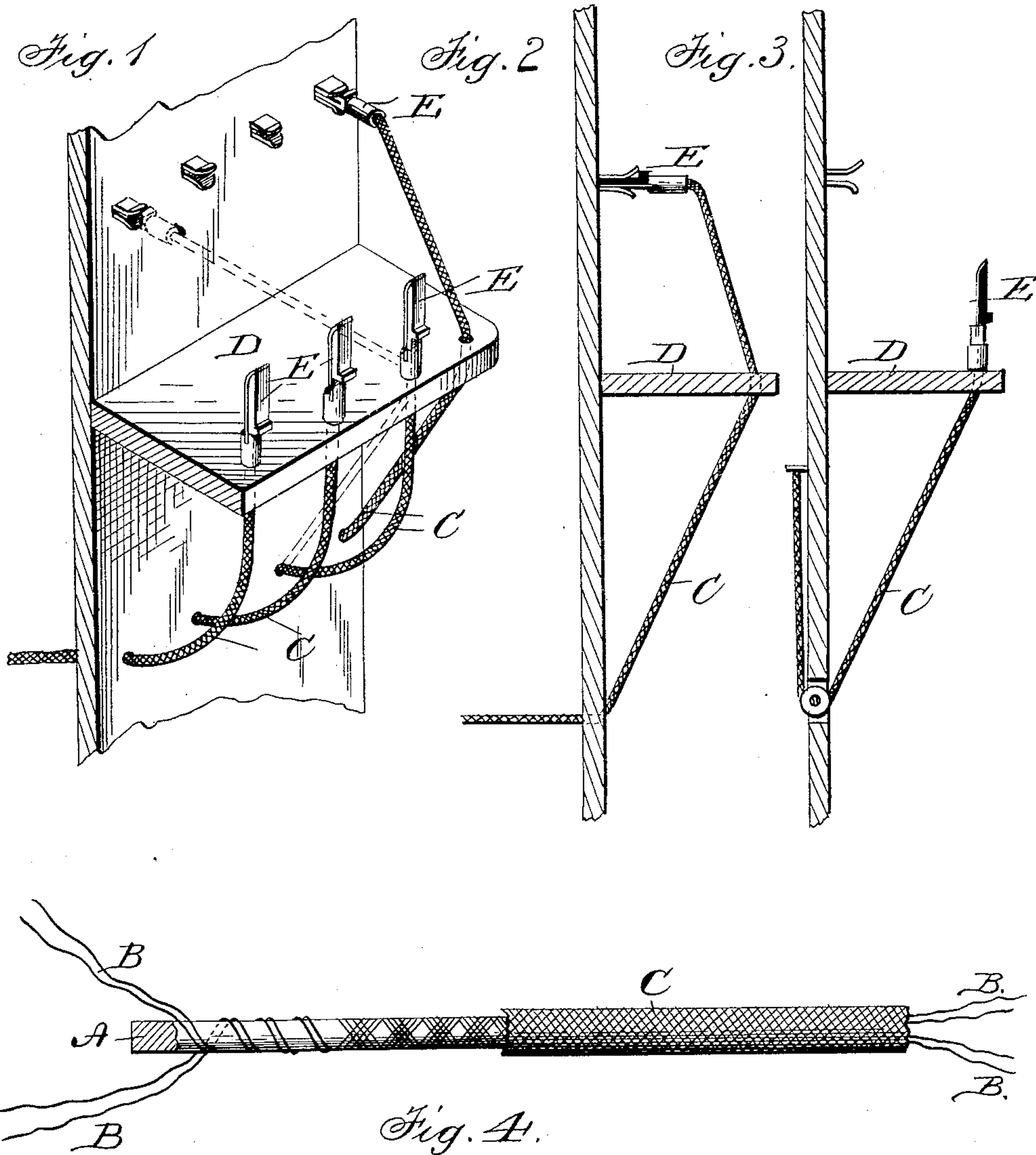


(No Model.)

W. H. SAWYER.
ELECTRICAL SWITCH CONDUCTOR.

No. 571,539.

Patented Nov. 17, 1896.



Witnesses
H. L. Ourand.
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UNITED STATES PATENT OFFICE.

WILLIAM H. SAWYER, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR TO THE
AMERICAN ELECTRICAL WORKS, OF SAME PLACE.

ELECTRICAL SWITCH-CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 571,539, dated November 17, 1896.

Application filed August 12, 1896. Serial No. 602,560. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SAWYER, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Electrical Switch-Conductors; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My present invention relates to improvements in electrical switch cords or conductors designed more particularly for telephone service and which will possess superior advantages with respect to efficiency in operation.

It may be observed that in making connections at the switchboard it is desirable that each cord or conductor, after being used, will be disposed of in such manner that only the plug remains in sight on the table, and it has heretofore been customary to provide the electrical cords or conductors upon telephone-switchboards with suitable weights, springs, or spring-actuated drums to take up the slack cord or conductors under the table to prevent the same from becoming tangled or twisted together while in use.

The object of my invention is to dispense with such appliances and to attain better results by means of the simplified construction hereinafter fully described, and specifically designated in the claims.

In the accompanying drawings, Figure 1 represents a section of a telephone-switchboard, showing the application of my invention thereto; and Figs. 2, 3, and 4 detail views of my improved electrical cord or conductor.

In carrying out my invention the central core or basis of the cord or conductor is composed of a continuous elastic rubber A, surrounded by a loosely-braided covering carrying one or more bare wires or conductors B, which in their turn are protected by the outside braided covering C, preferably of linen, as being the best for wear. The con-

struction of the cord or conductor in this respect, however, may be varied at pleasure, but the combination of the rubber core or other similar substance with a braided or wound covering containing one or more conductors to accomplish the object desired is the essential feature of my invention, and such changes or modifications can be readily made without departing from the spirit of the same.

As shown in the drawings, I preferably use two bare wires or conductors running near together on each side of the core, the object of which is such that when one or more of said conductors break from continued use the others are readily available to make immediate repairs.

In the operation of my invention the one end of each cord or conductor is connected in the usual manner with the line-wires, and the opposite ends pass up through suitable openings in the switchboard-table D, where they are provided with the usual plugs E.

Each cord or conductor is designed to elongate about eighteen inches in every six feet of its length, and the arrangement of the said cord or conductor with relation to its position upon the switchboard is determined thereby.

In making the different switch connections the elongation of the rubber core decreases its diameter, which in turn allows the braided covering to grow smaller and lengthen to enable the operator to make the desired connection. When the plug is removed from the spring-jack, the rubber core returns to its normal position, carrying the braided wires and linen covering with it and leaving the plug of the cord or conductor in position on the top of the table ready for use.

If deemed desirable, a suitable friction-roller may be interposed at a given point between the line-wire and the switchboard-table to enable the cord or conductor to have free play.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent, is—

1. An electrical cord or conductor composed

of an elastic rubber core, surrounded by a braided web carrying one or more wires or conductors, and the whole inclosed within a suitably wound or braided covering, substantially as and for the purpose specified.

5 2. In a telephone-switchboard conductor, the combination of an elastic rubber core; with one or more wires or conductors, and an

inclosing wound or braided covering, substantially as and for the purpose specified. 10

In testimony whereof I affix my signature in presence of two subscribing witnesses.

WILLIAM H. SAWYER.

Witnesses:

GILMAN E. JOPP,

EDWIN C. POTTER.