(No Model.)

A. H. ARNOLD.

BRACE FOR TELEGRAPH AND TELEPHONE LINES.

No. 308,818. Patented Dec. 2, 1884.

Fig. 1.

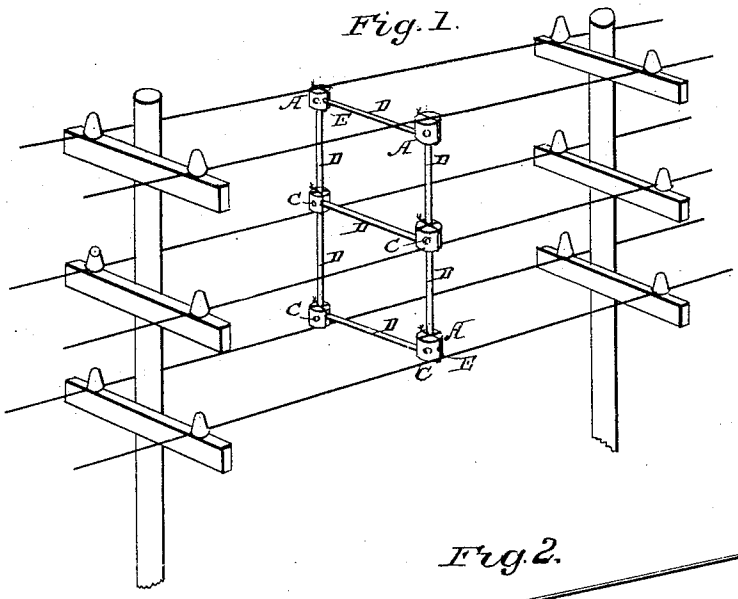


Fig. 2.

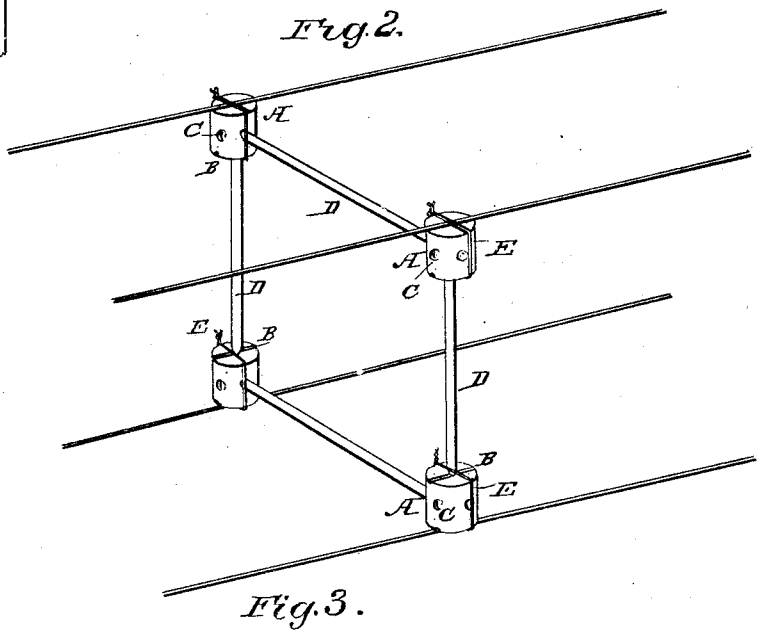
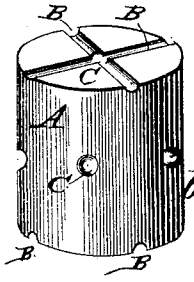


Fig. 4.



Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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BRACE FOR TELEGRAPH AND TELEPHONE LINES.

SPECIFICATION forming part of Letters Patent No. 308,818, dated December 2, 1884.

Application filed June 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, A. H. ARNOLD, a citizen of the United States, and a resident of Rensselaer, in the county of Jasper and State of Indiana, have invented certain new and useful Improvements in Braces for Telegraph and Telephone Lines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of a portion of a telegraph-line equipped with my improved attachment. Fig. 2 is a perspective view showing the attachment on a larger scale. Fig. 3 is a perspective view of the insulator detached, and Fig. 4 is a perspective view showing a modified construction of the brace.

The same letters refer to the same parts in all the figures.

This invention relates to an improved brace or spacing device for telegraph and telephone wires. It has frequently been observed that in case of high wind or other inclement weather, or owing to improper stretching of the wires, the same have come in contact with each other, thereby breaking or disturbing the circuit, or otherwise interfering with the successful operation of the lines.

My invention has for its object to overcome these disadvantages; and to this end it consists in a brace or spacing device which may be applied to the wires at intervals between the poles, and thus securing absolute isolation between the several lines of wires.

In the drawings, A designates an insulator made of glass or other non-conducting material, and consisting of a nearly cylindrical bulb, the ends of which are provided with grooves B B, crossing each other at right angles. The ends and sides of this insulator are provided with recesses C, to receive the ends of a brace, D, constructed of any suitable material, and of a length which is about equal to the usual distance between the wires.

The method of applying my invention to a telegraph-line will be readily understood by reference to the drawings hereto annexed. The insulator is attached to the wires at proper intervals by means of wire bands or clamps E, fitted in the grooves B of the insulator, and embracing the wire which has been placed in one of the said grooves. The insulators, of course, are placed upon the several wires in such position that they shall register with each other and enable the spacing-braces D to be interposed, the pointed ends of the said braces being inserted into the recesses in the sides or ends of the insulators. One or more sets of these insulators may be employed between each pair of poles, the number used being regulated partly by the distance between the poles and partly by the tension to which the wires have been stretched.

In Fig. 4 of the drawings I have shown a modification of a portion of my invention—namely, the brace D, which is in this case constructed with a swivel-joint, J, which, while the brace is equally effective, forms a more flexible, and therefore more efficient and desirable, connection.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. An insulator for spacing devices for telegraph-wires, consisting of a suitably-shaped bulb, the ends of which are provided with grooves, and the ends and sides of which are provided with recesses to receive the points of a suitable spacing-rod, substantially as set forth.

2. The combination, with a telegraph or telephone line having two or more wires, of insulators suitably attached to the said wires, and provided with recesses in their sides and ends, and a spacing-rod having pointed ends and constructed with a swivel-joint, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

ANDREW H. ARNOLD.

Witnesses:

JAMES W. DONTHIL,

his

ANDREW + J. GALBRATH.

mark.