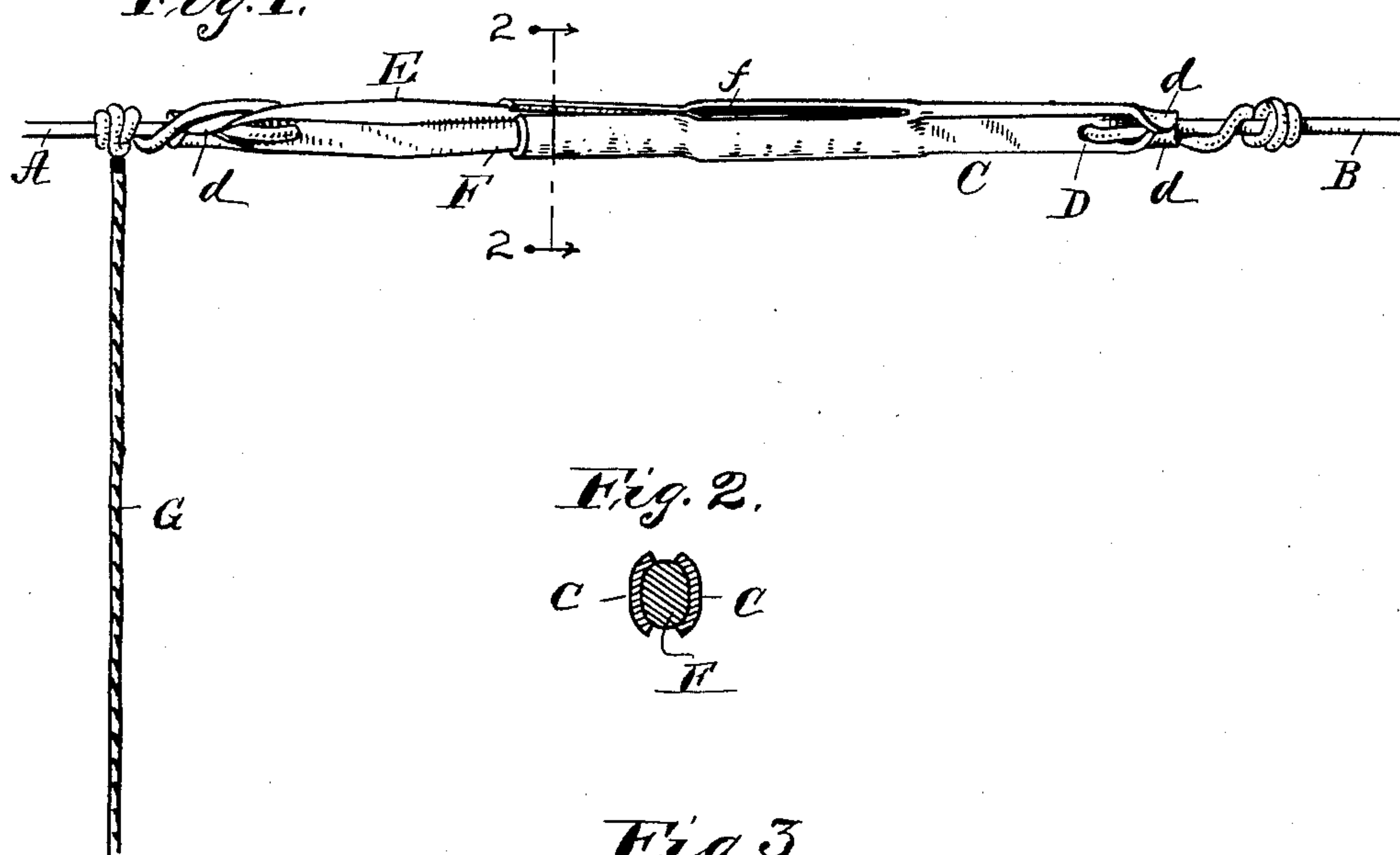


A. STILES.

NOISE AND LIGHTNING ARRESTER FOR TELEPHONE WIRES.

APPLICATION FILED MAR. 6, 1903.

NO MODEL

Fig. 1.*Fig. 2.**Fig. 3.**Fig. 4.**Fig. 5.*

Witnesses;
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ALEXANDER STILES, OF MARTINSVILLE, INDIANA.

NOISE AND LIGHTNING ARRESTER FOR TELEPHONE-WIRES.

SPECIFICATION forming part of Letters Patent No. 735,839, dated August 11, 1903.

Application filed March 6, 1903. Serial No. 146,440. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER STILES, a citizen of the United States, residing at Martinsville, in the county of Morgan and State of Indiana, have invented certain new and useful Improvements in Noise and Lightning Arresters for Telephone-Wires, of which the following is a specification.

This invention relates to improvements in telephone-lines; and the object is to arrest the vibrations of the wires, due to wind and other noise-producing causes foreign to the sound-waves from the telephone-transmitter, and to provide means during a thunder-storm for breaking the line and grounding the leading-in wire outside of the building to prevent damage from lightning.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my invention in operative position in a closed circuit; Fig. 2, a transverse section of same on the line 2 2 of Fig. 1; Fig. 3, a longitudinal section of Fig. 1; Fig. 4, a side view of the plug; and Fig. 5, a like view of the spring-clasp for holding the plug, the said parts being shown detached from each other.

Like letters of reference indicate like parts throughout the several views of the drawings.

A and B represent the ends of a divided telephone-line wire which are to be connected by means of my invention.

C is a clasp, of spring metal, preferably brass or steel, having an eye D at one end through which the end B is threaded and the end brought back and twisted to the body of the wire, as shown. The thinned corners of the clasp adjacent to the loop in the wire B are bent over against the wire, as shown at *d d*, to make the joint rigid between the clasp and wire—that is, so a rotary or torsional movement of the wire will carry the clasp with it in a corresponding movement. The end opposite the eye has the longitudinal split *f* to receive the end F of the plug E. The opposite end of the plug is perforated, and through this perforation the wire A is threaded and the end of the wire twisted fast to the body of the wire in the same manner as described for the end B. The adjacent corners of the plug are bent over upon the loop of wire A in

the manner described for wire B and for the same reason. The corners of the end F are slightly rounded, and the end is tapering, as shown. The outer portion of the jaws formed by the split *f* in the clasp C have outwardly-diverging inner faces to facilitate the insertion of the plug, and to insure an extended contact between the clasp and plug, and to increase the efficiency of the clamp I prefer to expand the inner portion of the split, as shown in Figs. 3 and 5, so the closing of the jaws will not be interfered with by contact at these inner parts before they are tightened upon the plug. The sides of the tapering plug will be flat, with the exception of the corners, as above mentioned, and the inner faces of the jaws will follow the contour of the walls of the plug, being bent inwardly at the edges of the jaws, as clearly shown in Fig. 2. This construction holds the plug firmly within the clasp, so that when one of said parts is revolvably moved the other must move in like manner.

The telephone-wire running into a building is provided with the above-described detachable connection. One of the parts will have a cable G attached to it, which drops down within reach of a person standing on the ground below. When a storm is approaching, the electrical connection is broken by pulling down on cable G, which separates the line-wire, and the disconnected ends dropping down to earth grounds the wires. I have also found by extended use that my invention successfully arrests the annoying vibrations caused by the blowing of the wires by the wind and other noise-producing agencies.

Having thus fully described my invention, what I claim as new, and wish to secure by Letters Patent, is—

A divided wire, a plug secured to one end of the wire, having a tapering end with rounded corners opposite the fastening end, a clasp secured to the other wire end comprising a bar split longitudinally at the end opposite its attachment to the wire end, said split forming jaws which are oblique for a distance from their outer ends and have inwardly-bent edges for such distance and which are spread apart from said oblique portions inwardly to prevent premature contact, said plug and

clasp having thinned outer ends transversely
perforated to receive the respective ends of
the divided wire which are looped through
said perforations and the sides of said thinned
5 portions bent over upon the looped wires to
compel simultaneous rotation.

In witness whereof I have hereunto set my

hand and seal, at Martinsville, Indiana, this
5th day of February, A. D. 1903.

ALEXANDER STILES. [L. S.]

Witnesses:

J. E. OVERTON,

J. W. MEELY.