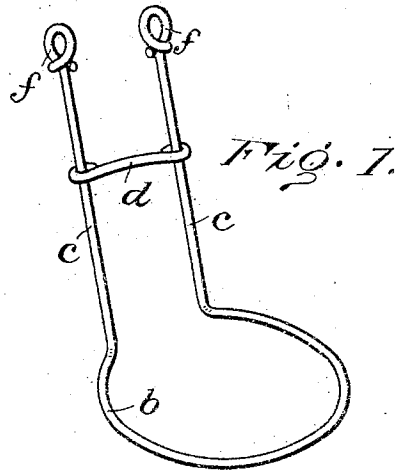
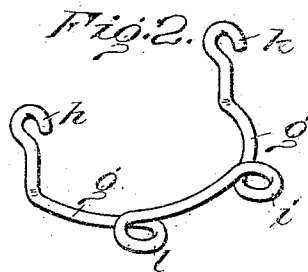
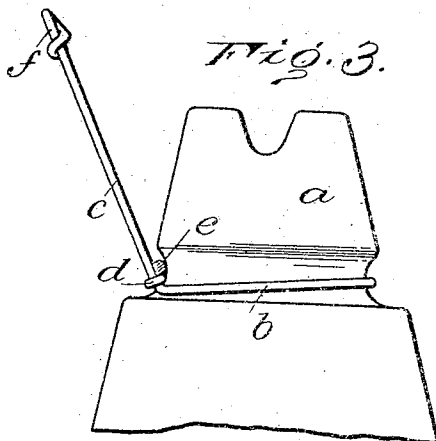
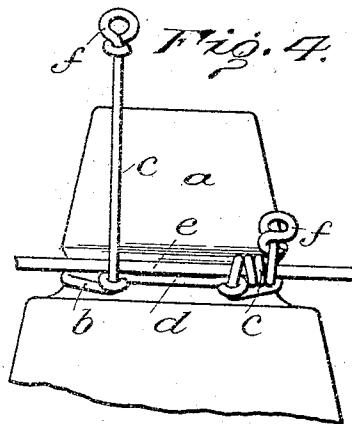
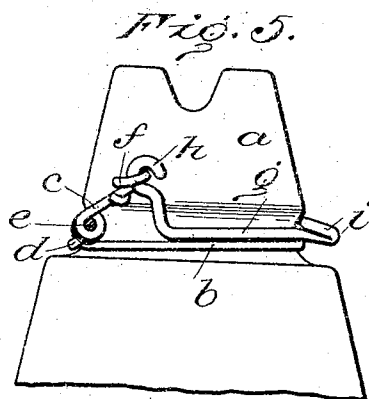


H. PARRA.
 DEVICE FOR ATTACHING CONDUCTORS TO INSULATORS.
 APPLICATION FILED NOV. 17, 1913.

1,235,592.

Patented Aug. 7, 1917.



Witnesses:
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UNITED STATES PATENT OFFICE.

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DEVICE FOR ATTACHING CONDUCTORS TO INSULATORS.

1,235,592.

Specification of Letters Patent.

Patented Aug. 7, 1917.

Application filed November 17, 1913. Serial No. 801,478.

To all whom it may concern:

Be it known that I, HENRI PARRA, a citizen of the Republic of France, residing at Port de Capdenac par Figeac, Lot, France, have invented a new and useful Improvement in Devices for Attaching Conductors to Insulators, which is fully set forth in the following specification.

The present invention has for its subject a device for attaching electric, telegraphic and telephonic wires or cables to insulators of all kinds.

This device presents the following advantages over existing devices and in particular over that which formed the subject of American Patent No. 1,054,138.

(a) *Strength.*—It obviates undulation and deformation of the wire or cable around the neck of the insulator, and therefore, as it does not deteriorate the wire, it does not reduce the strength of same.

(b) *Security.*—It fixes the wire or cable more tightly or closely to the insulator, however small the diameter of the wire or cable may be, and thus presents any slipping or shifting of the latter.

(c) *Economy of material.*—The parts of which the attaching device is composed being simple and few in number, the cost price is low and the sale price can be reduced.

The following description with reference to the accompanying drawings will enable the features and advantages of the attachment device of the present invention to be well understood.

Figure 1 is a perspective view of the attachment collar of the device.

Fig. 2 is a perspective view of the locking collar or stirrup.

Fig. 3 is a side elevation showing an insulator fitted with the attachment collar and the cable or wire to be fixed, before the binding of the latter.

Fig. 4 is a front elevation of the said insulator, showing the cable bound on one side only.

Fig. 5 is a view similar to Fig. 3, showing the cable bound at both sides and finally fixed by the locking collar or stirrup.

This securing device is composed of two independent parts:—

1. The attachment collar, which is placed around the neck of the insulator and is completed by two shanks or rods on which slides a cross-piece.

2. The locking collar or stirrup.

To fix the wire or cable on the insulator the procedure is as follows:—

The attachment collar *b*, having a cross piece *d* sliding along two vertical shanks or rods *c*, is put on to the neck of the insulator *a* by simply pressing the attachment collar on to the insulator, the cross-piece *d* being at the top of the two parallel shanks or rods *c* before the attachment collar is put on. The cross piece *d* having been pushed down, the wire or cable *e* to be attached is moved along the two vertical shanks *c* and between same and the insulator. Then the two shanks *c* are turned down on the cable and are wound around same in the form of a coil. The upper ends *f* of these two shanks are formed as eyes, and the locking of the attachment device is effected by means of the locking collar or stirrup *g*.

For this purpose the collar or stirrup *g* is inserted by the hooks *h* at its ends into the eyes *f*, and the stirrup is then easily turned down around the neck of the insulator by simply pressing with the thumbs on the ears or lugs *i*. Thus all shifting of the collar *b* is prevented, the coiled shanks or rods *c* of which are in this way more tightly gripped on the wire or cable; any slipping of the latter is therefore impossible.

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

1. In a device for attaching wires to a support, a collar, shanks extending from said collar and having eyes formed at their extremities, a cross-piece connecting said shanks, and a resilient stirrup having hooks at its ends for engaging said eyes.

2. In an insulator clamp, a wire having a central portion annularly formed and extending portions with holes at their extremities, a cross-piece connecting said extending portions at their juncture with said annular portion, and a resilient stirrup engaging the holes in said extended portions.

3. In an insulator-clamp, the combination of a collar adapted to fit an insulator, shanks extending from the collar and adapted to be wound about a conductor, a cross-piece connecting said shanks, and resilient means engaging the ends of said shanks and holding them in place.

4. In an insulator-clamp, the combination of a resilient wire having a body portion adapted to substantially surround an insu-

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lator and having shanks provided with eyes at their extremities and adapted to be wound about a conductor, a strap connecting said shanks, and a resilient stirrup adapted to engage said eyes.

5 An insulator clamp comprising a body portion formed from a single wire, said body portion consisting of a collar and shanks extending therefrom, a cross-piece connecting said shanks, and a resilient connecting portion for engaging the free extremities of said shanks.

6. A device for attaching wires to a support comprising a collar and shanks having eyes formed at their extremities, means carried by said shanks for retaining said collar in position, and resilient means engaging the eyes of said shanks and holding the same in place.

7. In an insulator-clamp, the combination of a member adapted to extend substantially around an insulator and having two extending portions adapted to be wound around a conductor, and means for connecting the said extending portions at points between the points at which the said portions engage the insulator and the points at which the said portions engage the conductor.

8. In a device for attaching wires to a support, the combination of a collar adapt-

ed to fit around the support, shanks extending from the collar and initially substantially parallel, and a cross-piece slidable along the shanks and normally positioned near the said wire, and means for securing the ends of the shanks after they have been wound around the wire.

9. In a device for attaching wires to a support, the combination of a collar adapted to fit around the support, shanks extending from the collar and adapted to be wound around the wire, and means supplemental to the wire for supporting the shanks, the said means engaging the shanks at points which are between the support and the wire and which are separated from the support.

10. In a device for attaching wires to a support, the combination of a collar adapted to fit around the support, shanks extending from the collar and adapted to be wound around the wire, and means for preventing the shanks from drawing the wire out of a straight line tangent to said support.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HENRI PARRA.

Witnesses:

X. CRUNET,
F. JACOBS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."