Dec. 11, 1934. T. J. LITTLE 1,984,026

CONNECTER

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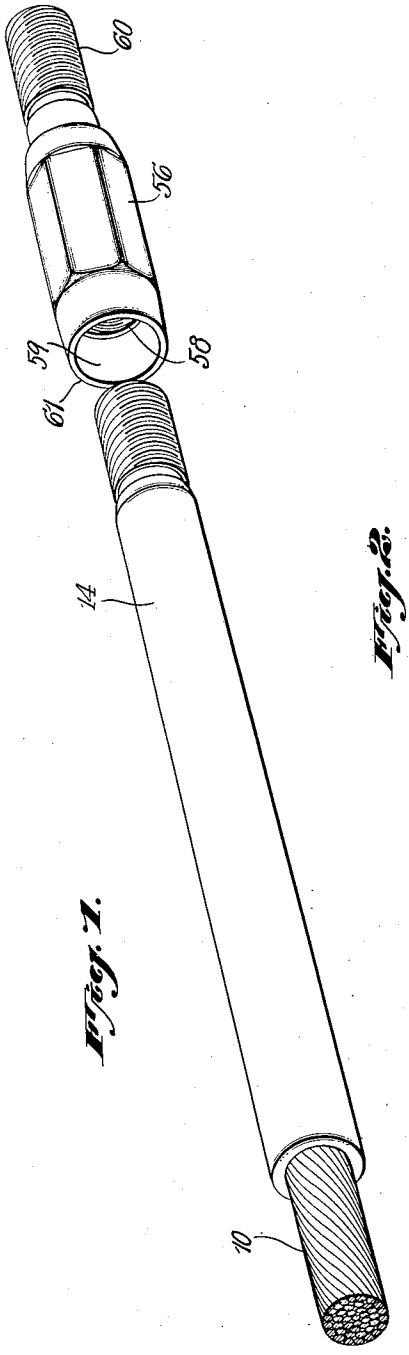


Fig. 1.

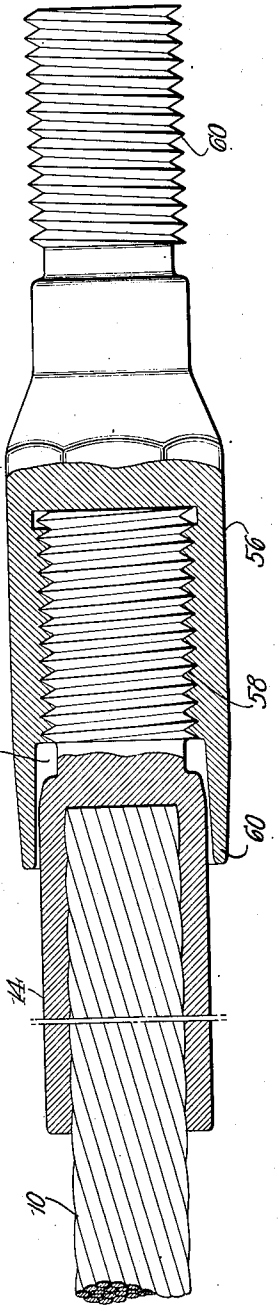


Fig. 2.

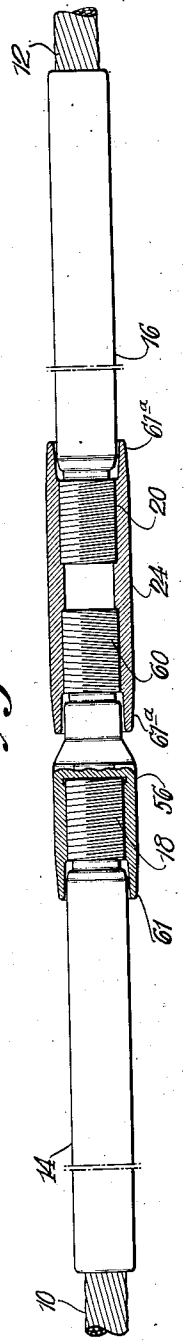


Fig. 3.

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CONNECTER

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Original application January 21, 1931, Serial No. 510,150. Divided and this application January 10, 1933, Serial No. 650,968

2 Claims. (Cl. 287—60)

In a copending application Serial No. 510,150, filed January 21, 1931, I have disclosed a cable conductor coupling, comprising a pair of terminals with respective right and left hand screw threads on the exteriors thereof, and a connection sleeve having right and left hand internal threads to fit said terminals and also disclosed an adaptor, which is to be used in those cases when the terminals on a pair of cables both have threads of the same hand. This adaptor has an internally threaded bore with threads of one hand (right hand for example) and a shank with exterior threads of the opposite hand (left hand for example). The present application is a division of the aforesaid application and is directed to the adaptor and the combination thereof with the threaded terminals.

The invention will be fully understood from a reading of the following detailed description in connection with the accompanying drawing, in which—

Fig. 1 is a perspective view showing an end of the cable having a threaded terminal secured thereto and an adaptor of my invention adapted to be secured to said terminal;

Fig. 2 is an enlarged view partly in longitudinal section and partly in elevation showing the adaptor of my invention screwed to the threaded terminal of one conductor;

Fig. 3 is a view similar to Fig. 2, but showing two cables connected by the use of my adaptor and coupling.

Referring in detail to the drawing, 10 and 12 indicate the adjacent ends of separate stranded cables to be joined or coupled together. The cable 10 carries a terminal, indicated as a whole at 14. The cable 12 carries a similar terminal 16. The terminals 14 and 16 are provided at their extremities with external threads 18 and 20, respectively. In the case illustrated, the threads 18 and 20 are both right hand threads. It may also occur in practice that both will have left hand threads. Normally, the cables are adapted to be connected by a coupling sleeve 24 having right hand threads at one end and left hand threads at the other.

It is clear that a coupling of this kind, with threads of opposite hand, will not suit, if the two cables have available terminals, which are both provided with threads of the same hand. To meet this difficulty, which is a real one, frequently encountered in practice due to the fact that the cables are reeled up at the mill and sent out to the point of installation in quantities, it may and frequently does happen that the available terminals have threads of the same hand. To meet this condition, I preferably provide an adaptor, such as illustrated as a whole at 56 in Fig. 2. This adaptor has internal threads 58 and a shank with external threads 60, the threads 58 and 60 being of an opposite hand. In the illustration of Figs. 2 and 3, the internal threads 58 of the adaptor are right hand and the external threads 60 are left hand. But, if the external threads are right hand, the internal threads will be left hand. Usually, the crew of workmen engaged in such work will carry along a supply of both kinds of adaptors, that is, some having right hand internal threads and left hand externally threaded shanks and some having left handed internal threads and right hand threaded external shanks. By the use of the adaptor described, it will be understood that the connection between two cables, such as 10 and 12, may be readily made by the use of a connecting sleeve 24, even though the two terminals are provided with shanks, whose threads 18 and 20 are of the same hand.

It is clear from the drawing that the internal threads of the adaptor do not extend to the extremity thereof, there being an unthreaded portion 59 forming an extension lip 61, the end of which is rounded off, so as to prevent all chances of brush discharge or corona loss. The unthreaded extended lip 61 is also adapted to serve as sort of an outboard bearing, or contact point for engagement with the terminal 14, when the same is deflected due to the load or weight of the cable. The interior bore 59 is just slightly greater than the outside diameter of the terminal 14, hence when a strain is to be on the cable the terminal will make contact with the extension lip 61, thus tending to prevent the transmission of stresses to the screw threads 58. The connection sleeve 24 has similar unthreaded extension lips, as indicated at 61^a in Fig. 3.

Various modifications may be made by those skilled in the art without departure from the invention as defined in the appended claims.

What I claim is:—

1. A conductor coupling comprising a pair of terminals with threaded extremities, an adaptor with threads on the interior of the same hand as the threads on one terminal and having a shank with exterior threads of opposite hand to those on the other terminal and a connection sleeve having internal right and left hand threads for engagement with said shank and said other terminal.

2. A conductor coupling comprising a pair of terminals with threaded extremities of the same diameter and the same hand, an adaptor with threads on the interior of the same hand as the threads of said terminals and having a shank with exterior threads of opposite hand and a connecting sleeve having internal right and left hand threads for engagement with said shank and one of said terminals.

THOMAS J. LITTLE.