

C. C. SUNDERLAND.
WIRE CORD COUPLING.
APPLICATION FILED MAR. 8, 1917.

1,247,174.

Patented Nov. 20, 1917.

Fig. 1.

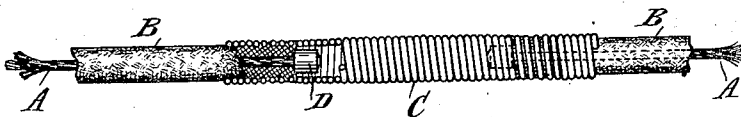


Fig. 2.

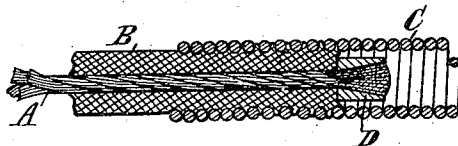
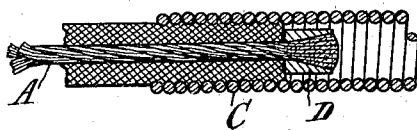


Fig. 3.



Inventor:
Charles C. Sunderland
by his Atlys:
Philip Lucero, Rice Kennedy

UNITED STATES PATENT OFFICE.

CHARLES C. SUNDERLAND, OF TRENTON, NEW JERSEY, ASSIGNOR TO JOHN A. ROEBLING'S SONS COMPANY, A CORPORATION OF NEW JERSEY.

WIRE-CORD COUPLING.

1,247,174.

Specification of Letters Patent.

Patented Nov. 20, 1917.

Application filed March 8, 1917. Serial No. 153,271.

To all whom it may concern:

Be it known that I, CHARLES C. SUNDERLAND, a citizen of the United States, residing at Trenton, county of Mercer, and State of New Jersey, have invented certain new and useful Improvements in Wire-Cord Couplings, fully described and represented in the following specification and the accompanying drawings, forming a part of the same.

This invention relates to an improved coupling intended particularly for small covered wire ropes or wire cords having a fiber covering usually braided or woven, the especial object of the invention being to provide an inexpensive, strong and durable coupling for bell cords, cords for driving small machines, and similar cords especially of that class which run over small pulleys so that great flexibility is required.

In the accompanying drawing forming a part of this specification, there are shown for the purpose of illustration, two cord ends with a coupling embodying all the features of the invention in their preferred form, and this construction will now be described in detail, and the features forming the invention then specifically pointed out in the claims.

In the drawing:—

Figure 1 is a side view of two cord ends and the coupling with one cord end and that portion of the coupling in section and showing the condition of the cord end and coupling after tension has been applied to the cord.

Fig. 2 is an enlarged view in section of one cord end similar to Fig. 1 and showing the condition of the cord ends and coupling after tension has been applied to the cord.

Fig. 3 is a similar view showing the construction previous to the application of any tension upon the cord.

Referring to the drawing, A is the wire rope or center of the bell cord, and B a braided thread or other fiber cover. A helically wound wire C overlapping the ends of the wire cord is used to couple the ends of the cord. Shoulders are provided on the wire centers of the cord which abut against the braided cover B for purposes to be explained later.

These shoulders may be provided in any suitable manner and are shown in the drawings as buttons D passed over the wire rope or center A. This is the preferred construction.

The method of applying the coupling and its action will be understood from a brief description in connection with the drawing.

The braided cover B is removed from the ends of the cord and the wires of the strands forming the rope centers A are passed through the buttons D which are moved to a position of abutment against the braided cover B, and secured thereagainst, being shown in the drawing as secured by spreading and soldering as is common. The helically wound wire C is then applied to the ends of the cord in the usual manner.

When tension is applied to the cord and coupling, it acts upon the wire core and the buttons D are drawn against the braided cover B, thereby forcing the braided cover to bunch and crowding it out between the wires. The pressure of the buttons on the cover in addition tends to crowd and tighten the wires so as to lock them upon the pushed out portions of the cover so as to assure a firm grip of the helically wound wire upon the cover of the cord.

It is not intended that the invention be limited to the specific form shown in the drawing, as modifications may be made in the construction without departing from the invention as defined by the claims.

What I claim is:

1. A wire rope or wire cord coupling consisting of a helically wound wire surrounding and connecting the cord ends, and shoulders on the wire centers of the cord abutting against the cord cover to force the cover out between the wires by tension upon the cord.

2. A wire rope or wire cord coupling consisting of a helically wound wire surrounding and connecting the cord ends, and buttons on the wire centers of the cord abutting against the cord cover to force the cover out between the wires by tension upon the cord.

In testimony whereof, I have hereunto set my hand.

CHARLES C. SUNDERLAND.