No. 886,774. PATENTED MAY 5, 1908.

H. A. DREW.

WIRE TIE.

APPLICATION FILED APR. 18, 1907.

Fig. 1.

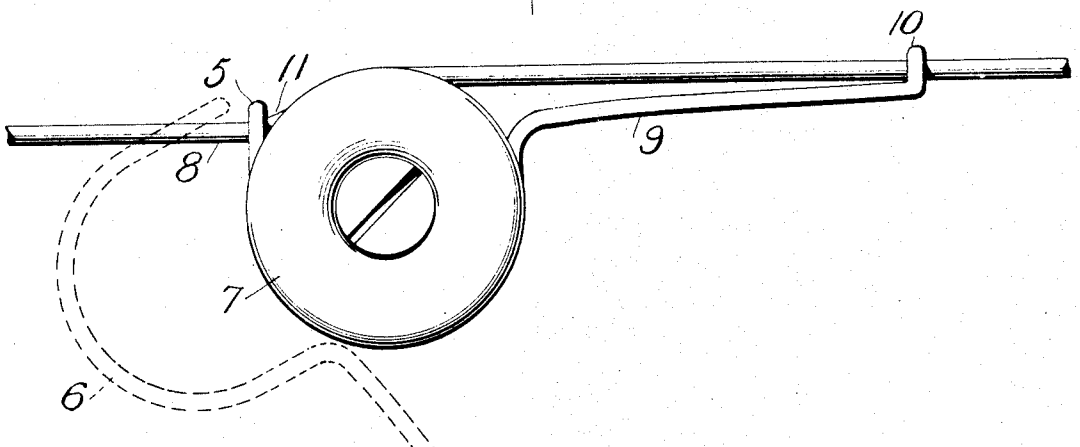


Fig. 2.

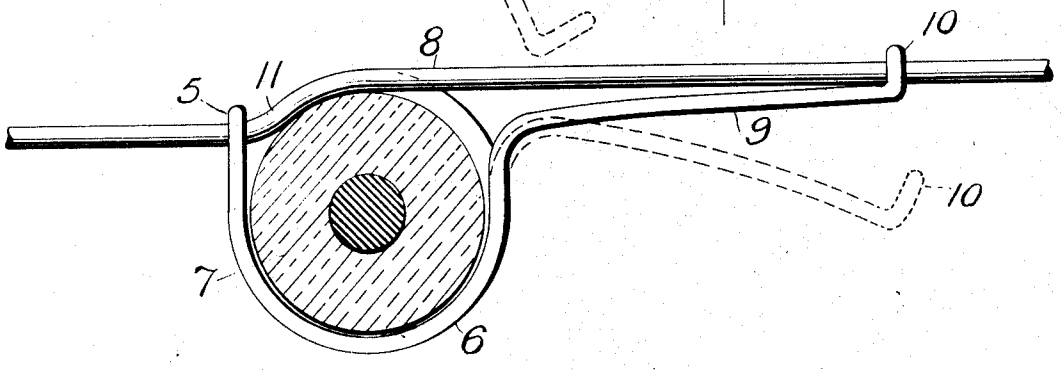
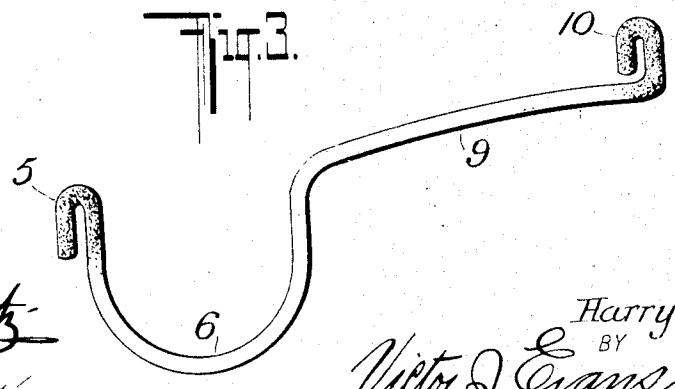


Fig. 3.



WITNESSES

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HARRY A. DREW, OF NEW YORK, N. Y.

WIRE-TIE.

No. 886,774. Specification of Letters Patent. Patented May 5, 1908.

Application filed April 18, 1907. Serial No. 368,914.

To all whom it may concern:

Be it known that I, HARRY A. DREW, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented new and useful Improvements in Wire-Ties, of which the following is a specification.

This invention relates to wire ties or devices for locking and binding electric and other wires to insulators and its object is to provide a cheap and simple device which not only securely grips and binds the wire to the insulator but may be instantly adjusted or removed. In providing the wire with this improved tie its arrangement in no way injures the wire nor insulator in case it is desired to remove same as will be further described in the following specification, set forth in the claims and illustrated in the drawings.

Figure 1 is a side elevation of an ordinary porcelain insulator and line wire with the improved tie wire applied thereto. Fig. 2 is a similar view with the insulator in section. Fig. 3 is a perspective view of the tie.

In electric wiring it has been the common construction to twist a tie wire around the main line wire on each side of the insulator firmly binding the two wires against the groove in the insulator and frequently with such force as to break and destroy same. This common form is also so firmly secured that it is practically impossible to remove same without destruction to the wire or to leave it in such condition as to be of no further use. The arrangement of this old form of tie also requires tools and scrapes the coating or covering from steel wires so that they are attacked by rust and ruined in a few years and lastly a great amount of skill and time is required to arrange the tie which this invention is designed to overcome.

The device consists of a wire of steel or suitable resilient metal having an engaging hook or loop 5 at one end of a receiving loop or rounded section 6, which is adapted to conform with the circumferential groove of the insulator 7 and fit around its lower side or the side opposite the line wire 8. The other end of the loop 6 continues outward to form an arm 9 which is substantially a spring and has at its outer end an engaging hook 10.

The tie is arranged upon the line wire and insulator as shown in Fig. 1 and the operation of placing same is shown in dotted lines in that view and Fig. 2 where it will be seen that after the line wire has been placed on the upper side of the insulator and in its groove the hook 5 is placed over same near the insulator and the tie is pressed upward against the insulator and in its groove, the action causing an off-set 11 in the line wire which is gripped against movement in either direction by the hook and the adjacent insulator. This gripping action is further increased when the hook 10 is sprung upward and over the line wire and retained there by the resilient action of the arm 9.

The above described operation of effecting this tie is practically instantaneous and its release is as rapid; at the same time the wire is not injured nor its covering mutilated, while the tie may again be used. This tie is especially desirable in temporary use where wires are strung for a short time only and the ties and wire may again be strung.

In Fig. 3 the tie is shown as being covered with some insulating material preferably rubber which not only acts as an insulator but protects the line wire from abrasion and injury.

Various minor modifications may suggest themselves in the construction and use of this device without departing from the essential features above described.

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

1. A fastener for securing a line wire to an insulator comprising a tie wire having a loop adjacent one end to partially encircle the insulator, the ends of said tie wire providing hooked arms to engage the line wire, one of said arms being longer than the other to exert a leverage action, whereby the short arm is adapted to form a kink in the line wire to hold the same firmly against the insulator.

2. A fastener for securing a line wire to an insulator comprising a tie wire provided with hooked terminals to engage the line wire and having a loop closer to one hooked terminal than the other.

3. A fastener for securing a line wire to an insulator comprising a tie wire bent intermediate its ends to form a loop to partially

encircle the insulator, the ends of said tie wire being hooked to engage the line wire, one of said ends being comparatively short to draw the line wire into close contact with the insulator and the other comparatively long to engage the line wire remote from the insulator.

In testimony whereof, I affix my signature in presence of two witnesses.

HARRY A. DREW.

Witnesses:
JAMES F. DUHAMEL,
MAE W. CLINTON.