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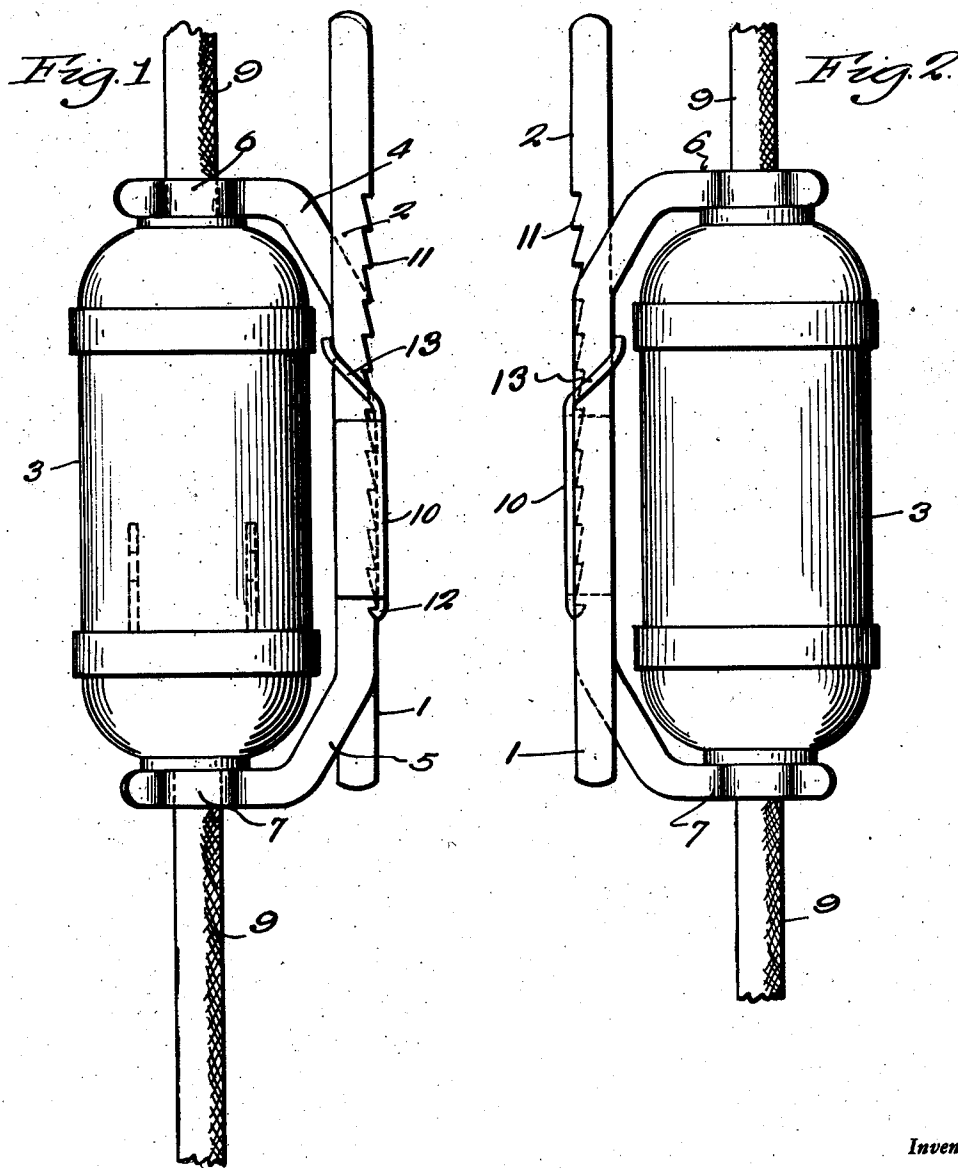
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2,406,567

HOLDER FOR CORDS OF ELECTRICAL CONNECTORS

Filed March 10, 1945

2 Sheets-Sheet 1



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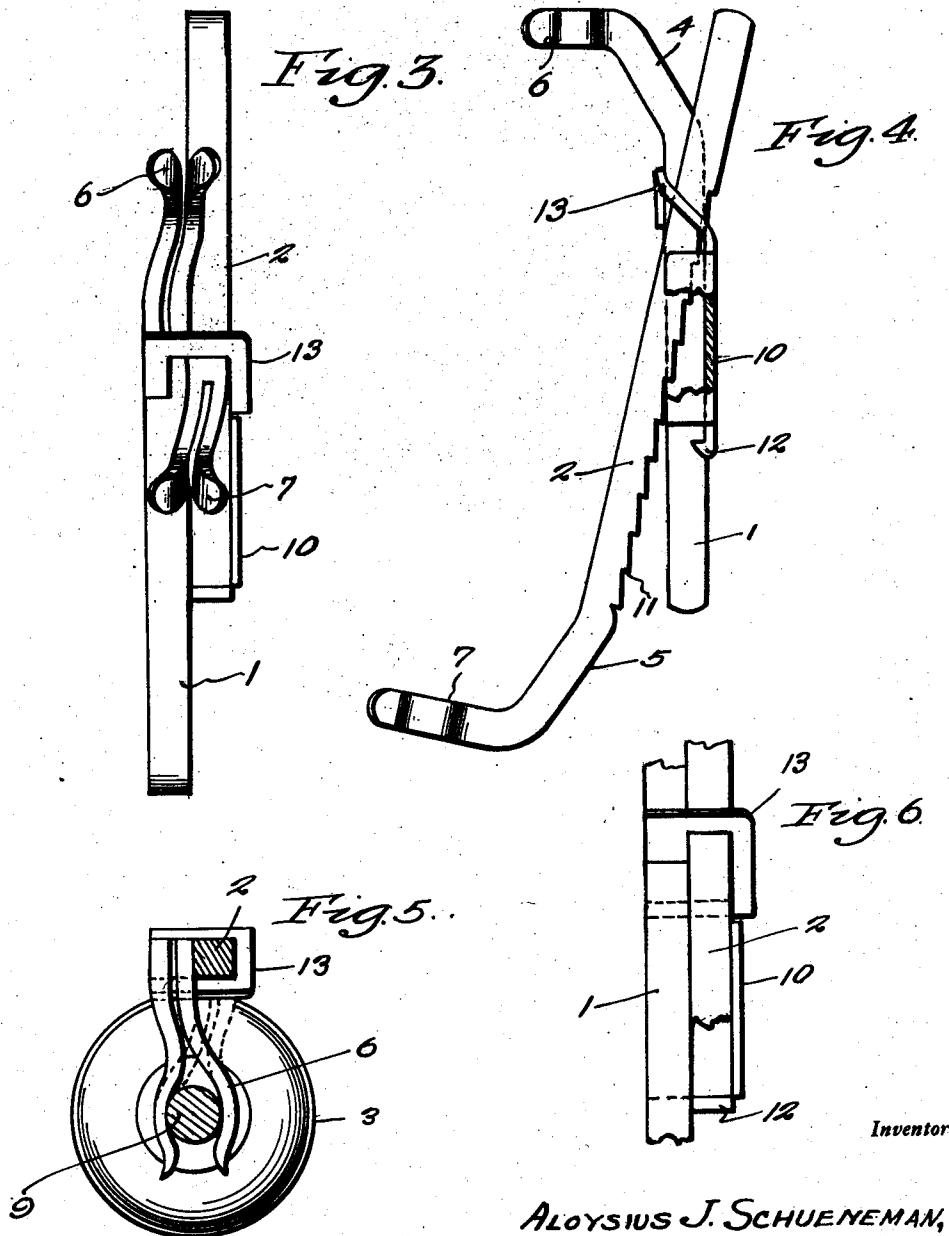
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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

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HOLDER FOR CORDS OF ELECTRICAL CONNECTORS

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2 Claims. (Cl. 173—328)

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My invention relates to improvements in holders for the cords of electrical connectors of the socket-and-plug type particularly.

The invention is designed with the principal object in view of providing means of simple form and inexpensive construction adapted for easy, quick application to the cords at opposite ends of the usual pull-apart socket-and-plug connector, of commerce, to grip the cords and prevent the same from being pulled loose from the socket and plug, and also prevent the socket and plug from being pulled apart, and which is designed for use with cords of such connectors of different sizes, and will not injure the cords, as by chafing the same.

Other and subordinate objects are also comprehended by my invention, all of which, together with the precise nature of my improvements, and advantages thereof, will be readily understood when the succeeding description and claims are read with reference to the drawings accompanying and forming part of this specification.

In said drawings:

Figure 1 is a view in side elevation illustrating my improved holder applied, in a preferred embodiment thereof, and viewed from one side thereof,

Figure 2 is a similar view looking at the opposite side of the holder,

Figure 3 is a view in rear elevation showing the bars adjusted endwise to contract the overall length of the holder,

Figure 4 is a view in side elevation, partly in section, illustrating the toothed bar swung to disengage the teeth thereof from the detent dog.

Figure 5 is a view in end elevation, partly in section,

Figure 6 is a fragmentary view in rear elevation.

Referring to the drawings by numerals, my improved holder, as illustrated, comprises a pair of bars 1, 2 adapted to extend alongside a connector 3 of the usual socket-and-plug type, in side-by-side aligned relation, said bars having relatively opposite, laterally extending end portions 4, 5 adapted to embrace the ends of the connector 3, and which terminate in forked, resilient grips 6, 7 adapted to straddle and frictionally grip the cords 9 at opposite ends of the connector 3. Preferably, the portions 4, 5 are split longitudinally and shaped to form the grips 6, 7, it being understood that the bars 1, 2 are formed of resilient metal, or the like, for imparting resiliency to the grips 6, 7.

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An elongated, channeled keeper flange 10 is provided on one side of the bar 1, intermediate the ends of the same, providing for relative sliding of the bars 1, 2 endwise to extend or contract the overall length thereof, and which maintains said bars side by side when aligned. The bar 2 is provided with ratchet teeth 11 on its outer face and facing the channel in said flange 10. A detent dog 12 is formed on one end of the flange 10 for interlocking with said teeth 11 when the bars 1, 2 are aligned, to thereby prevent the same from moving endwise relatively. A guide loop 13 is formed on the other end of the flange 10 to extend diagonally across the bars 1, 2 and through which the toothed bar 2 is slidable and swingably extended. The loop 13 bears against the face of the toothed bar 2 opposite the teeth 11, which is to say, opposite the point of engagement of the detent dog 12 with a tooth 11. Thus, the bars 1, 2 are prevented from buckling by movement of the grips 6, 7 in a separate direction, while, at the same time, by moving said grips 6, 7 toward each other, said bars 1, 2 may be swung relatively, with the toothed bar 2 fulcruming in the loop 13 and so as to disengage the detent dog 12 from a tooth 11 and unlock the bars 1, 2 for relative endwise sliding, as occasion may require.

The manner in which the described holder is applied and functions will be readily understood. With the bars 1, 2 swung relatively as previously described, and as shown in Figure 4, to disengage the detent dog 12 from the teeth 11, said bars 1, 2 are slid endwise alongside each other until the grips 6, 7 are spaced apart sufficiently to embrace the ends of the connector 3 with a slight clearance. The grips 6, 7 are then snapped over the cords 9 and said bars 1, 2 swung into side-by-side alignment to engage the detent tooth 12 with the appropriate tooth 11 and the bar 2. With the detent dog 12 engaged with the selected tooth 11, the grips 6, 7 are locked against separative movement and thereby oppose pull on the cords 9 such as would tend to loosen the cords in the connector. The frictional engagement of the grips 6, 7 with the cords 9 prevents said grips from working toward each other. Preferably, the grips 6, 7 should be applied close to the ends of the connector 3 so that movement of the grips toward each other is blocked by said connector. This may be accomplished by adjusting the bars 1, 2 so as to space the grips 6 and 7 apart to fit over the ends of the connector and applying the holder with the bars 1, 2 aligned and the detent

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dog 12 interlocked with the appropriate tooth 11 of the toothed bar 2.

As best shown in Figures 3 and 5, the end portions 4, 5 of the bars 1, 2 may be bent laterally and oppositely, relatively, to align the grips 6, 7. 5

As will be apparent, when the grips 6, 7 are applied as described, the holder also functions to prevent the connector 3 from pulling apart.

The foregoing will, it is believed, suffice to impart a clear understanding of my invention without further explanation. 10

Manifestly, the invention, as described, is susceptible of modification without departing from the inventive concept, and right is herein reserved to such modifications as fall within the scope of the appended claims. 15

What I claim is:

1. A cord holder for attachment to the electric cords at opposite ends of an electrical connector comprising a pair of bars adapted to extend alongside said connector in side-by-side aligned relation, said bars having relatively opposite laterally extending end portions adapted to embrace opposite ends of the connector, said portions terminating in resilient forked grips adapted to straddle and frictionally grip the cords at opposite ends of the connector, and coacting interlocking devices on said bars, respectively, for preventing relative endwise movement of the same in a direction to separate said grips, said devices 20 25 30

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providing for swinging of said bars relatively to break the interlock between the devices, said devices comprising a channeled flange on one bar receiving the other bar therein, ratchet teeth on said other bar, and a detent dog on said flange for engagement with said teeth.

2. A cord holder for attachment to the electric cords at opposite ends of an electrical connector comprising a pair of bars adapted to extend alongside said connector in side-by-side aligned relation, said bars having relatively opposite laterally extending end portions adapted to embrace opposite ends of the connector, said portions terminating in resilient forked grips adapted to straddle and frictionally grip the cords at opposite ends of the connector, and coacting interlocking devices on said bars, respectively, for preventing relative endwise movement of the same in a direction to separate said grips, said devices providing for swinging of said bars relatively to break the interlock between the devices, said devices comprising a channeled flange on one bar receiving the other bar therein, ratchet teeth on said other bar, a detent dog on one end of said flange for engagement with said teeth, and a loop on the other end of said flange through which the other bar extends and in which said other bar is fulcrumed.

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