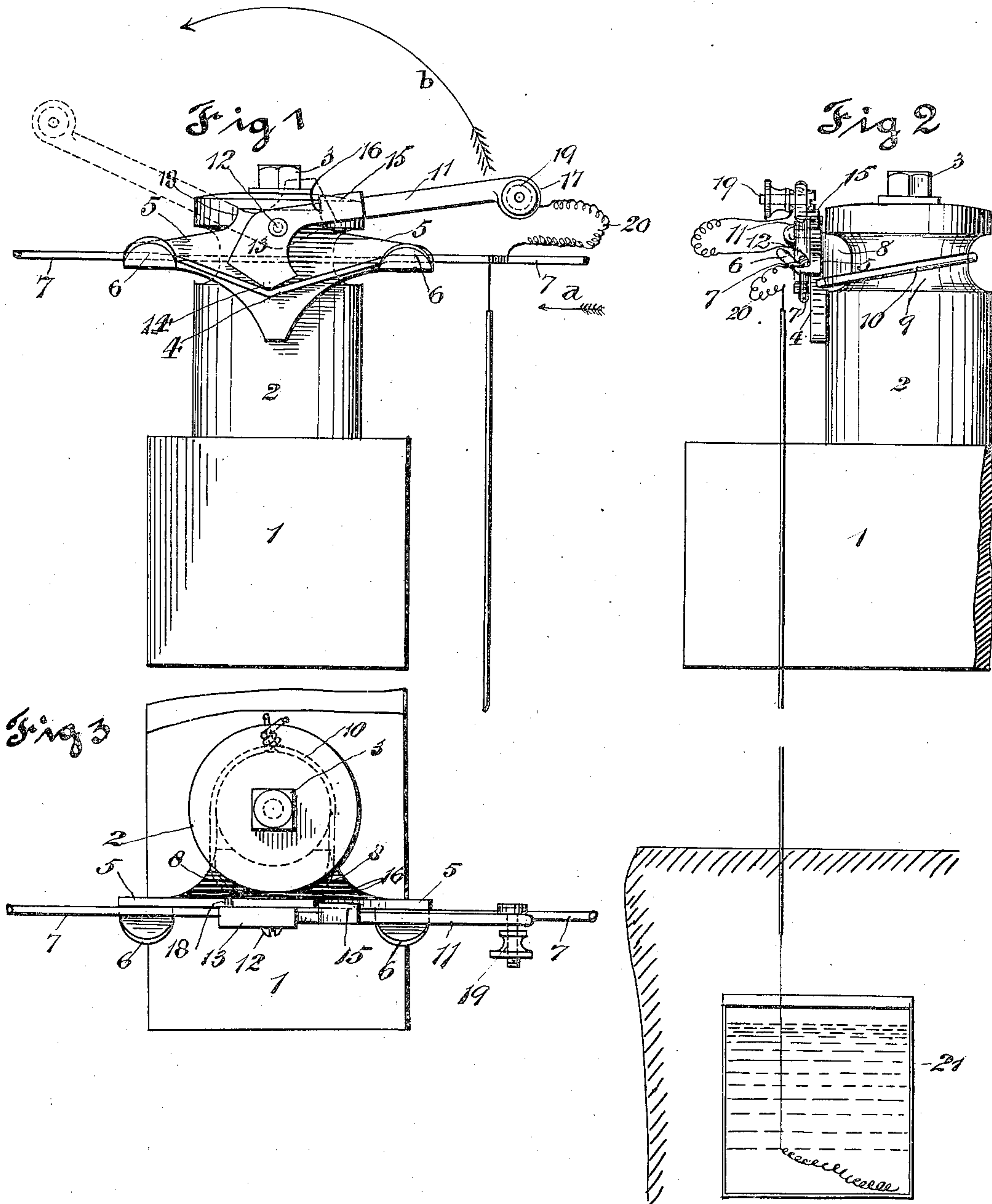


No. 835,801.

PATENTED NOV. 13, 1906.

H. W. RAGSDALE.
TELEPHONE WIRE SECURING MEANS.

APPLICATION FILED JUNE 19, 1905.



WITNESSES:

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HARVEY W. RAGSDALE, OF MORGANTOWN, INDIANA.

TELEPHONE-WIRE-SECURING MEANS.

No. 835,801.

Specification of Letters Patent.

Patented Nov. 13, 1906.

Application filed June 19, 1905. Serial No. 265,906.

To all whom it may concern:

Be it known that I, HARVEY W. RAGSDALE, a citizen of the United States, residing at Morgantown, in the county of Morgan and State of Indiana, have invented certain new and useful Improvements in Telephone-Wire-Securing Means, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to a wire-fastening means whereby electric service-wires are removably secured to their insulators; and it consists in the securing device hereinafter described in the specification and more particularly pointed out in the claims.

15 The object of this invention is to provide not only a means for removably securing the electric service-wire, but also to provide a ground connection for connecting said service-wire and the end of the lever of the fastening to a ground-wire, whereby when lightning strikes the service-wire the electric fluid passing toward the securing means will be arrested and grounded.

25 I attain these objects by means of the fastening device illustrated in the accompanying drawings, in which similar numerals of reference designate like parts throughout the several views.

30 Figure 1 is a front view of the device, showing the same secured to a suitable insulator. Fig. 2 is an end elevation of the same looking in the direction of the arrow *a*, and Fig. 3 is a plan view of the same.

35 The insulator cross-bar 1, preferably of wood, is secured in the usual way to a supporting telegraph-pole, which cross-bar carries the insulators 2, of glass or porcelain, which latter are secured to said bar 1 by 40 wood-screws 3.

45 The body portion 4 of the clamp is provided with the horizontally-extending arms 5, on the end portions of the bottom edges of which are formed integral the wire-receiving hooks or supporting-hooks 6, which extend 50 outwardly and upwardly or are inclined upwardly from the faces of said arms 5, so that when the service-wire 7 is placed upon said supporting-hooks 6 or rests thereon it will tend to drop toward the root of the supporting-hooks 6 and lie against the front surface of the arms 5 and the body 4 of the device to bridge the space between said supporting-hooks, and thereby leave that portion of the 55 service-wire 7 situated between the support-

ing-hooks 6 unsupported for the purpose hereinafter described.

60 A saddle portion 8 projects from and is formed integral on the back face of the body 4, and said saddle is concaved or hollowed out in one direction to fit the reduced portion 9 of the insulator 2, and the same is held tightly to the insulator by the securing-wire 10, the ends of which are passed around the reduced neck portion 9 of said insulator 2 and 65 twisted tightly or knotted, as shown particularly in Fig. 3, or otherwise united to firmly and securely hold said saddle in position.

70 A lever-arm 11 is pivotally mounted on the top portion of the face of the body 4 by the screw 12, and beneath the pivotal end of said lever-arm is the pointed cam 13, which is formed integral with said arm and has its engaging toe 14 when in engaging position situated to one side—that is, the side opposite 75 the lever-arm 11 of the center of the pivotal pin 12. (See particularly Fig. 1.) The cam 13 being pivoted centrally and above the plane of the hooks 6 will when moved into engaging position cause said engaging toe 14 80 of the cam 13 to contact with and bend or kink the wire 7 to change the same from the position shown in dotted lines to that shown in full lines, thereby effectually securing said wire 7 from a longitudinal movement. 85

90 A stop 15 is formed integral on the arm 11, intermediate the pivotal pin and the end thereof, and the same is arranged to permit its bottom projecting edge to contact with the rounded top edge portion 16 of the body 4 to prevent the lever-arm 11 descending so far as to permit its rounded end 17 contacting the service-wire 7. The distance 95 from the center of the pivot to the shoulder 15 being less than the distance from the center of said pivot to the shoulder 18, the stop 15 when the lever-arm 11 is thrown over in the direction of the arrow *b* will contact with the top edge portion of the arm 5, thereby again preventing the end 17 of the lever-arm 100 11 contacting with the service-wire 7 on the opposite side.

105 The binding-post 19 is situated on the rounded end 17 of the lever-arm 11, and the same is adapted to secure the top end portion of the ground-wire 20 to the rounded end 17 of the lever-arm 11. The ground-wire 20 is wrapped around the service-wire 7 and terminates in the ground reservoir or tank 21, which latter tank may be of any form of con- 110

struction or material, preferably of copper, embedded in the ground below the frost-line. The ground-wire 20 is preferably insulated from a point adjacent to the service-wire 7 to a point slightly beneath the surface of the ground.

The manner of applying this invention is as follows: The lever-arm 11 is thrown in the position shown in dotted lines, (see Fig. 1,) and the operator standing on the ground raises the wire by means of a pole and places the service-wire 7 in position over the supporting-hooks 6 and rests thereon, as shown in dotted lines. (See Fig. 1.) The lever-arm 11 is now revolved back into the position shown in full lines in Fig. 1, and the projecting pointed end 14 of the cam 13 contacts with the service-wire between the supporting-hooks 6 to bend or kink the same, as previously described, thereby absolutely preventing a longitudinal movement of the service-wire 7 on said supporting-hooks 6. The ground-wire 20 between the binding-post 19 and the service-wire 7 is coiled sufficiently to provide a length of wire at this point sufficient to permit the free rotation of the lever 11 from the position shown in full lines to that shown in dotted lines and also to permit the service-wire when removed from engagement with the cam 13 and its supporting-hook 6 to be dropped toward the ground within the reach of the person adjusting the tension of the wires.

It is clear that by means of a suitable pole provided with an engaging hook the lever-arm 11 can be moved by a person standing on the ground and the service-wire 7 removed from said supporting-hooks without necessitating the climbing of the pole to reach said service-wire to adjust the same. The entire adjustment and tension, therefore, of the service-wire can be accomplished by one standing on the ground.

Having thus fully described this my invention, what I claim as new and useful, and desire to cover by Letters Patent of the United States therefor, is—

1. In a telephone-wire-securing means, the combination with a cylindrical insulator, of a telegraph-wire-securing means comprising a body portion, opposing horizontally-extending wire-supporting arms formed integral on said body portion provided with hooked receiving supporting ends, a lever pivotally mounted on said body portion intermediate the ends of said arms and provided with a

projecting pointed toe for kinking the unsupported central portion of the wire.

2. In a telephone-wire-securing means, the combination with a cylindrical insulator, of a telegraph-wire-securing means comprising a body portion having its back concaved to fit said cylindrical insulator, opposing horizontally-extending wire-supporting arms formed integral on said body portion, wire-supporting hooks projecting from the end bottom edges of said arms and situated equally distant from the center of said body portion, a cam pivoted to the face of said body portion intermediate and above said hooks, and a lever-arm and a kinking and engaging toe formed on said cam whereby the wire situated between said supporting-hooks is bent or kinked.

3. In a telephone-wire-securing means, the combination with a cylindrical insulator, a saddle secured on said insulator, horizontally-extending opposing arms situated in a vertical plane and formed integral on said saddle, outwardly-projecting wire-supporting hooks extending from the outer end faces of said arms, of a cam-lever pivoted on the outer face of said saddle situated above and intermediate said wire-supporting hooks, a cam on said lever provided with a kinking and engaging toe, a stop on said cam-lever, whereby the end of said lever is prevented from contacting with said service-wire.

4. In a telephone-wire-securing means, the combination with a cylindrical insulator, a saddle secured on said insulator, horizontally-extending opposing arms situated in a vertical plane formed integral on said saddle, and outwardly-projecting wire-supporting hooks extending from the outer end faces of said arms, of a cam-lever pivoted on the outer face of said saddle situated above and intermediate said wire-supporting hooks, a cam on said lever provided with a kinking and engaging toe, a stop, whereby the end of said lever is prevented from contacting with said service-wire, a binding-screw on the end of said lever and a wire to the ground-wire connecting the end of said lever and said service-wire.

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

HARVEY W. RAGSDALE.

Witnesses:

THOMPSON R. BELL,
FLORENCE GIMBEL.