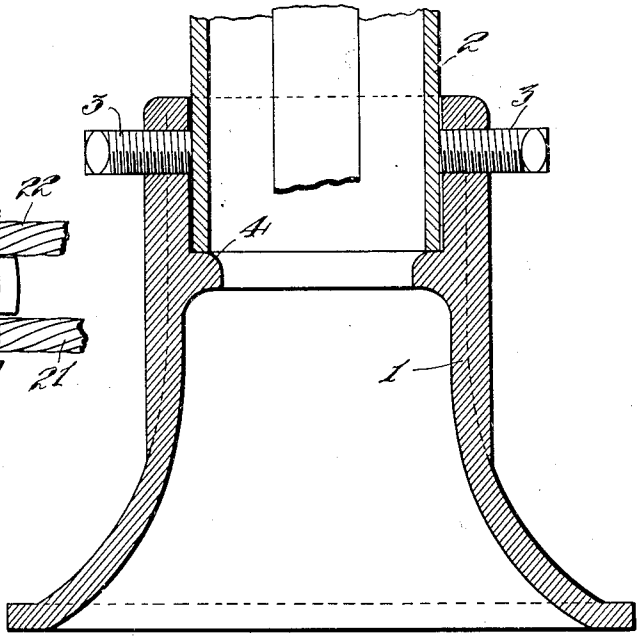


Fig. 2





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Fig. 4

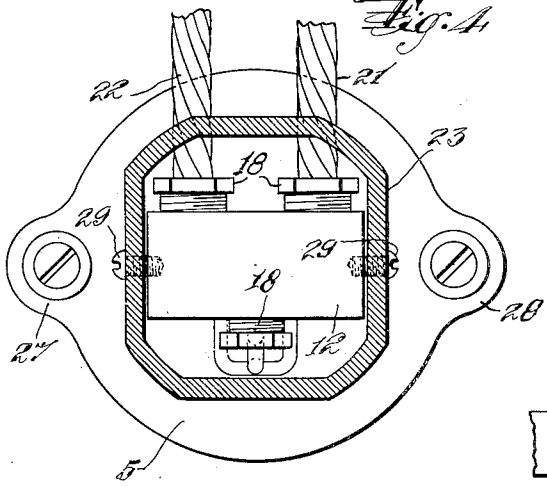


Fig. 6

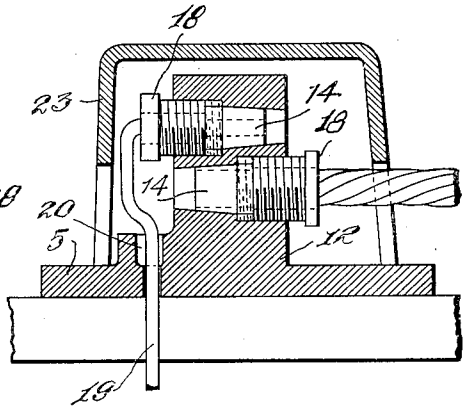


Fig. 5

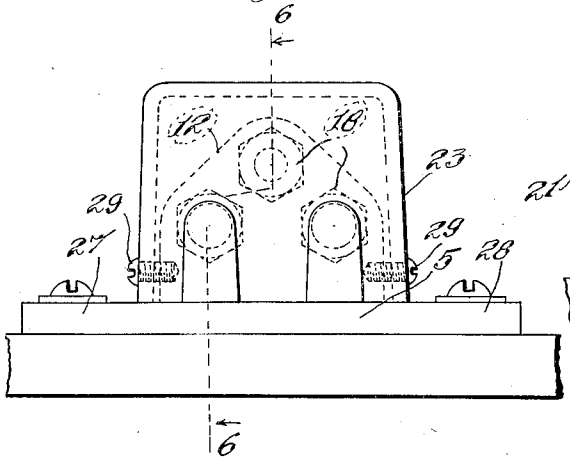


Fig. 7

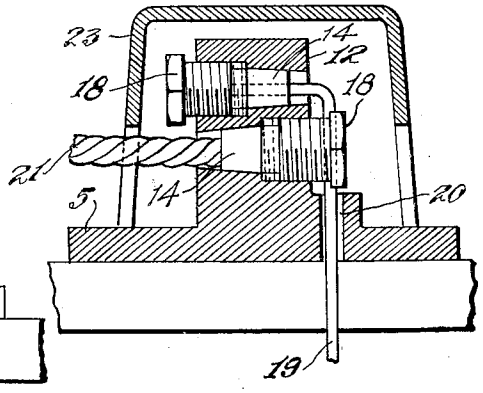


Fig. 9

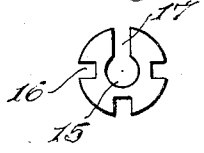
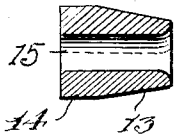


Fig. 8



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PARKWAY CABLE OUTLET

Godfrey Gort, Chicago, Ill., assignor to Western Railroad Supply Company, Chicago, Ill.

Application June 25, 1937, Serial No. 150,241

3 Claims. (Cl. 247—1)

This invention relates to improvements in a parkway cable outlet used with railway signal track circuits, which is generally referred to as a "bootleg".

In devices of this kind the cable is brought up through a hollow standard and connected to a suitable fitting mounted at the top of the standard. At the same time, the outgoing wires, such as bond wires, running to the track, are attached to this same fitting. In this present application, where the term "cable" is used, this is intended to include both the incoming and outgoing cables from the fitting.

The principal object of my invention is to provide a new form of fitting to which the cables may be readily and securely attached.

Another object of my invention is to provide a fitting in which there is no opening in the top of the cap which is used to cover the cable connections to the fitting.

A still further object of my invention is to provide a simple and compact design of fitting which is economical to manufacture yet efficient in its operating characteristics.

Other objects will appear to one skilled in the use of such devices, from a reading of the specification taken in connection with the annexed drawings, wherein:

Figure 1 is a view, partly in section and partly in elevation, of one form of my improved type of fitting or cable outlet.

Figure 2 is a view looking down on the top of the fitting with the cap removed.

Figure 3 is a view of the top part of Figure 1, looking from left to right.

Figure 4 is a plan view of a modified form of fitting, the cable connections thereto, however, being substantially the same as in Figure 1.

Figure 5 is a front elevational view of Figure 4.

Figure 6 is a section on the line 6—6 of Figure 5.

Figure 7 is a view similar to Figure 6, but showing a modified form of construction.

Figure 8 is a sectional view through the squeeze connector shown in Figures 6 and 7.

Figure 9 is a view of Figure 8 looking from left to right.

Coming now to the drawings, wherein like numbers refer to corresponding parts in the various views, 1 is a base which may be variable in shape or dimensions to suit the conditions where the bootleg is to be installed. To the base is attached a hollow standard 2 in any satisfactory manner as by set screws 3, the lower end of the standard 2 preferably engaging a flanged seat 4 on the base 1. Attached to the upper end of the hollow standard 2 is a fitting having a flat portion 5 and a flange 6. The flange 6 is slotted at 7 and has a pair of lugs 8 and 9 adapted to be drawn together by a bolt assembly 10 to clamp the flange 6 securely to the upper end of the stem. The fitting may be insulated from the standard 2 in any suitable manner such as a cup-shaped insulator 11.

Extending upwardly from the flat or plate portion 5 of the fitting is a riser 12 preferably made integral with the plate portion 5. The riser is provided with one or more transversely arranged holes, the number being sufficient to accommodate the necessary number of cables that are to be fastened to the fitting. As shown in the various figures, one portion of each transverse hole is provided with a taper to receive the tapered surface 13 of a squeeze connector 14 which may be made in different ways, but as shown more particularly in Figure 9, it is provided with a central bore 15 and a plurality of notches 16, and a slot 17 extending all the way from the periphery to the central bore 15. The other portion of the transverse holes in the riser 12 are threaded to receive a threaded member or nut 18.

It will be clear from Figures 1, 6, and 7 that the end of the collapsible or squeeze member 14 extends beyond the tapered portion of the hole into the threaded portion of the riser so that the elongated nut 18 will engage the end of the connector 14 at a distance from where the tapered hole in the riser begins, so that the end of the nut will always be in engagement with the end of the connector 14.

As shown in Figure 1, the parkway cable 19 is brought up through the standard 2 and passes through a longitudinal hole in the nut 18 and into the bore 15 of the connector 14. Setting up or screwing in the nut 18 against the end of the connector 14 causes this to collapse or squeeze together so as to securely grip the end of the parkway cable 19 which has been bared for a sufficient length to make the necessary electrical contact. The hole 20 through which the parkway cable 19 passes may be filled with a suitable filling which may include an insulating compound to prevent water from getting into the standard 2.

As shown in Figures 1, 2, and 3, the riser 12 has fastened thereto, in addition to the bootleg or parkway cable 19, outgoing cables 21 and 22 which may be bond wires running to adjacent rail ends. These are fastened to the riser 12

in the same manner as the parkway cable 19, the sizes of these fittings, of course, being made to suit the sizes of the respective cables used. Covering the cable connections to the riser 12, is a cap 23 which is fastened to the fitting 5 by means of a suitable fastening in the shape of a cotter pin 24 passing through suitably arranged lugs 25 and over the flange portion 26 of the cap 23.

In Figure 4, I have shown a different style of fitting from that shown in Figure 1, in that the plate 5 is provided with ears 27 and 28 having holes therein to receive screws for mounting the plate to another hollow support member, such as a pump log carrying the parkway cable. In this construction, the cable or cables are fastened to the riser 12 in the same manner as in Figure 1. However, the cap 23 is fastened to the riser 12 by means of screws 29, two being indicated, on opposite sides of the riser. In addition, the hole 20 may be formed differently than in Figure 1 to better receive the insulating compound for sealing the exit hole of the parkway cable 19.

By reference to Figure 6, it will be seen that the nuts 18 have a longitudinal hole therethrough to allow the respective cables to be passed therethrough into the connector 14, it being understood that the cables are passed into position before the nuts 18 are set up into locking position.

In Figure 7, I have shown a construction in which the cables may be assembled to the riser 12 in the opposite direction from that shown in Figure 6, so that the cost of providing hollow nuts 18 is eliminated, and since the longitudinal movement of the connectors 14 is very small when the connectors are properly placed in position in the riser, the small longitudinal movement caused by setting up the nuts 18 will move the cables only slightly from their initially set position.

I claim:

1. A cable outlet including a member through which the cable is brought, a fitting mounted on said member and having an opening therein to permit the passage of the cable, said fitting having an integral upwardly projecting part having a plurality of transverse holes therein, each hole having a tapered portion and a threaded portion, a tapered collapsible connector for each hole having a longitudinal bore to receive a cable and fitting in the tapered portion of the holes, and a nut for each hole having a threaded part to fit the threads in said holes and to engage one end of said tapered connector in the hole to force it to collapse sufficiently to grip a cable inserted into the bore of the connector.

2. A cable outlet as set forth in claim 1, further characterized in that the nuts are hollow so the cables can be passed therethrough into the bores of their respective connectors before setting up the nuts.

3. A cable outlet including a member through which the cable is brought, a fitting mounted on said member and having an opening therein to permit the passage of the cable, said fitting having an integral upwardly projecting part having a plurality of transverse holes therein each hole being internally threaded at one end and internally tapered at the other end, and separate means located in each hole for fastening a cable therein, said means comprising a threaded member adapted to be screwed into the threaded end of its cooperative hole, and a hollow split tapered member positioned in the tapered end of the hole and engaged by the end of said threaded member, the cable being adapted to be located in the hollow part of said split tapered member and gripped thereby when said threaded member is screwed against the end of said tapered member.

GODFREY GORT.