(No Model.)

P. SORGUE.

ELASTIC TUBULAR CABLE.

No. 322,493.

Patented July 21, 1885.

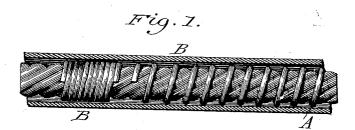


Fig. 2.

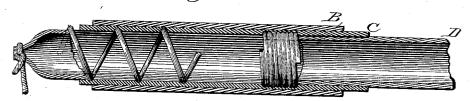
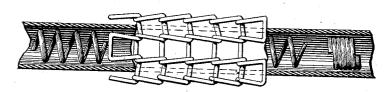


Fig.3.



Fig.4.



Witnesses:

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UNITED STATES PATENT OFFICE.

PHILIPPE SORGUE, OF PARIS, FRANCE.

ELASTIC TUBULAR CABLE.

CPECIFICATION forming part of Letters Patent No. 322,493, dated July 21, 1885.

Application filed August 5, 1884. (No model.) Patented in France February 26, 1884, No. 100,570, and in England June 16, 1884, No. 9,000.

To all whom it may concern:

Beitknown that I, PHILIPPE SORGUE, of the Republic of France, residing at Paris, France, have invented a new and useful Improvement 5 in Elastic Tubular Cables, (for which I have obtained a patent in Great Britain, No. 9,000, bearing date June 16, 1884,) of which the following is a specification.

My invention relates to elastic tubular cables, the object being to render them useful in telegraphic, telephonic, and electrical purposes, the cables being hollow, admitting of the wires passing inside them. Their method of construction, together with their materials,

are as follows: The exterior of the tube or cable consists of metallic tissue—such, for instance, as wire - gauze or some equivalent. Within this a non-metallic tube—such, for example, as gutta-percha, leather, or india-rub-ber—is inserted, and inside this is placed a spiral spring, the spirals being distended or open when inserted in the non-metallic tube;

spring increasing, a pressure is exercised between the spiral spring and the outer or metallic gauze, so that the intermediate or nonmetallic tubes of gutta-percha are forcibly
pressed between these two tubes—the non-metallic and the metallic. When the spring has

and when allowed to close, the diameter of the

30 been inserted within the non-metallic tube, another tube, of india-rubber or leather, is drawn inside the spiral spring and forms an insulating lining.

In the accompanying drawings, Figure 1

shows the external metal gauze-tube, B, A representing the spiral spring open and closed. A' shows the position an electric cable would occupy in this hollow tube; but no claim is made to either this or to telegraph-wires, such being well known. Fig. 2 shows the complete tubular cable, consisting of the wire-gauze exterior B, the non-metallic tube, of gutta-percha, C, inside which is placed the spring A, and, finally, the lining-tube D. Figs. 3 and 4 show different methods of forming the external 45 gauze.

The same letters of reference indicate like parts in the several figures.

No claim is made to the wires, which may be of any description or manufacture at present 50 known and in use, and which may be inserted in any convenient manner.

What is claimed is—

An elastic tubular cable composed of the external metal gauze-tube, B, the gutta-percha or 55 leather tube C, the spiral spring A, and leather or india-rubber lining-tube D, all of which are placed and occupy the respective positions shown by the drawings, such elastic tubular cables to be employed in the manner and for 60 the purposes hereinbefore mentioned.

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