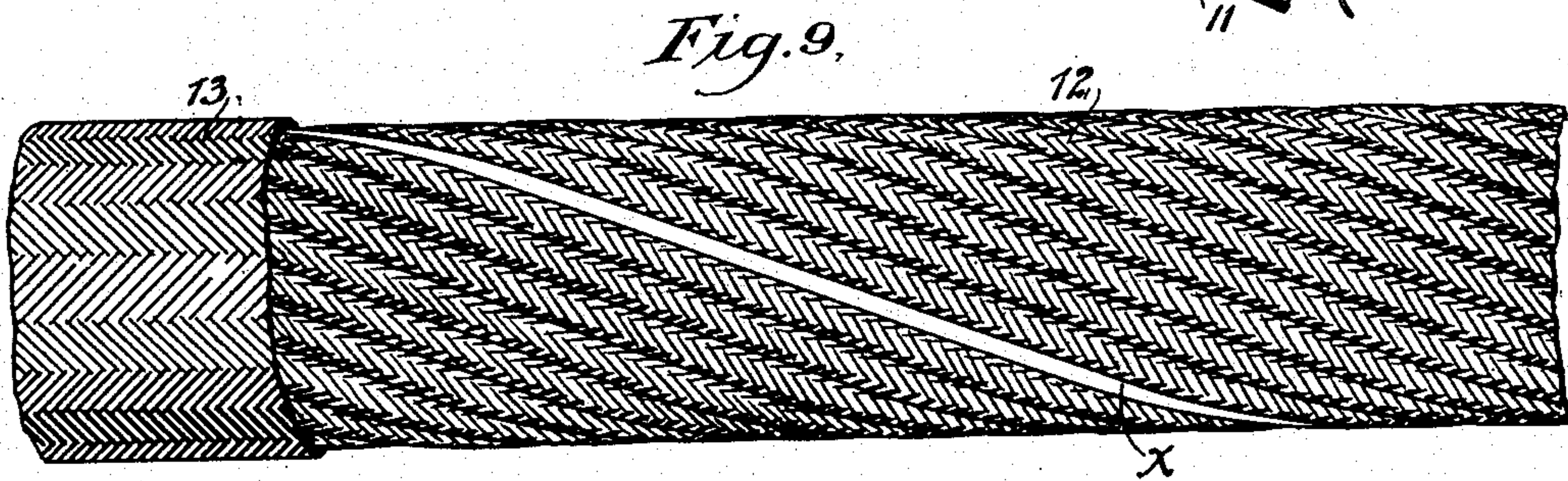
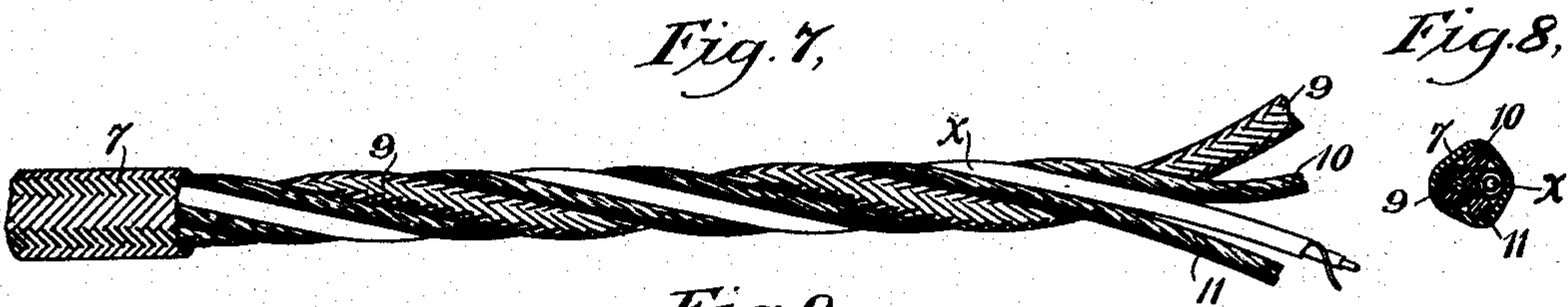
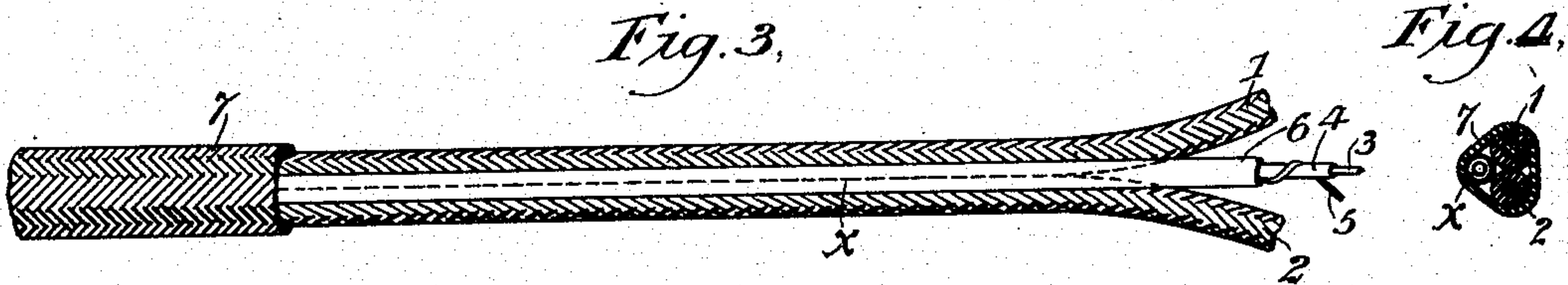
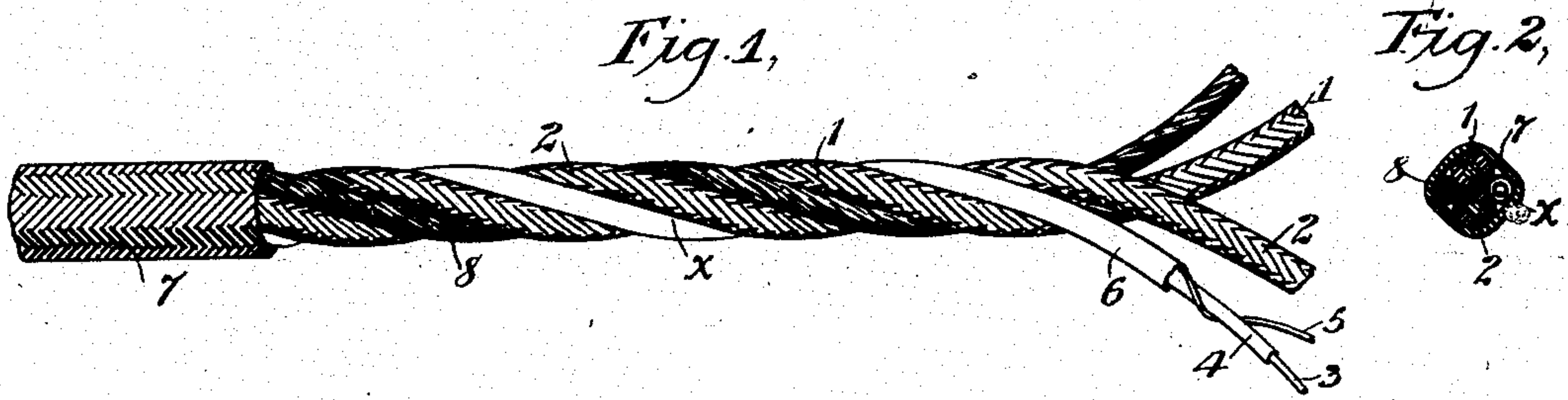


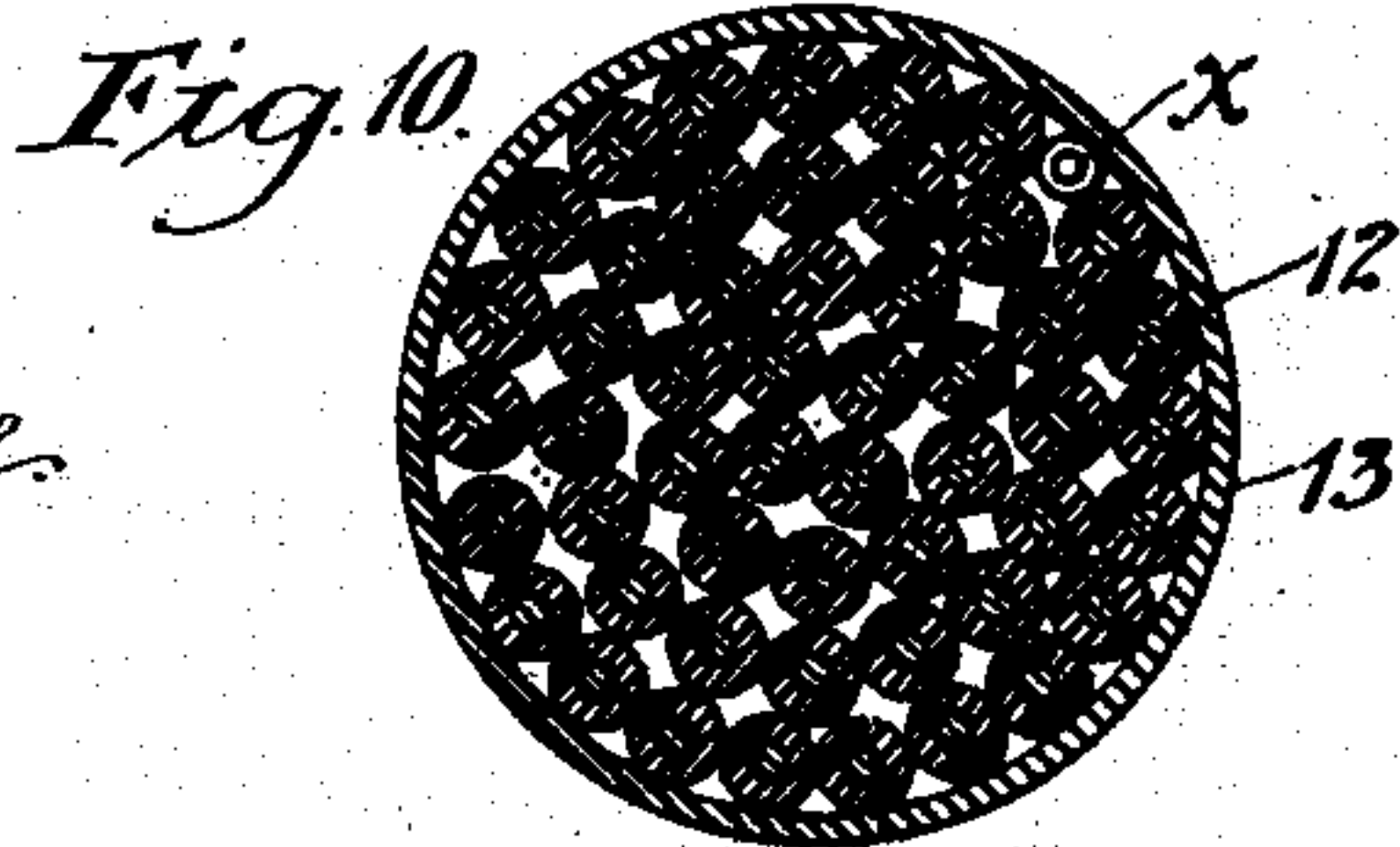
J. D. GOULD.
ELECTRIC CABLE.
(Application filed Apr. 6, 1898.)

(No Model.)



WITNESSES:

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JOHN D. GOULD, OF BROOKLYN, NEW YORK.

ELECTRIC CABLE.

SPECIFICATION forming part of Letters Patent No. 673,903, dated May 14, 1901.

Application filed April 6, 1898. Serial No. 676,626. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. GOULD, of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Electric Cable, of which the following is a full, clear, and exact description.

This invention relates to an improved construction of cables for conducting electric currents, particularly those for electric lighting; and the object is to provide a cable having not only a conductor or conductors for the working current, but embracing a fusible conductor designed for connection with a fire-alarm system, thus making the cable practically a thermostat throughout its entire length or throughout the length of cable that may be placed in a building for electric lighting or other purposes.

I will describe an electric cable embodying my invention and then point out the novel features in the appended claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figures 1, 3, 5, 7, and 9 show different forms of cable embodying my invention, and Figs. 2, 4, 6, 8, and 10 are cross-sections of the various forms.

In Fig. 1 I have shown two working-current conductors 1 2, each having a cover of insulating material, and a thermostatic or alarm conductor x , comprising a fusible core or wire 3, having an insulating-covering 4, around which is wound a copper or similar conductor 5, the whole having an insulating-cover 6. The wires or conductors 3 5 are designed to be connected with a fire-alarm system. The several conductors are wound spirally together, so that the thermostatic conductor, or rather its covering, is arranged between the working-current conductors, and consequently engages therewith throughout the length of the cable. The combined cable has an insulating-cover 7, and in order to make the combined cable substantially round I have shown a dummy or cord 8 as opposing the

thermostatic conductor, as plainly indicated in Fig. 2.

In Fig. 3 I have shown the conductors 1 2 and the thermostatic conductor as arranged in a straight line, the thermostatic conductor of course engaging with the other conductors.

In Fig. 5 I have shown a working conductor 9 and the thermostatic conductor as twisted thereon.

In Fig. 7 in connection with the conductor 9 and the thermostatic conductor I have shown two dummies or cords 10 11, employed simply to give a substantially round appearance to the combined cable.

The examples shown in Figs. 5 and 7 are designed for use when the ground is used as the return. The examples shown in Figs. 1 and 3, however, are for a complete metallic working circuit.

In Fig. 9 I have shown what may be termed a "trunk-line cable"—that is, it contains a large number of working-current conductors 12, that may be used for various purposes, and the several conductors are twisted together with a thermostatic conductor x , and the whole has a covering 13 of insulating material.

In each example of my improvement a thermostatic conductor is arranged along the periphery of the cable, so that it is exposed throughout its entire length.

By the construction shown and described and as the fusible conductor will fuse at a comparatively low heat it is obvious that the thermostatic conductor may be fused to close an alarm-circuit, either from heat generated within the cable by an overload or backing up of the current in the main conductors or it may be operated from external heat. Further, by employing this cable throughout a building for conducting the current to electric lights it is obvious that it forms a protector throughout the entire length of the cable, which is not the case when ordinary thermostats are placed in a building and at a considerable distance apart.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

5 An electric cable, comprising a working-current conductor and a thermostatic conductor, the said thermostatic conductor consisting of a fusible core and a wire coiled around the core but insulated therefrom and also insulated from the working-current conductor,

and a single-thickness covering for the cable and against the inner surface of which the thermostatic conductor engages, substantially as specified.

JOHN D. GOULD.

Witnesses:

JNO. M. RITTER,
C. R. FERGUSON.