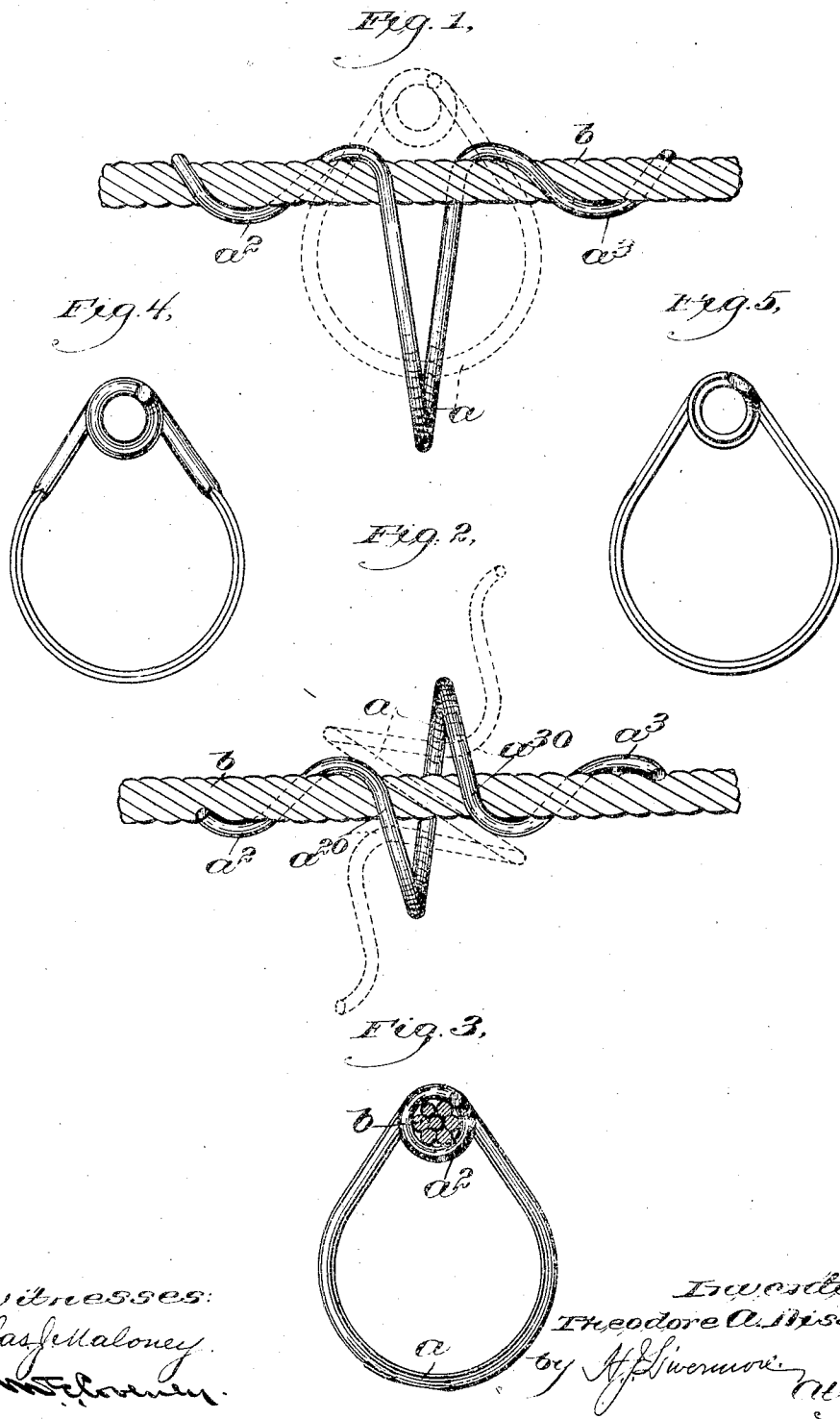


T. A. DISSEL.
CABLE SUPPORT.
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950,148.

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witnesses:
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UNITED STATES PATENT OFFICE.

THEODORE A. DISSEL, OF BOSTON, MASSACHUSETTS.

CABLE-SUPPORT.

950,148.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, THEODORE A. DISSEL, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Cable-Supports, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The present invention relates to a supporting clip of the kind now commonly used in supporting telephone cables and wires, or the like, where a span wire extends from pole to pole, while the cable is hung in loops or ring-shaped clips secured on the span wire.

It is the purpose of the present invention to obtain a cable or wire supporting device which will hold itself firmly in position upon the span wire, and at the same time be easily attachable thereto without the use of pliers or similar tools. For this purpose, the support or clip embodying the invention is formed of a single piece of resilient material bent to form a loop or ring of sufficient size to hold the cable or wires, the opposite ends of the piece of material passing each other above the loop, and being bent or twisted in opposite directions to form helical extensions or pig-tails of such shape as to extend around and conform to the span wire and to be frictionally held thereon by the resiliency of the material of which the clip is made. The said extensions of the loop are separated at the top where they pass each other, so that by turning the clip at an angle to the span wire the ends of the extensions can be passed above the said span wire crossing the same in opposite directions when the clip has been turned to its final position, and then being snapped around under the span wire extending in the form of a helix over and under the same in opposite directions, for some distance at each side of the loop.

Figure 1 is a side elevation of a span wire with a supporting clip embodying the invention applied thereto in its operative position, the same view showing, in dotted lines the position to which the clip is turned in applying it to the span wire; Fig. 2 is a plan view of the same; Fig. 3 is a cross section of the span wire with the clip thereon; Figs. 4 and 5 are views similar to Fig. 3, showing modifications.

The supporting clip embodying the in-

vention consists of a piece of material, such as galvanized wire, having sufficient strength to support a cable or wires, and sufficient resiliency to be sprung into place upon the span wire and to frictionally hold itself thereon, the clip being shaped to form the main supporting loop a , the ends of which are carried upward and pass each other. The said ends are then bent or twisted to form the helical extensions or pig-tails a^2 and a^3 , the helices being in opposite directions to each other. Where the extensions of the loop pass each other, they are laterally separated, as indicated in Figs. 1 and 2, thereby affording a space between the portions a^{2u} and a^{3u} (Fig. 2) so that by turning the clip to the dotted line position shown in Figs. 1 and 2, the ends a^2 and a^3 can be brought above the span wire b and caused to cross the said span wire in opposite directions when the clip is turned to its full line position. The helical pig tails a^2 and a^3 can then be sprung around the span wire and snapped into place, thereby causing the clip to have a firm frictional hold upon the span wire b . By making the extensions a^2 and a^3 of sufficient length, a firm frictional hold is obtained upon the span wire, it being easy, however, to snap the ends into position around the said wire. The separation of the parts a^{2u} and a^{3u} also admits of the passing of the two helical extensions over the span wire in opposite directions, instead of both being passed over the said wire from the same side, as in the devices of a similar nature which have heretofore been constructed. This feature of the device is particularly valuable in replacing supports on existing lines, as it permits the device to be readily attached over cables or wires already in position below a span wire.

The helical extensions, as shown, may be arranged so as to extend substantially once around the strand, being elongated to an extent sufficient to admit of being easily snapped into place.

In order to obtain a relatively large bearing surface for the cable or wires supported in the loop, without unnecessarily increasing the amount of material, that portion of the material which forms the lower part of the loop may be flattened in cross-section, as shown in Fig. 4.

It is also practicable to make the entire clip of wire flattened in cross-section, as shown in Fig. 5, the wire in this case being

twisted so that the shorter diameter is transverse to the span-wire, whereby the helical portion can be readily snapped into place around the span-wire.

5 Claims—

1. A supporting clip consisting of a single piece of resilient material in the form of a loop, the ends of which loop pass each other with space for a supporting wire to lie there-
10 between, said ends being extended into helices at opposite sides of the loop whereby said helices and said loop form a continuous helix having therein a single enlarged convolution.

15 2. A supporting clip which consists of a wire in the form of a continuous coil adapted to be sprung around a supporting wire and having a coil of relatively large diameter arranged centrally thereof and adapted
20 to support a cable.

3. A supporting clip consisting of a single piece of resilient material curved in the form of a loop, the ends of the material passing each other and the curve being continued to
25 form an elongated helix of smaller diameter, adapted to engage a span-wire.

4. A supporting clip having a supporting loop for cable and resilient members adapted to be sprung upon and to conform to a span
30 wire, said members extending laterally from the upper portion of said loop upon opposite sides thereof and formed to meet said loop from opposite sides of said span wire.

5. A supporting clip consisting of a piece
35 of resilient material bent in the form of a continuous coil of substantially three turns, the outside turns of which are smaller and more elongated than the inside turn.

6. A supporting clip consisting of a single
40 piece of resilient material having a portion thereof flattened and curved to form a loop, the plane of said loop being at right angles to the axis of the span wire, the ends of the

material passing each other, and the curve being continued in said ends to form an
45 elongated helix of smaller diameter adapted to engage a span wire.

7. In combination with a supporting strand, an aerial-cable support consisting of a piece of resilient wire bent to form a loop,
50 the ends of said wire extending upwardly above said loop and adapted to pass upon opposite sides of said strand, one of said ends then being bent forwardly and downwardly, and the other thereof being bent
55 rearwardly and downwardly, both of said strands being finally bent upwardly whereby each end forms an extended loop adapted to grasp said strand and to exert pressure upon opposite sides thereof. 60

8. In combination with a supporting strand, an aerial-cable support consisting of a piece of wire bent to form a loop at right angles to the axis of the supporting strand,
60 the ends of said wire extending upwardly upon opposite sides of said strand, then bent outwardly at an angle to said loop in opposite directions and formed to hold said strand with a spring grip.

9. A supporting clip consisting of a single
70 piece of resilient material in the form of a loop disposed at right angles to the axis of a supporting wire, the ends of which loop extend upwardly with space adapted to receive the supporting wire therebetween, said ends
75 being then bent downwardly and outwardly to form retaining members adapted to be sprung upon said supporting wire from opposite sides thereof.

In testimony whereof, I have signed my
80 name to this specification in the presence of two subscribing witnesses.

THEODORE A. DISSEL.

Witnesses:

M. E. COVENEY,
JAS. J. MALONEY.