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L. A. GOELZ

1,834,150

CONNECTER

Filed Sept. 2, 1926

Fig. 1.

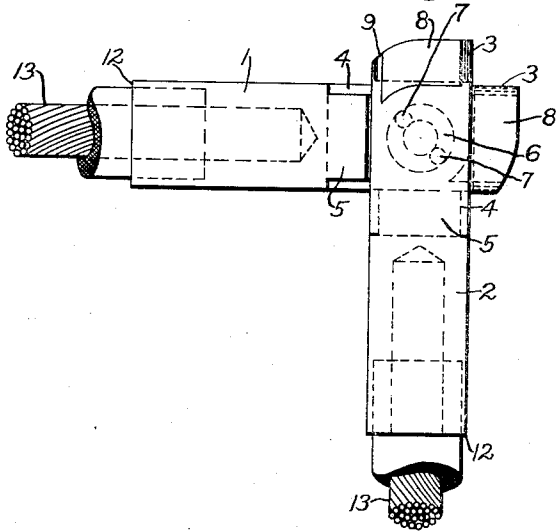


Fig. 2.

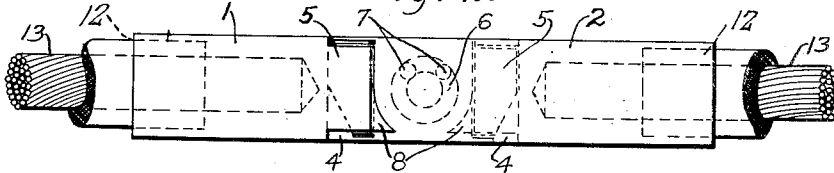


Fig. 3.

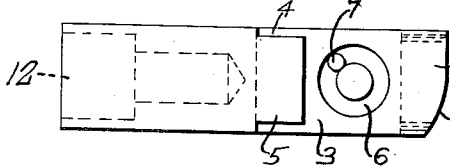


Fig. 4.

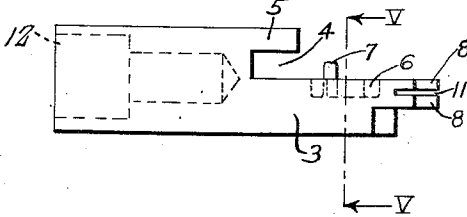
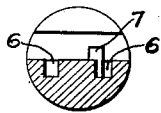


Fig. 5.



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CONNECTER

Application filed September 2, 1926. Serial No. 133,110.

My invention relates to connecters.

One object of my invention is to provide a connector comprising two interchangeable members.

51 Another object of my invention is to provide a connector comprising two interchangeable members of a tongue-and-slot construction.

10 Another object of my invention is to provide a connector having two interchangeable members and a pivotal means connecting the two members consisting of an annular groove having a stud disposed therein, whereby the pivotal means serves the dual purpose of
15 a stud and a groove. Heretofore, it has been customary, in constructing connectors of this type, to have a groove in one member and a stud in the other member. By virtue of the pivotal construction of my invention, the
20 members are rendered interchangeable, the advantages being apparent to those skilled in this art.

It is a further object of my invention to provide a connector comprising two interchangeable members having means for preventing the over-breaking thereof.

25 These and other objects that will be made apparent throughout the further description of my invention are attained by means of the apparatus hereinafter described and illustrated in the accompanying drawings, wherein,
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35 Fig. 1 is an elevational view of a connector showing the interchangeable members at right angles;

Fig. 2 is an elevational view showing the connector in operative position;

Fig. 3 is an elevational view of one of the interchangeable members;

40 Fig. 4 is an elevational view of the device shown in Fig. 3 turned 90°; and

Fig. 5 is a transverse sectional view taken along the line V—V of Fig. 4.

45 Referring to the drawings, Fig. 1 shows a connector comprising two members 1 and 2, which are interchangeable, each member having a tongue 3 and a slot 4 which is located between the tongue 3 and a jaw 5 of each of the members 1 and 2. The tongues 3 have
50 annular grooves 6 and pins or lugs 7 that ex-

tend outwardly and engage the groove 6 of the cooperating member. To connect the members, they are placed at right angles, as shown in Fig. 1, allowing the studs 7 to engage the grooves 6, and, upon relatively moving the members 1 and 2 angularly, the lugs 7 and grooves 6, acting as a pivot, the tongue portions 8, which are adapted to fit into the slots 4, are moved into them to ensure a simple and rigid connection having good conductive
60 characteristics.

Fig. 2 shows the connector with the members 1 and 2 in a lineal operative position. In this position, the lugs 7 occupy a position on the same side of the longitudinal axis of the
65 connector and are so disposed as to prevent separation of the members 1 and 2 in a longitudinal direction. The tongue portions 8 engage the slots 4 to prevent separation of the members 1 and 2 in a lateral direction, the
70 end faces of the reduced tongue portions 8, fitting against the inner end faces of the slots 4 and cooperating with the lugs 7 and grooves 6, for preventing relative angular movement of the members past the aligned position
75 shown in Fig. 2.

The pins or studs 7 have a diameter of substantially the width of the grooves and, when the connector is in a lineal operative position, as shown in Fig. 2, the studs 7 are
80 disposed in a plane disposed at an angle of substantially 45° with respect to the lineal axis. Disposing the studs 7 in the position above indicated is a very important feature of my
85 invention, as, at this point, the faces of the lugs 7, fitting against the surfaces of the annular grooves 6, effect a minimum longitudinal and lateral separation-play of the members 1 and 2.

Referring to Fig. 3, which is an elevational view of one of the interchangeable members, the ends of the tongue portions 8 are bevelled at the edges 9 to render ready entrance into the slot 4 of the other member, and each
90 tongue portion 8 is provided with a slot 11 that effects a spring action of the faces of the tongue portions 8 against the inner faces of the slots 4, thereby ensuring a snug fit.

The connector members are each provided, 100

at their free ends, with sockets 12 for receiving the ends of flexible conductor 13.

While I have given a sufficient description to illustrate one embodiment of my invention, it will be apparent to those skilled in the art that certain changes, modifications, substitutions, additions or omission may be made in the construction illustrated without departing from the spirit and scope of my invention, as set forth in the appended claims.

I claim as my invention:

1. A connector comprising two detachably connected members, each having an annular groove in a face thereof, a stud disposed in each groove and extending outwardly beyond the face of the member and engaging in the groove of the other member, and means to prevent separation of said members in a direction perpendicular to the faces thereof.

2. A connector comprising two detachably connected members, each having an annular groove in a face thereof, a stud disposed in each groove at a substantial distance from the axis of the member and extending outwardly beyond the face of the member and engaging in the groove of the other member, and means to prevent separation of said members in a direction perpendicular to the faces thereof.

In testimony whereof, I have hereunto subscribed my name this 30th day of August, 1926.

LEONARD A. GOELZ.

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