Sept. 13, 1938. G. GORT 2,129,837

PARKWAY CABLE OUTLET

Filed Aug. 4, 1937 3 Sheets-Sheet 1

Fig. 3

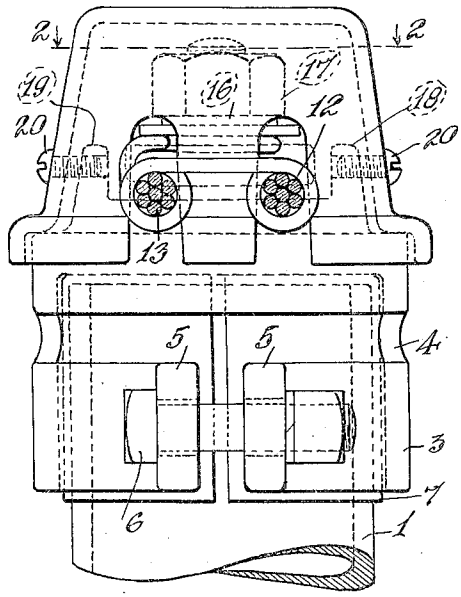


Fig. 1

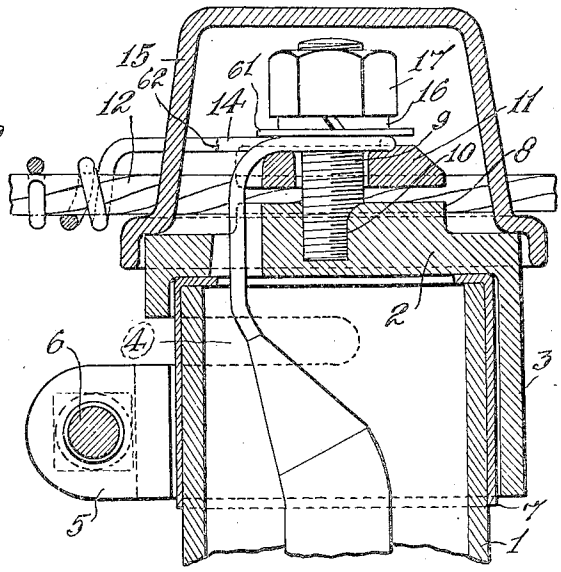


Fig. 8

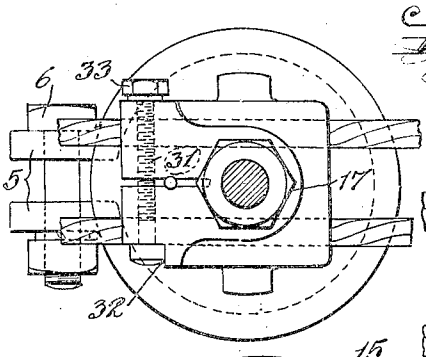
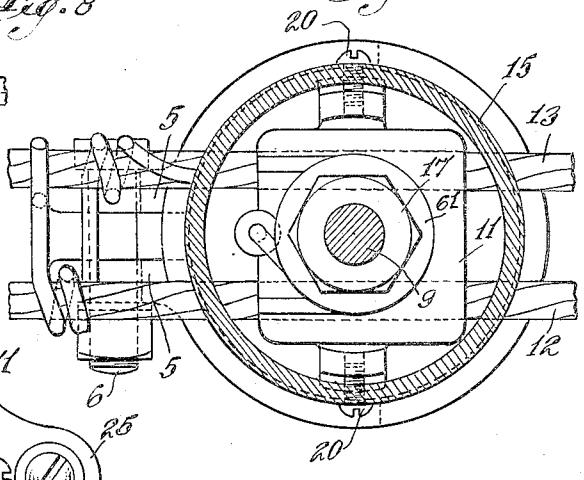


Fig. 2



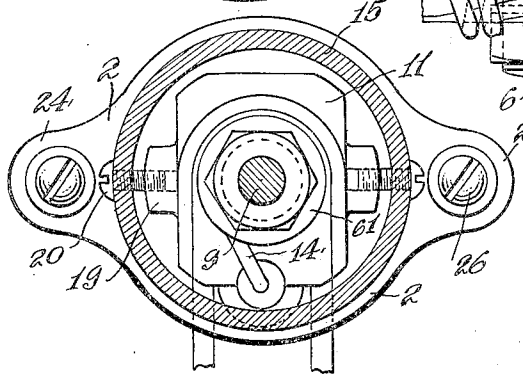


Fig. 6

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Sept. 13, 1938. G. GORT 2,129,837

PARKWAY CABLE OUTLET

Filed Aug. 4, 1937 3 Sheets-Sheet 2

Fig. 5

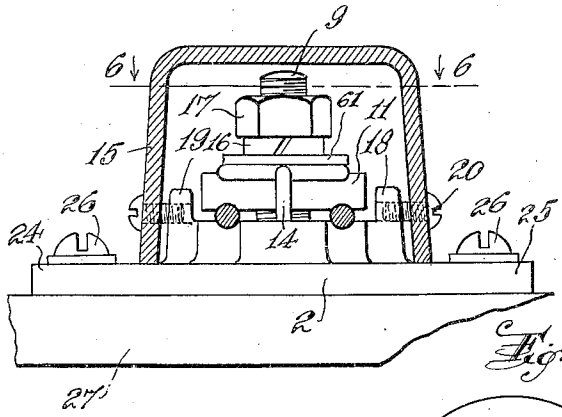


Fig. 4

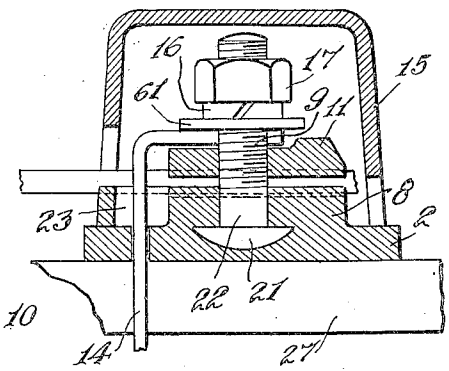


Fig. 10

Fig. 9

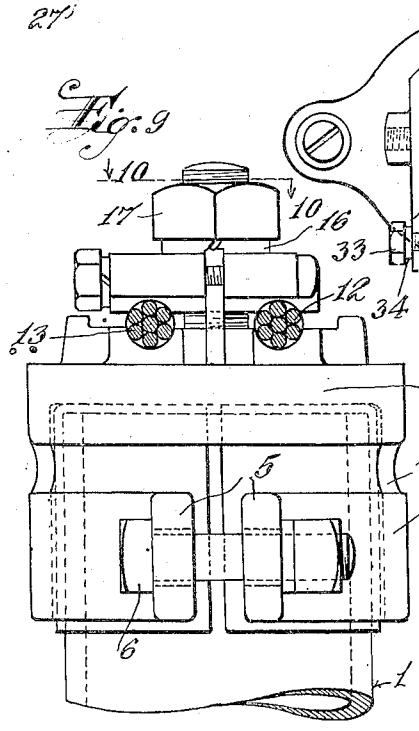
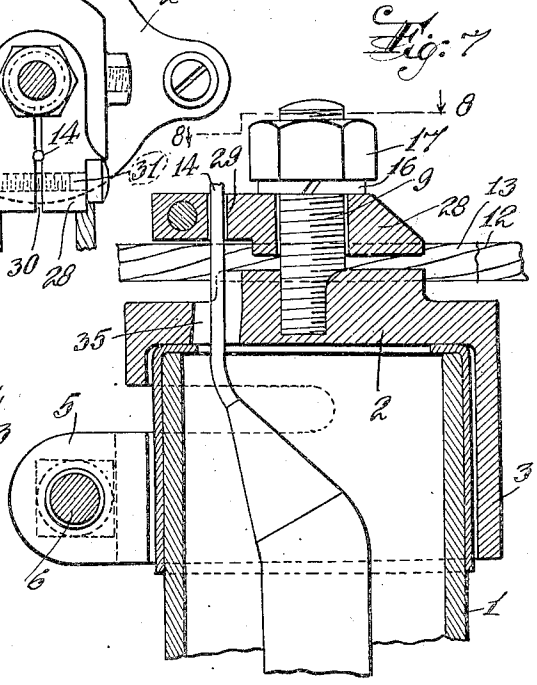


Fig. 7



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Sept. 13, 1938. G. GORT 2,129,837

PARKWAY CABLE OUTLET

Filed Aug. 4, 1937 3 Sheets-Sheet 3

Fig. 11

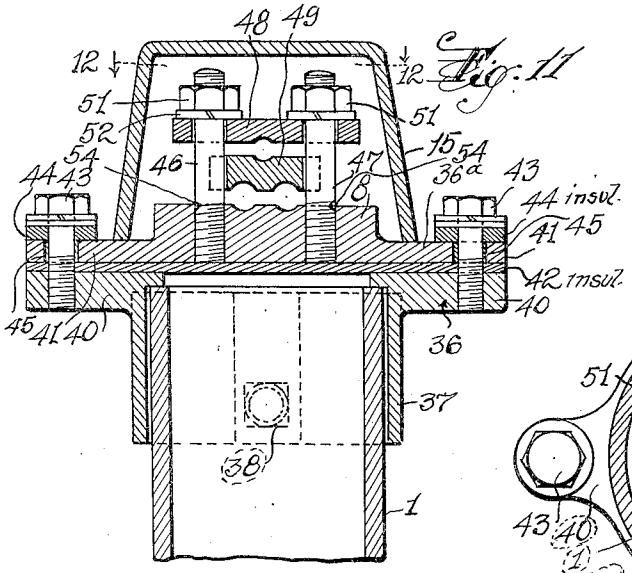


Fig. 12

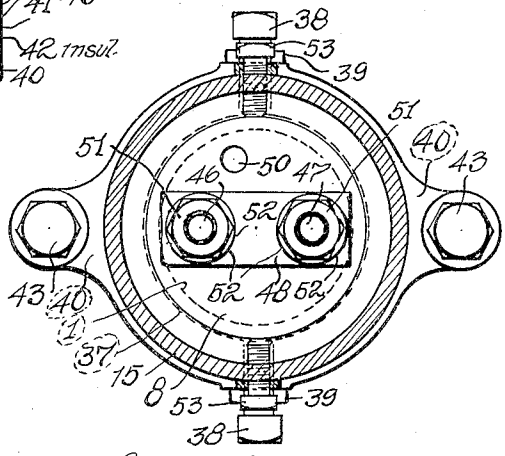


Fig. 13

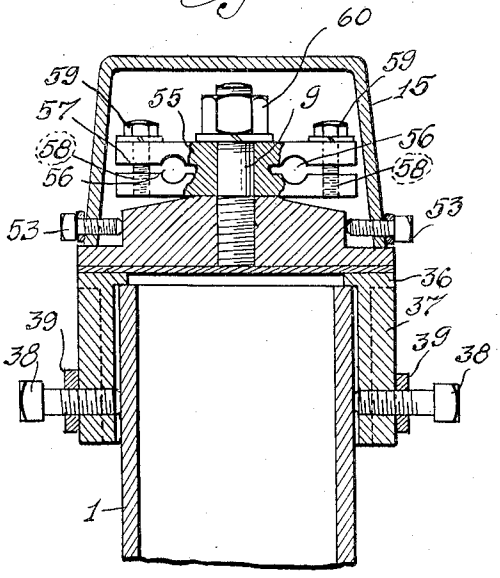


Fig. 15

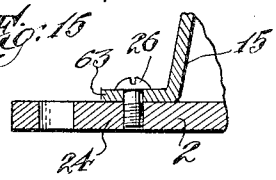
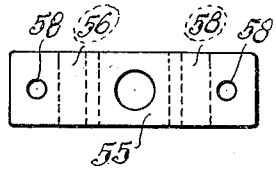


Fig. 14



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UNITED STATES PATENT OFFICE

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PARKWAY CABLE OUTLET

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

Application August 4, 1937, Serial No. 157,289

6 Claims. (Cl. 247—1)

This invention relates to improvements in parkway cable outlets especially adapted for use in connection with railway track circuits. Such outlets are generally referred to by the trade as "bootlegs".

In outlets of this character, the parkway cable is brought up through or carried in a hollow member to a fitting fastened to the top of the member and over an opening therein. To this fitting are attached wires or cables running to the signal circuits, or bond wires leading to the track rails.

It is one of the objects of my present invention to provide an improved form of outlet or fitting which will expedite the work of making connections between the parkway cable and the outgoing wires or cables leading from the bootleg or fitting.

Another object of my invention is to provide an outlet fitting in which certain difficulties encountered in other types of outlet fittings are overcome, and which, at the same time, is cheap to manufacture.

These and other objects will be clear to one familiar with these devices after a reading of the specification taken in connection with the annexed drawings, wherein:

Figure 1 is a view, part in section and part in elevation, of one form of my improved outlet fitting.

Figure 2 is a view looking down on Figure 1, the view, however, being taken on the line 2—2 of Figure 3.

Figure 3 is a side elevation of Figure 1 looking from left to right.

Figure 4 is a part-sectional and part-elevational view of another form of the invention.

Figure 5 is a part-sectional and part-elevational view of the device shown in Figure 4, but looking from left to right.

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

Figure 7 is a view somewhat similar to Figure 1, but showing a modified form of cable clamping member.

Figure 8 is a top view on a reduced scale of Figure 7.

Figure 9 is a view of Figure 7 looking from left to right.

Figure 10 is a top view on a reduced scale of Figure 9, but with the fitting of Figure 5.

Figure 11 is a view, part in section and part in elevation, of another form of my improved outlet fitting.

Figure 12 is a view on the line 12—12 of Figure 11.

Figure 13 is a view, part in section and part in elevation, of a still further modified form of outlet fitting.

Figure 14 is a plan view of the cable clamping member.

Figure 15 shows a modified form of holding the cup to the fitting.

Referring now to the details, wherein like numbers refer to correspoding parts in the various views, 1 is a hollow standard, over the top of which is positioned a fitting 2 having an annular rim or flange 3 which is slotted at 4 to provide a pair of lugs 5, only one of which is shown in Figure 1. The lugs 5 are provided with holes through which a clamping bolt 6 passes for drawing the lugs together to clamp the flange 3 around the upper end of the standard 1. An insulator 7 is preferably used to insulate the fitting 2 from the standard 1. The fitting 2 preferably has an enlargement or thicker portion 8, within which is located a threaded stud 9. Preferably the stud 9 has a flat portion 10 to prevent the stud from turning in the fitting. In construction, the stud 9 is cast with the fitting 2.

A clamping member 11 fits over the stud 9 and is grooved at least on one face to receive the outgoing bond wires or cables 12 and 13, it being understood that the large portion 8 of the fitting 2 is also provided with cooperating grooves to receive these cables. As shown in Figure 1, the upper surface of the member 11 has an annular groove adjacent the hole therein to receive the end of the parkway cable 14 coming up through the standard 1. After the end of the parkway cable is passed around the stud 9, it may be carried out through the side of a cap 15 and twisted around the cables 12 and 13, and preferably soldered or welded thereto although this is not necessary as it is clamped securely between the clamp 11 and washer 61 by nut 17 and lock washer 16 in which case it would terminate at point 62. The lock washer 16 and nut 17 complete the clamping means for holding the parkway cable and outgoing conductors or cables securely in electrical contact with each other and the stud 9.

It will be noted that there is no opening in the top of the cap 15 so that the cap completely covers the stud and the clamping means. The cap 15 is held to the fitting 2 by providing on the fitting a plurality of upstanding lugs 18 and 19 which are threaded to receive screws 20 which pass through the cap 15 near its rim.

In Figure 4 the stud 9 is in the form of a carriage bolt having a head 21 embedded or moulded into the portion 8 of the fitting 2. In this type

of stud, the square portion 22 is provided to prevent the stud from turning in the fitting. Also, the fitting 2 is provided with a recess 23 into which a sealing compound may be poured to seal the hole through which the parkway cable 14 passes. In this construction, more particularly shown in Figures 5 and 6, the fitting 2 is in the form of a plate having ears 24 and 25 provided with holes through which fastening screws 26 may pass to hold the fitting 2 to a pump log 27. The cap 15 is fastened to the fitting 2 in the same manner as in Figure 3.

In Figures 7 to 10, the cap is not shown and the stud 9 may be fastened to the member 2 as shown or as indicated in Figure 4. In these particular views, the clamping member 28 which engages the cables 12 and 13, is preferably grooved on the engaging side but the parkway cable 14 is anchored in a different manner. The clamping member 28 is provided with a hole 29 intermediate one edge of the member 28, and the hole for receiving the stud 9, and it is slitted or split at 30 through the hole 29. The hole 29 is preferably made in the member 28 in substantial alignment with the hole 35 in the fitting 2. The slit 30 may extend all the way to the hole for the stud 9. The member 28 is also provided with a hole, at right angles to the split portion and the hole 29, to receive a bolt 31 which is used to draw the two split parts of the member 28 to clamp the parkway cable 14 securely in the hole 29. The member 28 is provided with a notched portion 32 to receive the head of the bolt 31 to prevent its turning when the nut 33 is drawn up against the lock washer 34.

By constructing the member 28 and securing the parkway cable thereto in the manner described, the cap 15 may be removed and the nut 17 and member 28 loosened on the stud 9 so that bond wires or outgoing cables may be changed or replaced without disturbing the connection to the parkway cable.

While I have indicated the studs 9 as being initially separate machine parts to be cast with the fitting 2 and thereby become a substantially integral structure therewith, the studs may be cast directly with the same material as the fitting 2 and threaded thereafter, but in either case, the studs 9 are so positioned in the fitting that they cannot drop out of the fitting into the hollow member to which the fitting is applied when the nut 17 is removed, and connections are being made to the fitting.

In Figures 11 and 12, the fitting is divided into two parts, one of which, 36, has a flange 37 adapted to slide over the end of the standard 1 and fastened thereto by set screws 38 and lock nuts 39. The member 36 has a pair of projecting ears 40 adapted to receive cooperating ears 41 on the fitting 36*a*. The two parts 36*a* and 36 are separated by an insulator 42 and are held together with a plurality of screw studs 43 which are insulated from the fitting 36*a* by insulators 44 and bushings 45. The enlarged portion 8 of the fitting 36*a* has fastened thereto a pair of studs 46 and 47 which carry a pair of clamping members 48 and 49, the member 49 having arcuate recesses in its ends to fit around part of the periphery of the studs 46 and 47, while the member 48 is preferably provided with holes through which the studs 46 and 47 pass. The enlargement 8 and the member 49 are provided with cooperating grooves to receive the bond wires, and the member 49 is also provided with a groove to cooperate with a corresponding groove in the member 48 to receive the parkway cable going out of the standard through the hole 50 in the fitting 36*a*. Nuts 51 and lock washers 52 on the studs 46 and 47 are used to draw the clamping members 48 and 49 into locking position to bind the bond wires and parkway cable into permanent position on the fitting.

Preferably the enlargement 8 of the fitting 36*a* is of sufficient diameter to readily receive set screws 53 for holding the cap 15 in position, similar to that shown in Figure 13. The cap 15 may be held in place by extending one of the studs 46 and 47 so that it passes through the top of the cap 15, in which case a lock washer and nut are used to hold the cap in position. If the studs 46 and 47 are screw-threaded into the enlargement 8, they are preferably staked at the point 54, but when they are moulded in place, they are formed and arranged as is the stud 9 in Figures 1 and 7.

In Figure 13 a single stud 9 is used, on which is carried a cable-connecting member 55 which is provided with a plurality of cross-holes 56 to receive the cable. The member 55 is slotted or split at 57 and is further provided with bolt holes 58 to receive screw studs 59 for drawing the said split ends together to clamp the cables in their respective holes 56. The member 55 is clamped securely to the stud 9 and the fitting 36*a* by a lock nut 60. Preferably, the stud 9 is cast into position as in Figures 1 and 7.

As indicated in Figures 11 and 13, the enlargement 8 may be of a diameter sufficiently large so that set screws 53 and lock nuts may be used instead of the separate lugs 19 and screws 20, as indicated in Figure 5, from which it will be observed that certain of the details may be varied without departing from the spirit of my invention or the scope of the appended claims, for example the cap 15 may have an annular flange or ears 63 as shown in Figure 15, for fastening it to the fitting 2 of Figure 5 for example, or the fitting 36*a* of Figure 11.

What I claim is:

1. In a parkway cable outlet including a hollow member having an opening therefrom and carrying the cable and a fitting adapted to be secured to said hollow member over said opening; said fitting having an upwardly extending stud forming substantially an integral part of the fitting, said fitting also having a hole therein through which the parkway cable passes, clamping means for fastening the parkway cable and other cooperating cables to each other and to the stud, a part of said clamping means comprising a member having a hole to receive the stud and having cable-receiving grooves on at least one side, also a parkway cable hole intermediate one edge and the stud hole and in substantial alignment with the parkway cable hole in the fitting, said member being split through said parkway cable hole and having a bolt hole at right angles to the split, and a bolt going through the last-mentioned hole to draw the split portions together to grip the parkway cable, a cap completely covering the stud and said clamping means, and means for fastening the cap near its rim to said fitting.

2. In a parkway cable outlet including a hollow member having an opening therefrom and carrying the cable and a fitting adapted to be secured to said hollow member over said openings; said fitting having an upwardly extending stud permanently and non-rotatably anchored thereto, said fitting also having a hole therein

through which the parkway cable passes, clamping means for fastening the parkway cable and other cooperating cables to each other and to the stud, a part of said clamping means comprising a member having a hole for the stud and cable-receiving grooves on at least one side, also a parkway cable hole intermediate one edge and the stud hole, said member being split through said parkway cable hole and having a bolt hole at right angles to the split, a bolt going through the last-mentioned hole to draw the split portions together to grip the parkway cable, means on said member to prevent the bolt from turning, a cap completely covering the stud and said clamping means, and means including upstanding lugs on the fitting for fastening the rim of the cap to said fitting.

3. A parkway cable outlet including in combination with a hollow member having an opening therefrom and carrying the cable, a fitting adapted to be secured to said hollow member over said opening, said fitting having an upwardly extending stud, said fitting also having a hole therein through which said parkway cable passes, clamping means carried by said stud for fastening said parkway cable and other cooperating cables in electrical engagement with each other and the stud, said clamping means including a member having a hole for the stud and cable-receiving grooves on at least one side, also a parkway cable hole intermediate one edge and the stud hole, and means on said member for fastening the parkway cable securely thereto independent of other clamping means carried by said stud.

4. A parkway cable outlet including in combination with a hollow member having an opening therefrom and carrying the cable, a fitting adapted to be secured to said hollow member over said opening, said fitting having an upwardly extending stud immovably mounted therein, said fitting also having a hole therein through which said parkway cable passes, clamping means carried by said stud for fastening said parkway cable and other cooperating cables in electrical engagement with each other and the stud, said clamping means including a member having a hole for the stud and cable-receiving grooves on at least one side, also a parkway cable hole intermediate one edge and the stud hole, means on said member for fastening the parkway cable securely thereto independent of other clamping means carried by said stud, a cap completely covering the stud and clamping means, and means for fastening the cap near its rim to said fitting.

5. A parkway cable outlet including in combination with a hollow member having an opening therein and carrying the cable, a fitting adapted to be secured to said hollow member over said opening, said fitting having an upwardly extending stud fastened thereto, a cable-connecting member carried on said stud and extending on opposite sides thereof and having cross-holes in these extending parts to receive electrical cables, said extending parts being split from the ends to at least said cable holes and having bolt holes at right angles to said cable holes, clamping bolts in said bolt holes, a cap for covering the cable-connecting member, and means for holding the cap in place on the fitting.

6. A parkway cable outlet including in combination with a hollow member having an opening therein and carrying the cable, a fitting adapted to be secured to said hollow member over said opening, said fitting having a pair of spaced upwardly extending studs fastened to the fitting on opposite sides of its axial center, a pair of clamping members slidably mounted on said studs, one of said members having holes therein through which said studs pass, and means on said studs for forcing said clamping member to clamp a parkway cable coming out of said hollow member and an outgoing cable to the fitting, a cap for the fitting, and means for holding the cap in place on the fitting.

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