

No. 632,655.

Patented Sept. 5, 1899.

G. G. LEWIS.
INSULATING APPARATUS.

(Application filed Jan. 3, 1898.)

(No Model.)

Fig. 1.

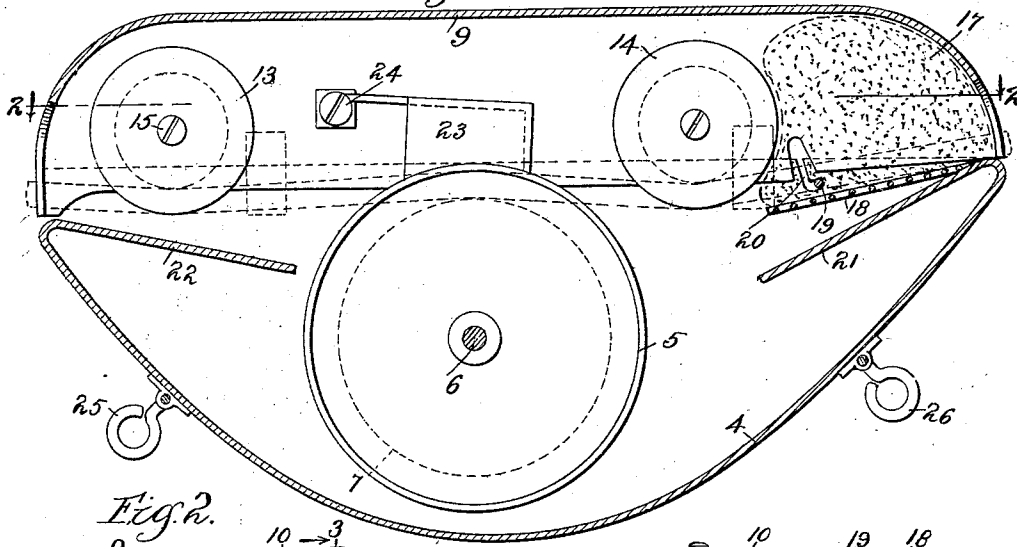


Fig. 2.

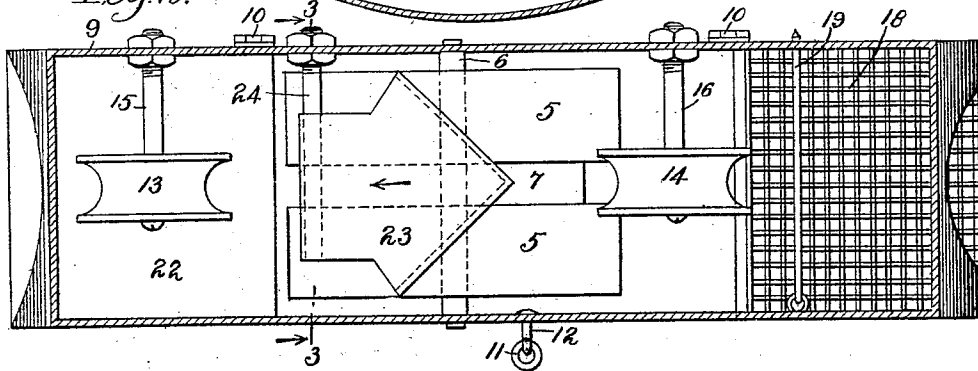
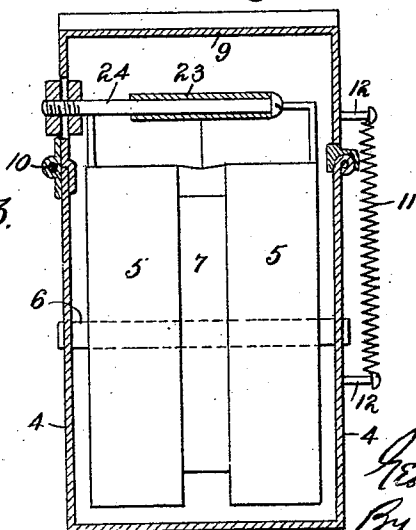


Fig. 3.



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UNITED STATES PATENT OFFICE.

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INSULATING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 632,655, dated September 5, 1899.

Application filed January 3, 1898. Serial No. 665,291. (No model.)

To all whom it may concern:

Be it known that I, GEORGE G. LEWIS, a citizen of the United States, residing in Sycamore, in the county of De Kalb and State of Illinois, have invented certain new and useful Improvements in Insulating Apparatus, whereof the following is a specification.

My invention relates to apparatus for coating or recoating wires with insulating material in liquid form, and more particularly to apparatus of the general type illustrated in my pending application, Serial No. 652,029, filed September 17, 1897, in which the paint or insulating material is carried in a reservoir and is carried therefrom to the wire by a conveyer operated by the movement of the apparatus.

The object of my present invention is to provide certain improvements in apparatus of this character, which object I accomplish as hereinafter specified and as illustrated in the drawings.

That which I regard as new will be set forth in the claims.

In the drawings, Figure 1 is a longitudinal vertical section. Fig. 2 is a horizontal section on line 2 2 of Fig. 1. Fig. 3 is a vertical cross-section on line 3 3 of Fig. 2.

Referring to the drawings, 4 indicates a reservoir which is in the form of a bowl or trough suitably shaped to contain the paint or other insulating material.

5 indicates a wheel or conveyer which is mounted upon a suitable spindle 6, secured in the sides of the reservoir 4, as shown in Fig. 3. The wheel 5 is provided with a groove 7 of sufficient size to receive the wire to be coated, such wire being indicated by the reference-numeral 8 in Fig. 1, wherein it is shown in dotted lines. The diameter of the wheel 5 is such that it is only partially submerged in the paint in the reservoir, and by its rotation it carries the paint up from the reservoir to the wire, as will be hereinafter more specifically described.

9 indicates the cover of the reservoir, which is hinged thereto at one side, as shown at 10 in Fig. 3, and is adapted to be secured to the reservoir 4 at the opposite side by a spring 11, connected to pins 12 or other suitable devices connected to the cover and reservoir, as illustrated in Fig. 3. The spring 11 is detachably

connected at one end, so that the cover may be turned back to permit of access to the reservoir when desired.

13 14 indicate rollers which are mounted upon suitable spindles 15 16, secured to one side of the cover 9, as illustrated in Figs. 1 and 2. The spindles 15 16 are secured in slots, as indicated by dotted lines, so that they may be adjusted as desired, and they are suitably grooved to receive the wire.

Near the rear roller 14 is a sponge or other wiper 17, which rests upon a perforated plate 18 at the upper part of the reservoir, at the rear end thereof. The wiper is held in place by a pin 19, as shown in Figs. 1 and 2, one end of which is linked to the reservoir at one side, its other end being secured in an angular slot 20 in the opposite side of the reservoir. By this construction the pin is readily removable to permit of the removal of the wiper.

21 22 indicate drip-plates at the ends of the reservoir to receive drippings and discharge them into the reservoir.

23 indicates a scraper which, as shown in Fig. 2, is V-shaped and is pivoted to a rod 24, secured to one side of the cover 9. The scraper 23 is provided with a downwardly-projecting V-shaped flange 23^a, which rests upon the upper surface of the wheel 5, the angle or apex of said flange lying over the groove 7 of the wheel 5, and as such wheel rotates in the direction indicated by the arrow in Fig. 1 the paint carried by it is scraped to the center by the scraper 23 and discharged into the groove 7 upon the wire resting in said groove.

25 26 indicate hooks, to which cords may be connected for moving the insulating apparatus forward or backward.

The operation of my improved apparatus is as follows: One end of the spring 11 is disengaged and the cover turned back, so that the wire to be coated may fit in the groove 7. The cover is then adjusted and the free end of the spring connected. As the apparatus moves along the wire in the direction indicated by the arrow in Fig. 2 the wheel 5 rotates in the direction indicated by the arrow in Fig. 1, carrying the paint up with it, until the scraper 23 is reached, when the paint is scraped off and discharged upon the wire. The wiper 17 serves to remove surplus paint

and to distribute the paint more uniformly over the surface of the wire, the surplus paint dripping through the plate 18 upon the plate 21, from which it is discharged into the reservoir. The rollers 13 14 serve to support the device upon the wire and guide it.

By yieldingly connecting the cover with the reservoir at one side, as above described, the rollers 13 14 are permitted to yield when passing over knots in the wire and to adjust themselves to such inequalities as may exist.

While the apparatus herein illustrated is intended to be drawn by a cord, I do not restrict myself to the use of a cord, as it may be connected to a pole or may be otherwise propelled. Neither do I wish to limit myself to other specific details of construction, except where specifically claimed, as my invention includes equivalents.

That which I claim as my invention, and desire to secure by Letters Patent, is—

1. In a painting apparatus, the combination with a reservoir, of a paint-conveyer, said conveyer having a groove to receive the wire, and a scraper adapted to scrape the paint from said conveyer upon the wire, substantially as described.

2. In a painting apparatus, the combination with a reservoir, of a paint-conveyer, said conveyer having a central groove to receive the wire, and a V-shaped scraper adapted to scrape the paint from said conveyer upon the wire, substantially as described.

3. In a painting apparatus, the combination with a reservoir carried below the wire to be painted, and a paint-conveyer therein, of a cover for said reservoir, and rollers carried by said cover and adapted to rest upon the wire, substantially as described.

4. In a painting apparatus, the combination with a reservoir, of a paint-conveyer adapted to convey paint therefrom to the wire, and vertically-yielding rollers adapted to rest upon the wire at opposite sides of said conveyer, substantially as described.

5. In a painting apparatus, the combination with a reservoir, and a paint-conveyer, of a

cover for said reservoir, said cover being yieldingly connected to said reservoir, and rollers carried by said cover and adapted to rest upon the wire, substantially as described.

6. In a painting apparatus, the combination with a reservoir, and a paint-conveyer, of a cover for said reservoir, said cover being yieldingly connected to said reservoir, rollers carried by said cover and adapted to rest upon the wire, and a scraper also carried by said cover, substantially as described.

7. In a painting apparatus, the combination with a reservoir, and a wheel journaled therein, said wheel having a peripheral groove, of a scraper adapted to scrape the paint from said wheel, and rollers adapted to rest upon the wire at opposite sides of said scraper, substantially as described.

8. In a painting apparatus, the combination with a reservoir, and a wheel journaled therein, said wheel having a peripheral groove, of a scraper adapted to scrape the paint from said wheel, rollers adapted to rest upon the wire at opposite sides of said scraper, and a wiper at the rear of the apparatus, substantially as described.

9. In a painting apparatus, the combination with a reservoir, and a conveyer therein, of a cover hinged at one side to said reservoir, a spring connecting the reservoir and cover at the other side, rollers mounted in said cover, and means for discharging paint from said conveyer upon the wire, substantially as described.

10. In a painting apparatus, the combination with a reservoir, and a wheel journaled therein, said wheel having a peripheral groove, of a cover hinged at one side to said reservoir, a spring connecting the other side of said cover to the reservoir, rollers carried by said cover, and a scraper between said rollers, substantially as described.

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Witnesses:

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