A. B. TINSLEY.

INSULATOR.

APPLICATION FILED MAY 11, 1909.

945,350. Patented Jan. 4, 1910. THY 3.24

UNITED STATES PATENT OFFICE.

ADDISON B. TINSLEY, OF ANSTED, WEST VIRGINIA.

INSULATOR.

945,350.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed May 11, 1909. Serial No. 495,263.

To all whom it may concern:

5 of West Virginia, have invented a new and useful Insulator, of which the following is

a specification.

The objects of the invention are, generally, the provision in a merchantable form, of a 10 device of the class above mentioned, which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of an insulator comprising separable sections, the 15 said sections being provided with interlocking elements adapted to receive and to firmly hold a wire; novel means being provided for assembling the sections with each other and with a supporting element; other and fur-20 ther objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts herein-25 after described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed for certain distinctive and peculiar features of the de-30 vice, it being understood, that, within the scope of what hereinafter thus is claimed, divers changes in the form, proportions, size, and minor details of the structure may be made, without departing from the spirit or 35 sacrificing any of the advantages of the

invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the draw-

40 ings.

In the accompanying drawings, Figure 1 shows, in longitudinal section, the insulator of my invention assembled with the crossarm of a pole; Fig. 2 is a detail perspective 45 of the separable sections, which, coöperating, unite to form the insulator; Fig. 3 is a vertical transverse section of the device, mounted in the cross-arm of a pole; Fig. 4 is a detail perspective of the retaining element 50 and of the nut which is adapted to be assembled therewith; Fig. 5 shows in perspective, a slightly modified form of my invention, the same being mounted in the extremity of the pole, instead of in the cross-arms 55 thereof.

In the accompanying drawings, the nu-

Be it known that I, Addison B. Tinsley, with the usual cross-arm 2. The cross-arm a citizen of the United States, residing at | 2 is chambered in its lower face, as denoted Ansted, in the county of Fayette and State | by the numeral 3 to receive and to house the 33

insulator of my invention.

The insulator as at first constructed comprises an inner section 5 and an outer section 6, similar in general contour. The outer section 6 is provided with an upstand- 35 ing lug 7 which is adapted to register in a chamber 8 in the face of the inner section 5. The lug 7 and the chamber 8 which is adapted to receive it, constitute interlocking, wireengaging elements, each of which is dis- 70 posed within the contour of its respective section.

The inner section 5 is provided with a transversely disposed groove 9, which extends from edge to edge of the member, 75 crossing the chamber 8, as denoted by the numeral 10. The outer section 6 carries a transverse groove 11 terminating at the base of the lug 7, the said lug being crossed by a groove 12 in longitudinal alinement with 80 the grooves 11.

Upon either side of the interlocking, wire engaging elements, the sections 5 and 6 are each provided with apertures 14, alined in the two sections, and adapted to receive re- 85 taining elements which will be described hereinafter. The apertures 14 are enlarged to form seats 15 and 16 in the outer faces of

the sections 5 and 6 respectively.

The invention includes a retaining ele- 90 ment which is shown in detail in Fig. 4. This retaining element is adapted to be inserted into the apertures 14 in the sections 5 and 6, to assemble the said sections with each other, and with the supporting member 95 whereby they are carried. The retaining element 17 is provided, intermediate its ends, with a polygonal shoulder 18, and the length of the said element is such, that when it is mounted in the sections 5 and 6, one end 100. thereof will protrude beyond the insulator, to form a support-engaging portion 19, which in the present instance, is threaded. The opposite extremity of the retaining element 17 is reduced as denoted by the nu- 105 meral 20, and threaded to receive a nut 21.

In practical operation, the retaining elements 17 are inserted into the apertures 14 in the inner section 5, and, the shoulder 18 being engaged by a suitable tool, the retain- 110 ing element is rotated, to cause the threaded, support-engaging portion 19 thereof to engage apertures provided for its reception in the supporting member. When the inner section has thus been mounted in its place, the wire 23 may be disposed transversely of the inner section 5 between the retaining elements 17, the outer section 6 being then mounted upon the retaining elements, and drawn to a bearing against its fellow, by the rotation of the nut 21.

When the device is mounted in the form shown in Fig. 1, both portions of the cross-arm 2 which inclose the insulator laterally, may be provided with flaring apertures 22 through which the wire 23 may pass.

When the device is mounted as shown in Fig. 5, upon the pole proper, the said pole upon either side of the insulator may be cut away as denoted by the numeral 26 to accommodate the wire 23, and to receive co-20 operating, split bosses 27 which are carried by the sections, the said bosses uniting to inclose the wire 23. It is to be understood that the outer section 28 which is shown in Fig. 5, together with the inner section there 25 indicated in dotted line, are provided with the interlocking - wire - engaging elements hereinbefore described, and with the other elements described in connection with the form of insulator which is shown in Figs. 30 1, 2 and 3. The important modification in the device shown in Fig. 5, consists in the fact that the lower ends of the outer section 28, and of the inner section, are outwardly beveled as denoted by the numeral 29. The 35 advantage of this construction is, that any water which, running down the pole, might find its way to the rear of the insulator, will follow the bevel 29 to the outer face of the pole, it being understood that the chamber 40 4 in the pole in which the insulator is mounted, is beveled at its lower end, to conform to the bevel 29 of the insulator.

The manner in which the lug 7 cooperates with the chamber 8, to engage the wire 23, is deemed worthy of note. It will be observed, as shown most clearly in Fig. 3, that these

elements cause to be formed in the wire 23, a bend 24, the upright portions 25 of which, engage the insulator securely, the form of the bend being such that it is well adapted 50 to hold the wire 23 in place, and to prevent any longitudinal movement of the said wire between the sections 5 and 6, whereby the insulation upon the wire might become broken through, or, in case no insulation is 55 used, whereby the wire itself, might become chafed and attenuated.

Having thus described my invention, what I claim as new and desire to protect, by Letters Patent, is:—

1. An insulator comprising separable inner and outer sections, provided with alined apertures, the aperture of the inner section being enlarged to form a seat in the outer face of said section; a threaded retaining 65 element arranged to be mounted in said apertures and to project beyond the inner section to form a support-engaging portion, the retaining element being provided with a polygonal shoulder to register in the seat; 70 and means assembled with the retaining element for engaging the outer section.

2. An insulator comprising separable inner and outer sections provided with alined apertures enlarged to form seats in the outer 75 faces of said sections; a retaining element arranged to be mounted in said apertures and to project beyond the inner section to form a support-engaging portion; the retaining element being provided with a 80 shoulder to register in the seat of the inner section; and means removably assembled with the retaining element and housed in the seat in the outer section, for engaging the outer section.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ADDISON B. TINSLEY.

Witnesses:
E. Hume Talbert,
Mason B. Lawton.

ADDIOUN D. LI