Sept. 21, 1943. W. MEYER 2,329,998

CABLE CONNECTOR

Filed Oct. 6, 1942

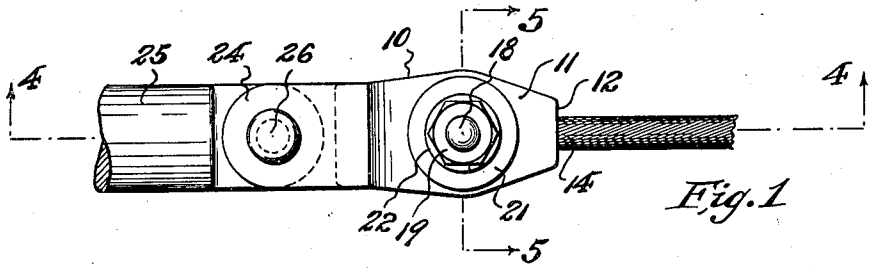


Fig. 1

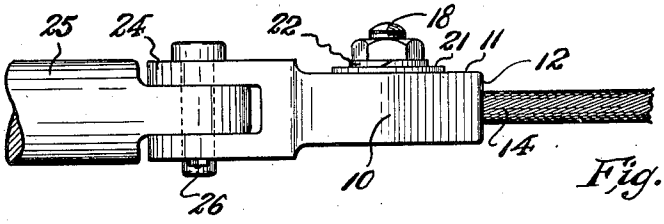


Fig. 2

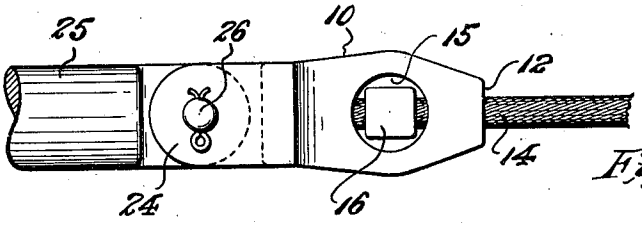


Fig. 3

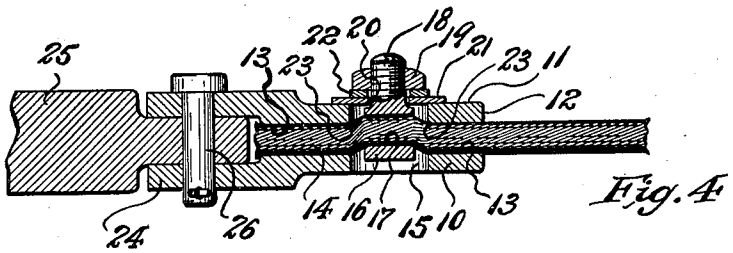


Fig. 4

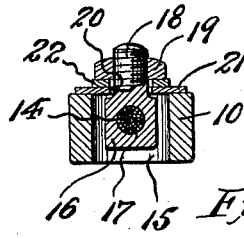


Fig. 5

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CABLE CONNECTOR

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Application October 6, 1942, Serial No. 461,019

1 Claim. (Cl. 24—125)

This invention relates to an improved cable connector device; and the invention has reference, more particularly, to a novel connector device for coupling a pull cable or the like to selected means desired to be actuated or otherwise served thereby.

The invention has for an object to provide a simple, inexpensive, strong, durable and easily manipulated connector device having at one end a novel means adapted to releasably grip an end portion of a pull cable so as to secure the same thereto, said device having suitable means at its opposite end for attachment to means desired to be actuated or otherwise served by said cable, whereby to operatively couple said cable to said latter means.

The invention has for another object to provide a connector body having an axial cable end portion receiving opening or passage transversely intersected by a chamber within which is housed a movable snubber block through which the cable end portion extends, said snubber block having a screw threaded shank to project from said chamber, and a manipulatable nut on said shank, said connector body having means to support the thrust of said nut, whereby movement may be imparted to said snubber block so as to deflect the engaged cable end portion and thereby strongly grip and anchor the same between the connector body and snubber block against axial movement relative to said connector body or displacement from its engaged relation therewith.

Other objects of this invention, not at this time more particularly enumerated, will be understood from the following detailed description of the same.

An illustrative embodiment of this invention is shown in the accompanying drawing, in which:

Fig. 1 is a top plan view, Fig. 2 is a side elevational view, and Fig. 3 is a bottom plan view of one form of cable connector device illustrative of and according to the principles of this invention.

Fig. 4 is a longitudinal sectional view, taken on line 4—4 in Fig. 1; and Fig. 5 is a transverse sectional view, taken on line 5—5 in Fig. 1.

Similar characters of reference are employed in the above described views, to indicate corresponding parts.

Referring to the drawing, the reference character 10 indicates the body of the connector device, which may be variously suitably shaped, but preferably so as to provide at least one flat face surface, such e. g. as the flat top face surface 11. Extending longitudinally and centrally or axially into said body 10, from the free end 12 thereof, is a cable end portion receiving opening or passage 13, seized in diameter to snugly fit a cable end portion 14 desired to be inserted therein for attachment to said body 10. Formed in said body 10, to extend at right angles to the face surface 11 thereof, and so as to intersect said longitudinal cable end portion receiving opening or passage 13, is a chamber 15 of any suitable cross-sectional shape.

Housed within the chamber 15 of the body 10 is a movable snubber block 16, through which extends a transverse cable passage 17 likewise sized in diameter to snugly fit the cable end portion 14, which may be passed therethrough when said snubber block is positioned to align said cable passage 17 with the cable end portion receiving opening or passage 13 of the body 10 and said cable end portion 14 is entered therethrough. Said snubber block 16 is provided with an externally screw-threaded shank 18 aligned with the longitudinal axis thereof. Said shank 18 projects exteriorly beyond the flat face surface 11 of the body 10, and threaded onto the free end portion of the same is a manipulatable nut 19. Means is provided to bridge the snubber block chamber 15, said means having an opening 20 through which the snubber block shank 18 projects, and said means being adapted to receive the thrust of the nut 19. Said means, as shown, is constituted by a separate perforate washer 21 of external diameter exceeding that of the chamber 15; it will be obvious, however, that a chamber bridging means to bear to thrust of the nut 19 may optionally be provided as an integral part of the body 10 or as a separable part thereof in the form of the washer 21 as shown. Preferably a lock-washer 22 is interposed between the chamber bridging means and the nut 19, which serves, when the nut is turned home, to securely hold the same against loosening and relaxation of its thrust against said chamber bridging means.

Preparatory to applying a cable end portion 14 to the connector body 10 for secured attachment thereto, the nut 19 is loosened and outwardly moved on the snubber block shank 18 sufficiently to permit the snubber block 16 to be inwardly moved to a position adapted to bring its cable passage 17 into aligned relation with the cable end portion receiving opening or passage 13 of the connector body 10. When the elements are thus arranged, the cable end portion 14 is inserted and inwardly moved through the receiving opening or passage 13 and so as to pass also

through the cable passage 17 of the snubber block 16. After the cable end portion 14 is thus applied, the nut 19 is turned home on the snubber block shank 18 so as to thrust against the lock-washer 22 and bridging means or washer 21, whereby to transmit to the snubber block 16 an axial movement which is perpendicular to the axis of the applied cable end portion 14. This results in an offsetting movement of the snubber block 16, which moves its cable passage 17 and the cable end portion part extending therethrough out of alignement with the receiving opening or passage 13 of the body 10 and the cable end portion parts lodged therein, thereby deflecting an intermediate part of the cable end portion so as to snub the same between the snubber block and the adjacent opposite internal end edges 23 of the receiving opening or passage 13 formed at the junctures of the latter with the sides of the chamber 15, and thus firmly gripping and holding the cable end portion against withdrawal from the connector body 10, or in other words, securely anchoring said cable end portion to the latter (see Fig. 4). Since the nut 19 bears against the lock-washer 22, the latter securely holds the same against loosening and consequent relaxation of the grip of the snubber block upon the cable end portion.

It will thus be seen, that a very simple, easily manipulated, and yet securely held attachment of the cable end portion to the connector body 10 is assured, and yet an attachment which may be easily released when, for any reason, it may be desired to disconnect the cable from the connector body.

The connector body 10 may be provided, at the end thereof opposite to its cable receiving end 12, with any suitable means for coupling the connector body and attached cable to means desired to be actuated or otherwise served by said cable. For example, said coupling means may comprise a clevis formation 24 to engage a link 25, lever or other mechanical element to be actuated or served; said clevis including the cross-pin connection 26 for attaching said link or the like thereto. It will be obvious that any other form of coupling means better adapted for connection with a given part to be engaged thereby may be optionally utilized.

Having now described my invention, I claim:

In a cable connector device, a body shaped to provide at least one flat external face surface, said body having a cable end receiving pasage extending axially therethrough and of a diameter substantially corresponding to that of a cable to be entered therein, said body having a chamber extending therethrough in direction perpendicular to said flat face surface thereof, the axis of said chamber intersecting that of said cable end receiving passage, a snubber block axially movable in said chamber and provided with a transverse cable passage initially alignable with said cable receiving passage of the body, said snubber block being of substantially less cross-sectional area than that of said chamber so as to be spaced from the sides of the latter, a screw-threaded shank extending from said snubber block to project exteriorly beyond said flat face surface of said body, a perforate bridging washer having an external diameter substantially exceeding the diameter of said chamber, whereby when abutted against the flat face surface of said body to bridge the mouth of said chamber, said snubber block shank extending through said bridging washer, and a nut threaded onto the free end of said shank, said bridging washer being adapted to purchase said nut when the latter is screwed down on said shank, whereby to draw outward the snubber block to perpendicularly offset relation to the cable axis and thus snubbingly bend portions of the cable lying between the spaced opposed sides of the snubber block and chamber so as to grippingly bind said cable between the block and body.

WILLIAM MEYER.