

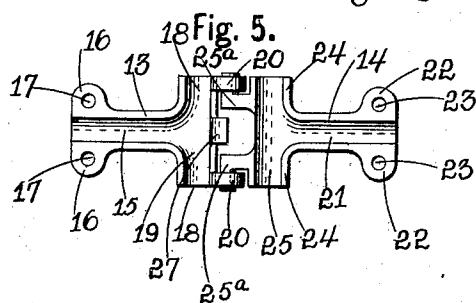
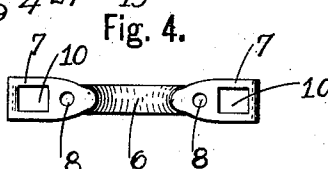
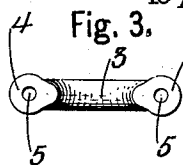
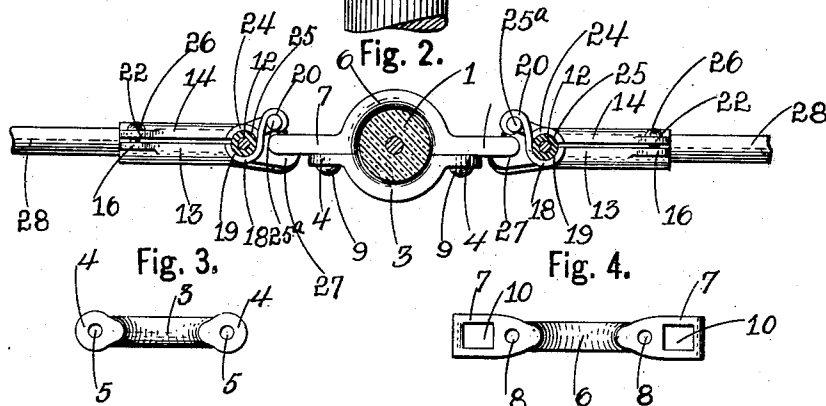
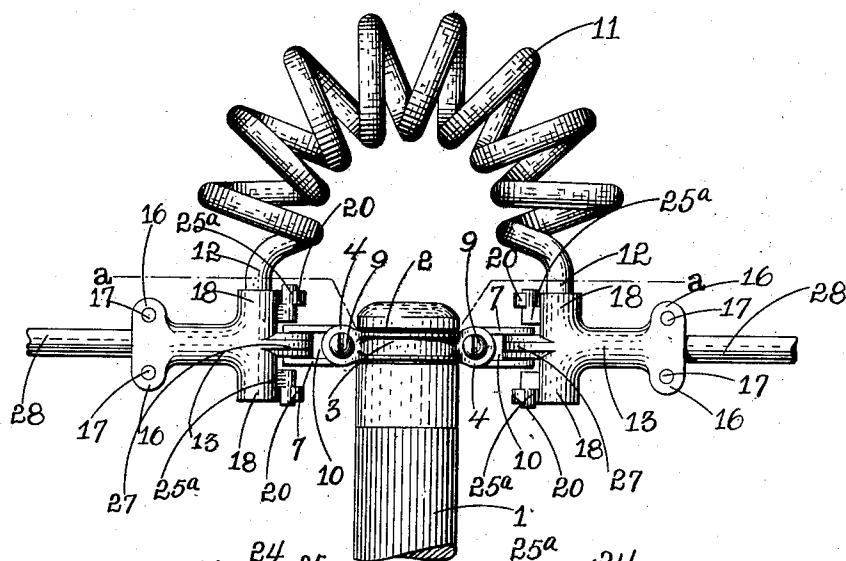
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MEANS FOR PREVENTING BENDING STRAINS IN WIRES.

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NO MODEL.

Fig. 1.



Witnesses.

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MEANS FOR PREVENTING BENDING STRAINS IN WIRES.

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Application filed October 28, 1901. Serial No. 80,203. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. SHICKLUNA, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Means for Preventing Bending Strains in Wires, of which the following is a specification.

This invention relates to a means for preventing bending strains in wires.

Wires which are subjected to numerous bending strains necessarily break in time—such as, for instance, wires used in electric lighting in which a movable support for the light is employed, the wires being bent as the support is moved to raise or lower the light.

The object of this invention is to form an angular spring portion, such as a coil in the wire, which will give sufficient spring to obviate any bending strain in the wire, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which a preferred embodiment of the invention is shown attached to an electric-light pole or support.

Figure 1 is a side elevation of a preferred embodiment of the device attached to a fragment of an electric-light pole. Fig. 2 is a section on line *a a*, Fig. 1. Fig. 3 is a detached view of one of the members or parts of the two-part collar fitting around the support. Fig. 4 is a detached view of the other member or part of the two-part collar. Fig. 5 is a detached view of one of the two-part tubular wire-supports.

In referring to the drawings for the details of construction like numerals designate like parts.

1 represents a fragment of an electric-light pole. An encircling groove 2 is formed near the end of the pole-fragment, and a collar formed in two parts or members is clamped around the pole in said groove. One of the parts or members is formed substantially as shown in Figs. 2 and 3 and has a curved central portion 3 and end ears 4, provided with perforations 5, and the other part or member, formed substantially as shown in Figs. 2 and 4, has a curved central portion 6 and end ears 7, which are larger than the ears 4 of the first-mentioned members or parts and have perforations 8, which register with the perfora-

tions 5 of the smaller member when the two members are in clamping position around the pole, as shown in Fig. 2. Clamping-screws 9 are inserted in the registering perforations 5 and 8 to secure the two members together loosely around the pole. The ears 7 of the longer member are also provided with enlarged openings 10 of substantially square form. (See Fig. 4.)

In the preferred embodiment shown in Fig. 1 a portion of the wire is curved into a coil 11, which is bent into a substantially U form, as shown in Fig. 1, so that the coil extends partially around the end of the pole 1, and the straight portions 12 of the wire adjacent to the coil extend substantially parallel to each other and are supported in wire-supports, which are hinged to the collar. These wire-supports are formed in two parts 13 and 14, the part 13 having a longitudinal channel 15, two outer oppositely-disposed laterally-projecting lugs 16, provided with perforations or openings 17, two inner oppositely-disposed lateral extensions 18, having a channel 19, which extends transversely to and communicates with the inner end of the channel 15, and two inwardly-projecting slotted lugs 20, and the part 14, having a longitudinal channel 21, two outer oppositely-disposed laterally-projecting lugs 22, provided with perforations or openings 23, two inner oppositely-disposed lateral extensions 24, having a channel 25, which extends transversely to and communicates with the inner end of the channel 21, and two inwardly-extending angular hinge parts 25^a, which engage with the slotted lugs 20. These two parts 13 and 14 are of a substantial T-shaped form, and when hinged together and closed upon each other the longitudinal channels 15 and 21 and the transverse channels 19 and 25 form substantially circular openings, in which the wire is supported, being clamped between the two parts by the screws 26, which engage in the perforations 17 and 23.

Two of the wire-supports are employed, and each one is provided with an inwardly-extending slotted hinge-lug 27, which preferably extends from the part 13 and engages in the opening 10 in one of the ears 7 of the longer member of the collar.

The several parts of the device are prefer-

ably cast of brass, although they may be made of any suitable metal or alloy.

In placing the device in position a portion of the wire is curved into the coil form shown in Fig. 1, the two parts of the collar are clamped loosely around the pole, and the coil is bent, so that the straight portions 12, extending at substantially right angles to each other, are formed. Another bend at the lower termination of the wire causes the respective parts 28 on each side of the coil and below the portions 12 to extend substantially longitudinally with each other. The hinge-lug 27 of each of the wire-supports is bent into hinging position with respect to one of the ears 7. The wire parts 12 and 28 are laid in the channels of one of the parts of the wire-supports, and the other parts of the wire-supports are clamped upon them, as before described.

In operation the movement of the pole turns the wire-supports on their hinges and twists the coil, which forms a spring to absorb the strain, and thereby prevent any distortion of the strands composing the wire.

I claim as my invention—

1. The combination with a movable device, such as an electric-light pole, of a wire having a portion thereof formed into a coil and extending partially around the end of said movable device and wire-supports extending oppositely and having hinge-support from the movable device and attached to the wire on opposite sides of the coil.

2. The combination with a movable pole of a wire having a portion thereof formed into a coil and extending partially around the pole end with the straight portions adjacent to the coil extending substantially parallel to the pole, a collar clamped to said pole, and supports hinged to the collar and attached to the wire on opposite sides of the coil, substantially as set forth.

3. A wire having a portion thereof formed into a coil, a pole, a two-part collar clamped

to said pole and having oppositely-disposed hinge portions, and two-part wire-supports adapted to be clamped upon the wire on opposite sides of the coil and having lugs engaging the hinge portions of the collar, substantially as set forth.

4. A wire having a portion thereof formed into a coil, a pole having a groove, a collar loosely clamped in said groove, and two-part wire-supports, each part of each support having channels to receive the wire, substantially as set forth.

5. The combination with a pole, of a collar loosely encircling said pole and having hinge portions and two wire-supports each in two parts hinged together at one end and one of said parts having a slotted lug engaging one of the hinge portions and both of said parts having channels to form openings to receive portions of a wire, substantially as set forth.

6. A wire having a portion thereof formed into a coil, a pole, a collar clamped to said pole, and wire-supports adapted to be clamped upon the wire on opposite sides of the coil and having hinge attachment to the collar, substantially as set forth.

7. A wire having a spring portion, a pole, a collar loosely secured to said pole, and wire-supports secured to the collar and having channels to receive the wire, substantially as set forth.

8. In means for preventing bending strains in wires, a pole adapted to be moved, a wire having a spirally-coiled portion bending into a substantially U form and extending partially around the end of the pole and oppositely-disposed devices clamped to the wire on opposite sides of the coiled portion and having hinge attachment to the pole, substantially as set forth.

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Witnesses:

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