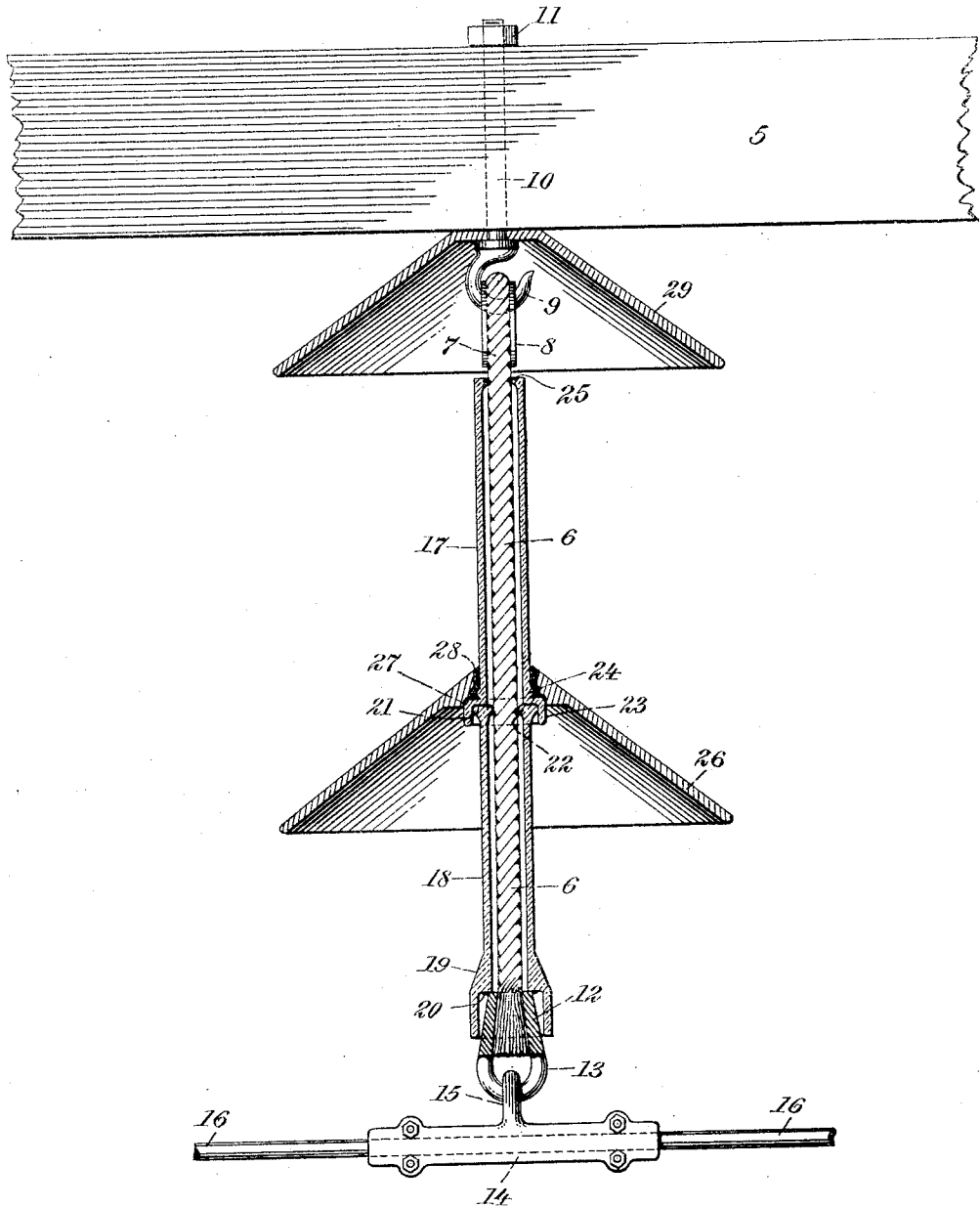


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 ISULATOR.
 APPLICATION FILED DEC. 18, 1911.

1,038,473.

Patented Sept. 10, 1912.



WITNESSES

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UNITED STATES PATENT OFFICE.

JULIUS ALSBERG, OF NEW YORK, N. Y.

INSULATOR.

1,038,473.

Specification of Letters Patent.

Patented Sept. 10, 1912.

Original application filed November 18, 1908, Serial No. 463,285. Divided and this application filed December 18, 1911. Serial No. 666,392.

To all whom it may concern:

Be it known that I, JULIUS ALSBERG, a citizen of the United States, residing at the city of New York, borough of Manhattan, in the county and State of New York, have invented certain new and useful Improvements in Insulators, of which the following is a full, clear, and exact specification.

My invention relates to improvements in means for supporting electrical conductors of the type shown in my prior United States Patents, Nos. 1,006,040; 1,006,041, and 1,006,042, dated October 17, 1911, and in my application for Letters Patent of the United States Serial No. 463,285, filed November 18, 1908, of which this application is a divisional application.

Further, said invention has for its object to provide a simple, efficient and durable insulating support comprising an insulating member and a protector therefor composed of a tubular member, and a separate protecting hood adapted to be secured to said tubular member.

Further, said invention has for its object to provide an insulator of the character specified comprising an insulating element and a tubular member which is so constructed that the protecting hood may be readily secured thereto when it is desired to assemble the parts and dispose the same upon and surround the insulating element proper.

Further, said invention has for its object to provide an insulator comprising a tubular protecting member formed of insulating material and a separate hood or protector which may be made of insulating material, or any other suitable material which may or may not be treated to render the same insulating, as desired.

Further, said invention has for its object to provide an insulator having its several parts so arranged and constructed that the same may be nested or packed within small compass for storage or shipment, and which shall be capable of easy assembling when it is desired to attach the same to a suitable support to suspend a conductor.

Further, said invention has for its object to provide an insulator comprising an insulating element proper and a series of protecting sections which may be readily increased or diminished to form a tubular protector of any desired length to surround

the insulating element, and which protecting sections may be easily provided with protecting hoods of any suitable size or kind, as the conditions of service may demand.

To the attainment of the aforesaid objects and ends, my invention consists in the novel details of construction, and in the connection, combination and arrangement of parts, hereinafter more fully described and then pointed out in the claims.

In the accompanying drawings forming part of this specification, I have shown one form of insulator constructed according to and embodying my said invention, the same being shown as a central vertical section.

In said drawings, 5 designates a supporting arm and 6 a flexible insulating member formed in the shape of a rope composed of strands of insulating material. The upper end of said insulating member is spliced to the body portion thereof to form a loop having a thimble 8 therein, adapted to receive the hook 9 of a bolt 10 secured to said supporting arm 5 by a nut 11. The lower end of the insulating member 6 is frayed out and secured by cement, or other suitable medium, within a conical socket 12 provided at its lower end with a loop or bale 13.

14 denotes a clamp provided with a hook or eye 15 for securing the same to the loop or bale 13 at the lower end of the insulating member 6, and 16 denotes an electric conductor secured in said clamp 14.

17 and 18 denote tubular protecting sections preferably made of glass, porcelain or other suitable insulating material and arranged one upon the other and surrounding said insulating member 6. The protecting section 18 is provided at its lower end with an enlarged recessed portion 19 having a shoulder 20 at the base of said recess adapted to rest upon the upper, reduced end of the conical socket 12 secured to the lower end of the insulating member 6, and at its upper end said protecting section 18 is provided with an outwardly projecting bead or rim 21, and an inwardly projecting bead or rim 22 adapted to contact with the insulating member 6 to hold the latter properly centered within said projecting section 18. The lower end of the projecting section 17 is also provided with an enlarged recessed end 23 which is adapted to receive the upper end of the protecting section 18, and

upon the outer surface of said protecting section 17, above said enlarged recessed portion 23, is provided an annular bead 24.

25 denotes an inwardly projecting bead arranged at the upper end of the tubular protecting section 17, which also serves to maintain the insulating member 6 properly centered within said protecting section.

26 denotes a conical protecting hood made of glass, porcelain or metal, or other suitable material or combinations of material. The said protecting section is provided upon the inner side of its base with a socket 27 adapted to receive the socket portion 23 of the protecting section 17. The protecting hood 26 is secured to the lower end of the tubular protecting section 17 and upon the socket portion 23 thereof by cement, or other suitable securing means 28. 29 denotes a similar protecting hood disposed above the upper end of the protecting section 17 and the insulating member 6, and secured rigidly in position upon the bolt 10 against the under side of the arm 5.

It will be noted that the tubular protecting sections 17 and 18 are flexibly united where the lower socketed portion 23 of the section 17 rests upon the upper end of the section 18. When it is desired to render the protecting sections rigidly connected, it merely becomes necessary to introduce cement, or other suitable securing medium, in the socket portion 23 below the bead or rim 21 at the upper end of the tubular protecting section 18, and thus render the several protecting sections, with their protecting hoods, rigid and surrounding the insulating member 6.

It will be noted that by means of my improved construction, I am enabled to readily provide an insulator composed of a plurality of tubular protecting sections with protecting hoods of various sizes and diameters, as may be required. This, I am enabled to accomplish, by reason of the fact that the protecting hoods, regardless of their size, are provided with suitable sockets and openings whereby the same may be secured to the ends of the tubular protecting sections.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:

1. An insulator comprising an insulating element, and protecting means therefor comprising a series of tubular protecting sections surrounding said insulating member, and a separate protecting hood secured to each tubular protecting section, substantially as specified.

2. An insulator comprising an insulating element, and protecting means therefor comprising a series of flexibly-connected tubular protecting sections surrounding said insu-

lating element, and a separate protecting hood secured to each of said tubular protecting sections adjacent to the adjoining ends of said tubular sections, substantially as specified.

3. An insulator comprising a flexible insulating element, and protecting means therefor comprising a series of flexibly-connected tubular protecting sections surrounding said insulating element, and a separate protecting hood secured to each of said tubular protecting sections adjacent to the adjoining ends of said tubular sections, substantially as specified.

4. An insulator comprising an insulating element, and protecting means therefor comprising a series of tubular protecting sections provided at their lower ends with socket portions adapted to receive the ends of adjoining tubular sections, and separate protecting hoods supported upon said socket portions and secured to said tubular protecting sections, substantially as specified.

5. An insulator comprising a flexible insulating element, and protecting means therefor comprising a series of tubular protecting sections provided at their lower ends with socket portions adapted to receive the upper end of an adjoining tubular section, and separate protecting hoods supported upon said socket portions and secured to said tubular sections, substantially as specified.

6. An insulator comprising a flexible insulating element, and protecting means therefor comprising a series of tubular insulating protecting sections provided at their lower ends with socket portions adapted to receive the upper end of an adjoining tubular insulating section, and separate protecting hoods supported upon said socket portions and secured to said tubular insulating sections, substantially as specified.

7. An insulator comprising a flexible insulating element, and protecting means therefor comprising a series of tubular insulating protecting sections provided at their lower ends with socket portions adapted to receive the upper end of an adjoining tubular insulating section, and separate protecting hoods each provided in the underside of its base with a socket adapted to receive the socket portion of one of said tubular protecting sections, and a securing medium, substantially as specified.

Signed at the city of New York, in the county and State of New York, this sixteenth day of December, nineteen hundred and eleven.

JULIUS ALSBERG.

Witnesses:

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JOSEPH G. QUINN, Jr.