

UNITED STATES PATENT OFFICE.

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WIRE-PAINTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 523,093, dated July 17, 1894.

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To all whom it may concern:

Be it known that I, JOHN B. WHALEN, a citizen of the United States, residing at Sycamore, in the county of De Kalb and State of Illinois, have invented a new and useful Improvement in Wire-Painting Devices, of which the following is a specification.

My invention relates to a device for use in coating wires, and especially insulated electric conductor wires, with a suitable "paint;" which when applied to the wire will afford a preservative covering therefor.

It is found in practice that the insulated wires, commonly employed, for example, in electric lighting systems, and wherein the insulating covering is in the form of woven fabric, are deleteriously effected by exposure to the elements; that when strung upon poles, or otherwise, out of doors, the more or less frequent wetting, the frost and changes of temperature to which they are subjected all combine to wash out and destroy any preservative material with which the insulating fabric may have been initially coated, whereby the fabric becomes exposed to the rotting influences of the atmosphere and its function accordingly impaired. In order to preserve the insulation it is customary to coat or paint the wires, at more or less frequent intervals, with a preservative compound or material; and my object is to provide a device of novel construction for use in applying a preservative substance to the wires without removing them from the poles or other supports upon which they are strung.

In the drawings—Figure 1 shows my improved device in perspective applied to an insulated wire; Fig. 2, an enlarged section taken on line 2 of Fig. 1; and Fig. 3, a perspective view of one of the ends of the device enlarged, and showing its inner side.

A is a box-shaped receptacle, preferably oblong, and provided with a hinged cover t . The opposite ends s of the box are provided with slots s' extending downward from the upper edges of the ends to about the centers thereof where the slots terminate in enlarged openings s^2 . Placed against the inner faces of the ends s are flexible, preferably soft rubber, plates q , having openings q' which regis-

ter with the openings s^2 , and slits q^2 extending centrally of the slots s' to the tops of the plates. The plates q are held in place by angular clamping strips p , of metal or other stiff material, which may be fastened in position by means of screws, p' , as shown. The strips p extend along the plates q at opposite sides of and below the openings q' and slits q^2 , leaving the upper edges of the plates free to yield as hereinafter described. Held in place by the clamping strips p and bearing against the inner faces of the plates q at opposite sides of the slits q^2 , are strips n of springy metal which serve normally to maintain the edges of the slits in contact.

Secured upon the cover t midway of the lateral edges thereof is a handle t' to which is attached one end of a cord, or other length of flexible material, affording a dragging medium t^2 . The cover when closed is fastened down by means of a suitable fastener which may be constructed, as shown, and comprise a metal strip portion m upon the cover having a projecting bifurcated end m' , and a hasp portion in the form of a rod m^2 pivotally secured at one end by a staple m^3 to the body of the box, the free end portion of the rod being threaded to receive a thumb nut m^4 . With the fastening illustrated the cover is secured by swinging the rod m^2 between the projecting forks m' and screwing down the nut m^4 . Any other suitable fastening means may be substituted for that shown.

The upper edges of the side and end pieces of the box are preferably provided with strips l of yielding material, as soft rubber, to afford water-tight joints between the body of the box and cover when the latter is closed. On the outsides of the ends s I provide grooved rollers i which register with the openings q' .

In practice the receptacle is filled, preferably to a plane a little above the openings q' , with absorbent material k , as cotton waste, for example, which is saturated with a suitable liquid preservative paint or compound and forms the painting medium.

Presuming that the wire X to be painted is strung upon poles, the operator ascends a pole with the device and after opening the cover t

presses the receptacle at the slots s' upward against the wire, causing the slits q^2 to open and permit the wire to pass to and extend through the openings q' , whereby it bears in the receptacle against the saturated material k and beyond the receptacle against the rollers i . After the wire has been passed through the slits, as described, the edges of the latter close together forming substantially water-tight joints. The operator after fastening down the cover descends the pole and grasping the cord pulls upon it to upset the receptacle, and draws the latter in its upset condition along the wire causing it to travel thus upon the rollers i to the next pole. When the receptacle is upset, as described, the material k envelops the wire and the liquid paint with which the material is saturated is fed by gravity to the wire causing the latter to become thoroughly coated as the receptacle is drawn along. When a pole is reached the receptacle is removed and replaced upon the wire, as described, on the opposite side of the pole and the operation continued.

In practice I prefer to provide plates q having openings q' which fit closely around the wire to be coated. The plate q at the rear end of the receptacle thus operates as a wiper to insure an even application of the paint to the wire and prevent wasting of the paint. For wires of different diameters plates q having openings of suitable size may be provided, and the plates may be readily inserted and removed from the receptacle by loosening the screws which hold the clamping strips in place.

My improved device affords a convenient and comparatively inexpensive medium whereby the wires may be quickly and thoroughly coated with a preservative paint.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a wire-painting device, a traveling receptacle for the painting medium, openings in the ends of the receptacle to receive the wire and support the receptacle in suspended relation thereto normally in upright position, the receptacle being so formed as to contain absorbent material in its lower part, and means for upsetting the receptacle and moving it, while upset, along the wire, whereby the liquid paint may sink into the absorbent material when the device is at rest and whereby the liquid paint in the absorbent material will flow to the wire from the absorbent material contacting with the wire, when the box is upset and drawn along the wire, substantially as described.

2. In a wire-painting device, a covered receptacle for the painting medium, having slotted end-portions to receive and close about the wire and hold the receptacle in normally upright pivotal suspended relation to the wire, the receptacle being so formed as to contain absorbent material in its lower part,

and a dragging medium attached to the upper side of the box and operating, when dragged, to upset the receptacle and move it along the wire, whereby the liquid paint may sink into the absorbent material when the device is at rest and whereby the liquid paint in the absorbent material will flow to the wire, from the absorbent material contacting with the wire, when the box is upset and drawn along the wire, substantially as and for the purpose set forth.

3. In a wire painting device, the combination, with the receptacle for the painting medium, of flexible end-plates on the receptacle having normally closed slits q^2 , for the insertion of the wire, and openings q' , to receive the wire, substantially as described.

4. In a wire painting device, the combination, with the receptacle for the painting medium, of flexible end plates on the receptacle having slits q^2 , for the insertion of the wire, and openings q' , to receive the wire, and springs at said plates bearing normally against the edges of the slits to maintain them closed, substantially as described.

5. In a wire-painting device, the combination of a receptacle for the painting medium, having slotted end-portions to receive and close about the wire and hold the receptacle in pivotal suspended relation to the wire, the receptacle being so formed as to contain absorbent material in its lower part, an opening and closing cover for the receptacle having means for fastening it when closed, upsetting means for the receptacle, and means for moving the receptacle along the wire, whereby the liquid paint may sink into the absorbent material when the device is at rest and whereby the liquid paint in the absorbent material will flow to the wire from the absorbent material contacting with the wire, when the box is upset and drawn along the wire, substantially as and for the purpose set forth.

6. In a wire painting device, the combination, with the receptacle for the painting medium, of removable and replaceable flexible end plates on the receptacle having slits q^2 , for the insertion of the wire, and openings q' , to receive the wire, and clamps for fastening the plates in place, substantially as described.

7. In a wire painting device a receptacle A for the painting medium, having slotted end-portions to receive and close about the wire and hold the receptacle in pivotal normally upright suspended relation to the wire, the receptacle being so formed as to contain absorbent material in its lower part, a cover t on the top of the receptacle, fastening means for the cover, a handle on the cover and a cord, or the like, t^2 connected to said handle, whereby the liquid paint may sink into the absorbent material when the device is at rest and whereby the liquid paint in the absorbent material will flow to the wire from the absorbent material contacting with the wire,

when the box is upset and drawn along the wire, substantially as and for the purpose set forth.

5 8. In a wire painting device, the combination of a receptacle, for the painting medium, having a cover *t* and cover fastening, and ends *s* having slots *s'* and openings *s²*, flexible end plates *q*, in the receptacle, having normally

closed slits *q²*, at the slots *s'*, and openings *q'*, at the openings *s²*, and rollers upon the ends *s* below the openings *s²*, substantially as and for the purpose set forth. 10

JOHN B. WHALEN.

In presence of—

J. D. BECKLER,
S. A. FULTON.