No. 692,890. Patented Feb. 11, 1902.

C. H. McEVOY.

ELECTRICAL CONNECTING CORD.

(Application filed Nov. 15, 1901.)

(No Model.)

Fig. 1.

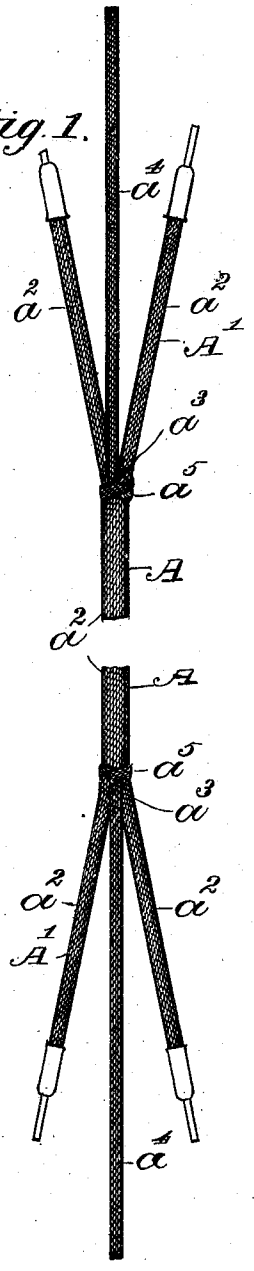



Fig. 2.

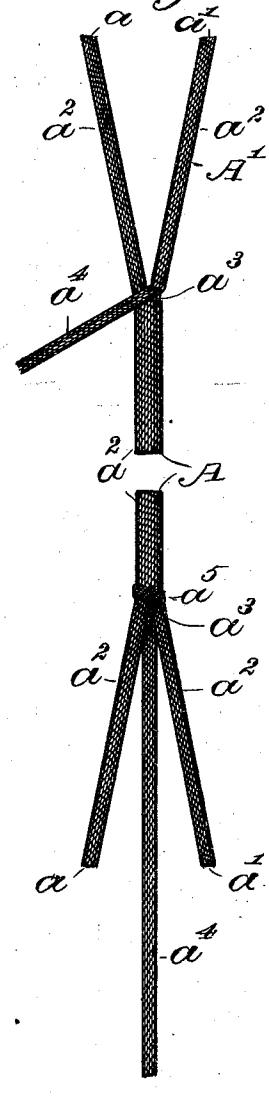
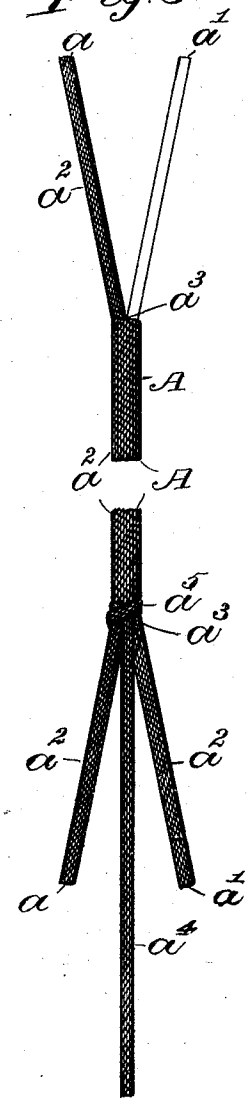



Fig. 3.




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# UNITED STATES PATENT OFFICE.

CHARLES H. McEVOY, OF LOWELL, MASSACHUSETTS.

## ELECTRICAL CONNECTING-CORD.

SPECIFICATION forming part of Letters Patent No. 692,890, dated February 11, 1902.

Application filed November 15, 1901. Serial No. 82,397. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. McEVOY, a citizen of the United States, residing in Lowell, in the county of Middlesex and Commonwealth of Massachusetts, have invented a certain new and useful Improvement in Electrical Connecting-Cords, of which the following is a specification.

This invention relates to electrical connecting-cords such as are commonly used with hand telephones or receivers. Such cords usually comprise two or more insulated or separately-covered flexible metallic-tipped conductors inclosed throughout the greater portion of their length by an outer common covering of braided material to which are secured non-conducting suspension-cords to take the weight and strain of the suspended instrument off the tips of the conductors. Such suspension-cords are sometimes continuations of the common covering. Sometimes the threads which form the common covering of two conductors are separated at the end of the common covering, and one-half of the threads are braided around one conductor and the other half around the other conductor from the point where the conductors diverge at the end of the common covering.

The object of this invention is to lessen the cost of manufacture without diminishing the value or injuring the appearance of the finished connecting-cord and to cover the break between the common covering and the separate outer covering of one branch of the cord.

This invention comprises a plurality of insulated or separately-covered conductors inclosed nearly throughout their length by a common covering which may be continued to the end of one conductor, while the end portion of another conductor outside or beyond the common covering is provided with a second covering having a continuation which serves as a suspending-cord.

In the accompanying drawings, Figure 1 shows a finished connecting-cord embodying my improvement; Fig. 2, a similar cord without tips, the upper suspension-cord not being looped about the connecting-cord; Fig. 3, similar to Fig. 2, except that the suspension-cord and the outer covering of the upper end or branch of one of the conductors is omitted.

The connecting-cord A comprises two like flexible conductors $a$ $a'$, each provided with an insulating inner covering of ordinary construction, both conductors, with their inner coverings, being surrounded (preferably by braiding) by the same outer or common covering $a^2$ throughout the greater portion of their length, leaving the end portions of said conductors at each end of the connecting-cords free to diverge or branch from the end of the common covering (at the point $a^3$) to different binding-posts in the usual manner.

At one or both ends, usually at each end of the connecting-cord, the covering $a^2$ is continued to form the outer covering of one branch or conductor from the point of divergence $a^3$ to the free end of said conductor, while the other branch has a separate outer covering A′ from its adjacent end to the point of divergence $a^3$, and this last-named outer covering A′ is continued to form a suspension-cord $a^4$, or the suspension-cord $a^4$ may first be braided and then continued to form said covering A′, in either case said cord and covering A′ being continuous at the point $a^3$.

To prevent the separate covering A′ from separating from the common covering A, it is necessary that the suspension-cord $a^4$ should be attached or connected to said common covering. I prefer to connect these two coverings A A′ by looping the suspension-cord $a^4$ around the end portion of the common covering, passing the free end of said suspension-cord outward through the bight thus formed, making a half-hitch $a^5$, as shown.

Sometimes a suspension-cord is needed at only one end of a connecting-cord, while at the other end the conductors are bare and are held in conducting-clamps, binding-posts, or equivalent devices, in which case my improvement is applied to one end only of the conducting-cord.

Obviously any number of conductors may be included in the common covering, and either or both projecting end portions of any conductor may have its separate outer covering continued to form a suspension-cord, substantially as above described. In any case it is thought preferable to continue the common covering to form the outer covering of one conducting branch.

I claim as my invention—

1. An electrical connecting-cord, compris-

ing a plurality of conductors insulated from each other, an outer covering common to said conductors to the point where said conductors diverge, a separate outer covering for one of said conductors from said common covering to the adjacent end of said last-named conductor and a suspension-cord integral with said separate outer covering at the point where said conductors diverge.

2. An electrical connecting-cord, comprising a plurality of conductors insulated from each other, an outer covering common to said conductors to the point where said conductors diverge, a separate outer covering for one of said conductors from said common covering to the adjacent end of said last-named conductor and a suspension-cord integral with said separate outer covering at the point where said conductors diverge and attached to said common covering.

3. An electrical connecting-cord, comprising a plurality of conductors insulated from each other, an outer covering common to said conductors to the point where said conductors diverge, a separate outer covering for one of said conductors from said common covering to the adjacent end of said last-named conductor and a suspension-cord integral with said separate outer covering at the point where said conductors diverge, said suspension-cord having a half-hitch around the end portion of said common covering.

4. An electrical connecting-cord, comprising two conductors insulated from each other, an outer covering, common to both conductors to the point where they diverge and continued to the end of one conductor, to form an outer covering for the same, a separate outer covering for the other conductor from said common covering to the adjacent end of said last-named conductor, and a suspension-cord integral with said separate outer covering at the point where said conductors diverge.

5. An electrical connecting-cord, comprising two conductors insulated from each other, an outer covering, common to both conductors to the point where they diverge and continued to the end of one conductor, to form an outer covering for the same, a separate outer covering for the other conductor from said common covering to the adjacent end of said last-named conductor, and a suspension-cord integral with said separate outer covering at the point where said conductors diverge and secured to the end portion of said common covering.

6. An electrical connecting-cord, comprising two conductors insulated from each other, an outer covering, common to both conductors to the point where they diverge and continued to the end of one conductor, to form an outer covering for the same, a separate outer covering for the other conductor from said common covering to the adjacent end of said last-named conductor, and a suspension-cord integral with said separate outer covering at the point where said conductors diverge and connected to said common covering by a half-hitch in said suspension-cord around said common covering.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES H. McEVOY.

Witnesses:
ALBERT M. MOORE,
ANNA T. HALLORAN.