

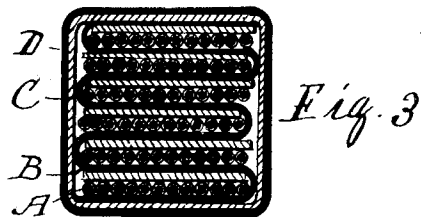
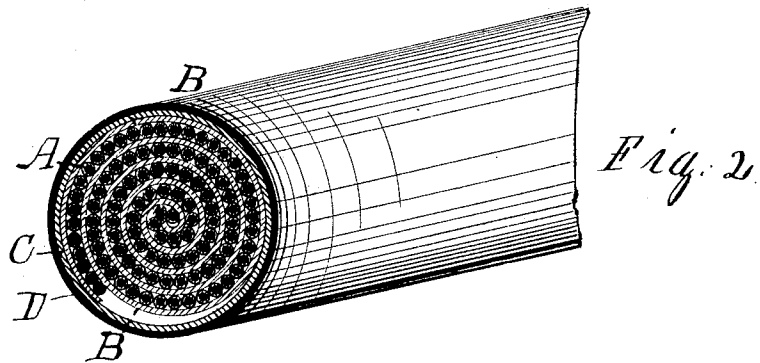
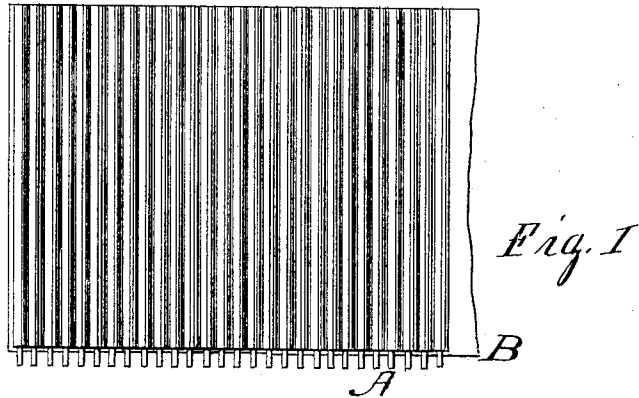
(No Model.)

J. SPEICHER.

TELEGRAPH AND TELEPHONE CABLE.

No. 269,735.

Patented Dec. 26, 1882.



Witnesses
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UNITED STATES PATENT OFFICE.

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TELEGRAPH AND TELEPHONE CABLE.

SPECIFICATION forming part of Letters Patent No. 269,735, dated December 26, 1882.

Application filed June 21, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN SPEICHER, of New York, in the county and State of New York, have invented a new and useful Improvement in Telegraph and Telephone Cables, of which the following is a specification.

My invention relates to an improvement in cables of insulated wires, whereby the insulation is made more perfect, effectually preventing the interferences so common in other forms of cables, and is designed for aerial, underground, or submerged cables; and it consists in the devices substantially as hereinafter set forth.

Figure 1 shows a series of wires laid on a piece of insulating-cloth preparatory to being rolled into a cable. Fig. 2 shows the relation of the conductors when rolled into a cable. Figs. 3 and 4 show modified forms of making up the cables, Fig. 3 showing an extra layer between the parts.

In my improvement I take the common cotton-covered wires A and lay them close together on rubber cloth B, or tarred cloth, or cloth of some other suitable material, uniting them with the cloth and filling up all the interstices with a shellac so prepared by union with a waxy compound that it possesses a measure of elasticity which allows the fabric to be closely rolled, which, when it is done, presents the appearance at the end seen in Fig. 2, where the conductors, in their cotton coating, lie close together in a series, with a layer of insulating-cloth between the series.

In place of the cable being made up by rolling, as above named, it may be made by a series of doublings of the fabric B, as seen in Figs. 3 and 4, leaving a flat layer of conductors together, with a layer of the cloth be-

tween them, and the shellac preparation used as in the former case. Any desired number of wires are bunched together in a square, round, or other form. After the cable has been made up in either form named a covering of thin sheet-copper, C, is placed over the whole, and over this is placed another sheet of rubber or tarred canvas, or a canvas having some other suitable coating, and the whole is covered with the prepared shellac. These combinations and coatings, it is believed, will render the cable proof against all influences from moisture or heat and cold, which in other forms are so liable to impair the cable and allow of interference with it. The form of uniting and bunching the wires into a cable may be changed somewhat, and yet the whole be completely protected by the copper and canvas external covering, which is an especial feature of my invention.

I claim—

1. The cable composed of a series of conductors having the cotton covering, lying close together and bunched, with a layer of insulating-cloth between the layers of wires, and treated with a prepared shellac, substantially as and for the purpose specified.

2. The combination of the conductors A, insulating fabric B, substantially as described, and the cover of copper C and of canvas D, coated with shellac, substantially as set forth.

3. A cable having a series of conductors provided with suitable insulating-layers, and having an external covering of copper and canvas, substantially as and for the purpose specified.

JOHN SPEICHER.

Witnesses:

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