(No Model.)

H. A. McCOY.

ELECTRIC WIRE HOLDING APPLIANCE.

No. 599,346. Patented Feb. 22, 1898.

Fig. 1.

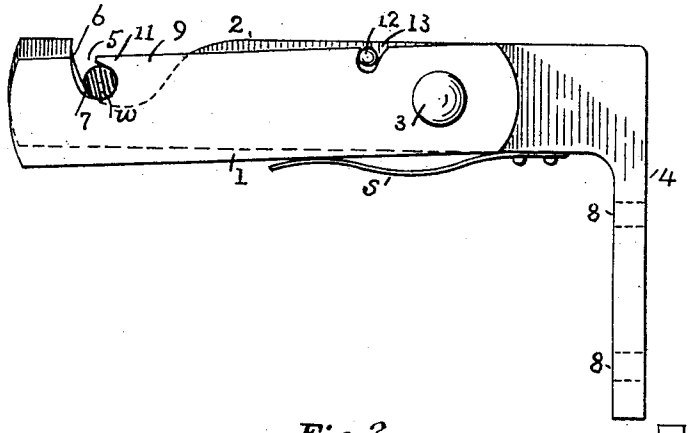


Fig. 2.

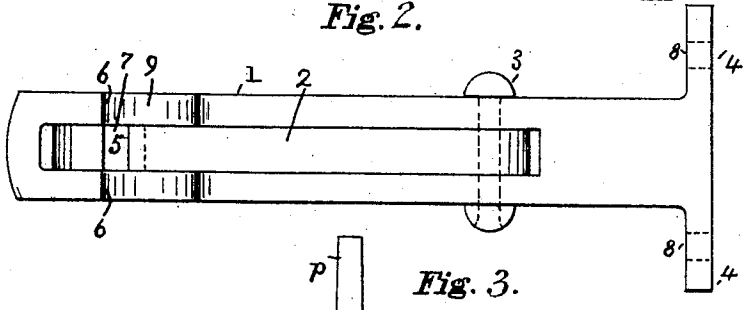
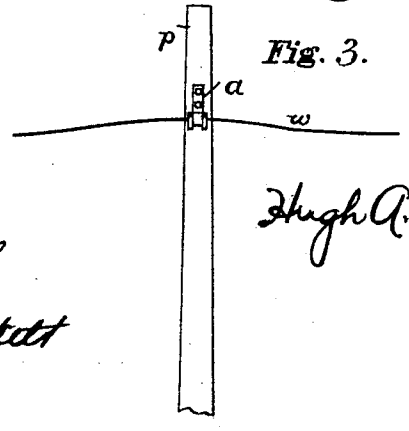


Fig. 3.



Attest.
Henry L. Grush
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HUGH A. McCOY, OF CAMBRIDGE, MASSACHUSETTS.

ELECTRIC-WIRE-HOLDING APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 599,346, dated February 22, 1898.

Application filed September 30, 1897. Serial No. 653,610. (No model.)

To all whom it may concern:

Be it known that I, HUGH A. McCOY, residing at Cambridge, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Electric-Wire-Holding Appliances, of which the following is a specification.

In stringing telegraph and telephone wires upon their supports it is often necessary to hold them firmly at rest at such supports temporarily during the process of pulling them along to prevent their sagging, and in the common method of suspending aerial cables in which the suspension or guy wire is drawn along with the cable frequent stoppages are made, during which the suspension-wire is held to the poles or supports.

The present invention aims to provide means for quickly and securely holding the wires to supports, whether temporarily or permanently, and as quickly releasing them.

In carrying out the invention a wire-holding implement has been devised into which the wire can be easily inserted or dropped and which will automatically operate to grip and hold the wire by reason of the weight of the latter.

The apparatus for the said purpose which I have shown herein, which operates to grip and hold the wire as aforesaid when supporting the same, consists of a portable device provided with a foot or means of attachment to a pole, cross-arm, or other suitable support and means for gripping and holding the wire, which consist of fingers or extensions secured together by a bolt, on which they swing, each finger having openings on one of their sides or faces continuous with each other, into which the wire is dropped or inserted. These openings are so constructed that the weight of the wire causes two of the fingers to swing past a third finger, or the third finger to swing past the two fingers, as the construction may be, and pinch or grip and hold the wire. In either case the fingers act to close upon the wire in such a manner that it cannot dislodge itself; but whenever the wire is manually raised, so that its weight is removed from the gripping-jaws on the fingers, they are easily opened and the wire lifted out, all of which I will now proceed to describe, and point out in the appended claims.

In the drawings, Figure 1 represents a side view of the appliance, showing a wire gripped between the fingers. Fig. 2 is a modification of construction, and Fig. 3 illustrates the attachment of the appliance to a pole.

a represents the appliance, shown as composed in Figs. 1 and 2 of three fingers, the two outer ones, 1 1, being alike and pivoted to the central finger by the bolt 3. The central finger has a foot 4 at one end to be secured to a support by means of bolts which pass through the holes 8.

The outer fingers or bars 1 have openings 5 on their upper face, which serve as entrances to the enlarged circular-shaped holes 7, and the central finger has a curved-shaped notch 9, cut in its upper side, terminating in a wedging incline 6, which is continuous with the outer edges of the openings 5 5 of the fingers 1 1.

Suppose a wire to be elevated for any purpose or, being elevated, to be drawn along the poles, and it becomes desirable to hold it taut between two or more poles or supports. The appliances *a* being secured to the poles and the fingers being held parallel, the wire is dropped or inserted into the openings 5 and 9 of the fingers. It falls upon the bottom surfaces of the holes 7 of the outer fingers, which surfaces are higher than the bottom surface of the curved notch 9 in the central finger, and the weight of the wire forces or depresses the fingers 1 until the wire has been impelled by the incline 6 to the right and under the projections 11 at the entrances 5 of the fingers 1 1 and becomes firmly gripped, as shown in Fig. 1.

The jaws or fingers are constructed to grip any size of wire that can be inserted into the entrances 5. In Fig. 1 I have shown a flat spring *s*, secured to the under side of the center finger 2, whose free or outer end bears upon the under side of the two outer fingers to hold them in a parallel position. I also show a slot 13, cut in the upper part of the fingers 1, and a stud 12 in the central finger, which plays in the slot to prevent the fingers from being jumped upward by any rising of the wire. Neither the spring nor the studs are necessary to the successful operation of the appliance, however.

The curved notch in the central finger is

made so deep that the wire will never reach its bottom surface in order that the incline 6 and the opposing sides of the holes 7 shall be able to serve as jaws and grip and retain wires of different diameters.

Fig. 2 shows a modified form of the appliance, in which the outer fingers are joined to each other and carry the foot or securing part 4. The central finger is pivoted by the bolt 3 and adapted to be depressed by the wire. In this case the outer fingers have curved notches 9 and the central finger has the entrance 5, in order that a gripping of the wire can be effected.

I provide any kind or shape of foot-piece in order that the appliance may be attached to any support.

I do not limit myself to the precise form of construction shown, but may employ any form within the spirit of my invention.

Having described the invention, I claim—

1. The combination in a portable device for holding a wire, of three parallel pieces of metal pivoted to each other by a bolt at one extremity; the two outer swinging pieces having underhooking openings in their upper surfaces coincident with each other; the central piece extending beyond the side pieces at one end and terminating in one or more integral right-angled extensions provided with bolt-holes, a curving notch in its upper surface registering with the openings in the side pieces when the upper surfaces of the three pieces are parallel with each other.

2. A wire-holding device consisting of parallel fingers pivoted to each other provided with means for securing the same to a support and with means for holding a line-wire consisting of openings and jaws in the said fingers, the fingers being held parallel by a spring, and adapted to be depressed by the weight of said line-wire and to grip the same.

3. A wire-holding device consisting of fingers pivoted to each other provided with means for securing the same to a support and with means for holding the line-wire consisting of openings and jaws in the said fingers, the fingers being held open by a spring, and adapted to be depressed by the weight of said line-wire and to grip the same.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of September, 1897.

HUGH A. McCOY.

Witnesses:
HENRY G. GRUSH,
WILLIAM P. CROCKETT.