S. TROOD & G. CHOVAN.

METHOD OF MAKING ELECTRICAL CONDUCTORS.

APPLICATION FILED MAR. 28, 1913.

1,227,346. Patented May 22, 1917.

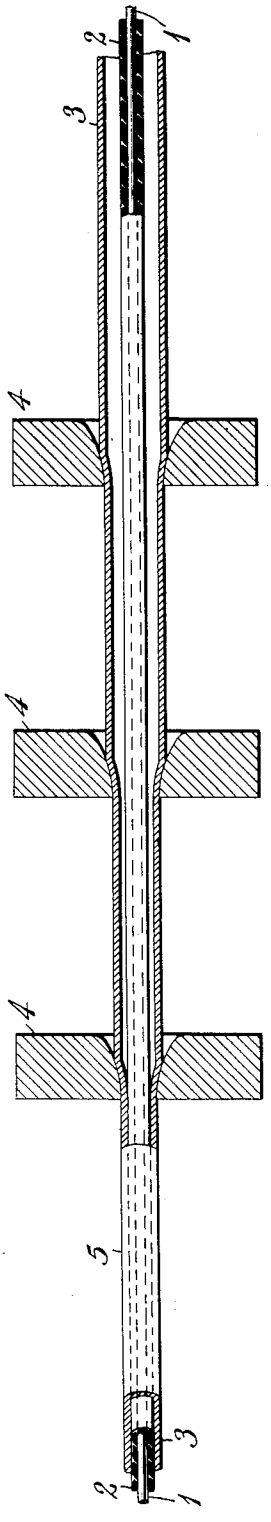


Fig. 1.



Fig. 2.

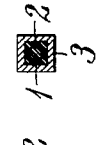


Fig. 3.

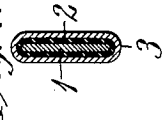


Fig. 4.



Fig. 5.

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METHOD OF MAKING ELECTRICAL CONDUCTORS.

1,227,346. Specification of Letters Patent. Patented May 22, 1917.

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To all whom it may concern:

Be it known that we, SAMUEL TROOD and GUSTAVE CHOVAN, citizens of the United States, and residents, respectively, of Edgewood Park and Wilkinsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Methods of Making Electrical Conductors, of which the following is a specification.

Our invention relates to electrical conductors, and it has special reference to methods for providing a mechanically protected or armored conductor.

The object of our invention is to provide a simple, inexpensive and efficient method of producing a flexible, strong and compact armored electrical conductor.

Heretofore, the manufacture of armored conductors has been expensive and complicated, necessitating the employment of various special machines.

According to our invention, we provide a method whereby the only apparatus necessary is a set of wire-drawing dies of decreasing diameters.

In the accompanying drawing, Figure 1 is a view in section of the armored conductor undergoing the process of manufacture; and Figs. 2, 3, 4 and 5 are views in section of a variety of forms of electrical conductors constructed in accordance with our invention.

Referring to the drawing, an electrical conductor 1 covered with suitable insulating material 2 and of any convenient length is first disposed within a seamless tube 3 of copper or other suitable material and of relatively large diameter. The tube 3 and conductor 1 are then drawn through a plurality of dies 4 of gradually decreasing diameter until said tube fits closely around the insulated conductor 1. The completed armored conductor 5 may then be bent into any desired form for use in electrical apparatus.

As shown in the drawing, the completed conductor 5 may take a variety of forms, as, for instance, cylindrical, rectangular, and flattened, Figs. 2, 3 and 4, respectively. Moreover, a plurality of conductors may be disposed within one tube 3, as in Fig. 5. It is understood that solid, stranded or other types of conductors may be employed in connection with our invention.

Those skilled in the art will understand that many modifications may be introduced into the method hereinbefore described without departing from the spirit and scope of our invention, and we desire that only such limitations shall be imposed as are indicated in the appended claims.

We claim as our invention:

1. The method of manufacturing electrical conductors that consists in disposing a conductor having an insulating covering within a seamless conducting tube and then reducing the tube only by successive steps until it closely engages the insulating covering of the said conductor.

2. The process of manufacturing a sheathed and insulated electrical conductor which consists in inclosing a conductor and a surrounding insulating material in a seamless metallic tube and then reducing the tube until it closely surrounds the insulating material.

3. The process of manufacturing a sheathed and insulated electrical conductor which consists in inclosing a conductor and a surrounding insulating material in a seamless metallic tube and then reducing the tube only until it closely surrounds the insulating material.

4. The process of manufacturing a sheathed and insulated electrical conductor which consists in inclosing a conductor and a surrounding insulating material in a seamless metallic tube of relatively large diameter and then reducing, by successive steps the tube only until it closely surrounds the insulating material.

In testimony whereof, we have hereunto subscribed our names this 21st day of March, 1913.

SAMUEL TROOD.
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