J. S. SWENSON AND F. E. STEHLIK.

LIGHTNING ROD.

APPLICATION FILED JAN. 4, 1917.

1,303,739.

Patented May 13, 1919.

Fig. 1.

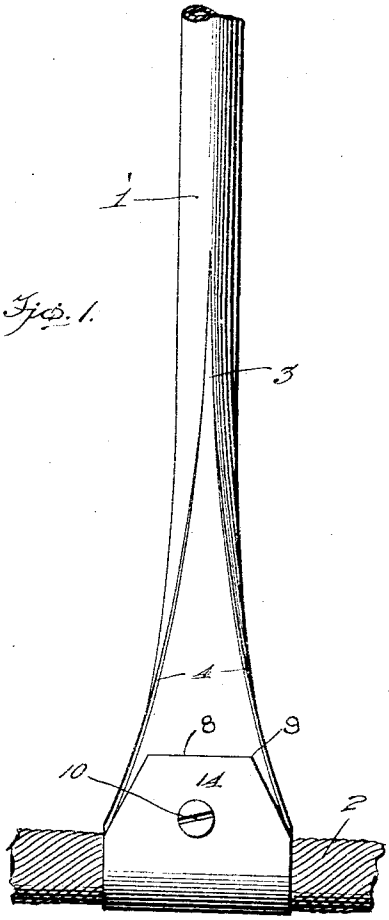


Fig. 2.

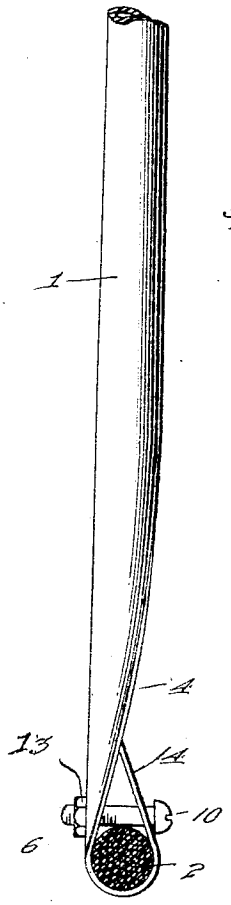
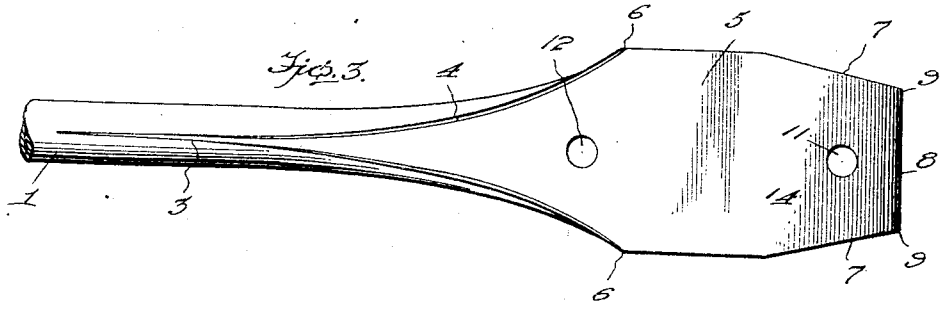


Fig. 3.



Witness

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UNITED STATES PATENT OFFICE.

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LIGHTNING-ROD.

1,303,739. Specification of Letters Patent. Patented May 13, 1919.

Application filed January 4, 1917. Serial No. 140,553.

To all whom it may concern:

Be it known that we, JOHN S. SWENSON and FRANK E. STEHLIK, citizens of the United States, residing at Cresco and Oak Park, respectively, in the counties of Howard and Cook, respectively, and States of Iowa and Illinois, respectively, have invented certain new and useful Improvements in Lightning-Rods; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in lightning rod construction and more particularly to the manner of connecting the rod that extends vertically above the structures to be protected and designed to receive the bolts or charges of lightning, and the cable or other conductor that extend horizontally across the top of the protected structure.

The object of the invention is to form between the upright standard that receives the charge and the cable that conducts said charge to the ground, a simple rigid and inexpensive connection.

A further object of the invention is to produce such a connection wherein a maximum contact surface between the usual tubular upright standard and the cable may be obtained.

With these and other objects in view, which will hereinafter more fully appear, the present invention consists in certain novel details of construction and arrangements of parts, hereinafter fully described, illustrated in the accompanying drawing and more particularly pointed out in the appended claims; it being fully understood that various changes in form, proportion, size and minor details of the device may be made within the scope of the appended claims, without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing:—

Figure 1 is a front elevation of the lower portion of an upright standard connected to a cable or other conductor.

Fig. 2 is a side elevation of the same.

Fig. 3 is a detail view of the lower end of an upright standard prepared according to our invention to receive the cable.

Similar numerals are employed to designate corresponding parts.

Referring more particularly to the accompanying drawing, 1 is a tubular upright standard of the usual type to be connected to the horizontal cable or conductor indicated at 2. To provide a simple rigid connection between these two members wherein a maximum contact surface may be obtained, the tubular standard 1 is slit or cut throughout a portion of its length adjacent its lower extremity as at 3, said slit or cut being parallel to the elements of the tubular standard. Beginning at the lowermost extremity of the slitted tubular standard, the metal thereof is spread or flared as shown at 4, and flattened as at 5, for any desired portion of the slitted length, as for instance, as at 6, the length of this flattened end being determined by the diameter of the cable to be inclosed therein. The extreme corners of this flattened end of the slitted tube, are preferably cut away as at 7, so that when the end 8 is doubled up to inclose the cable 2, as seen in Fig. 2, the corners 9 will pass between and within the flared edges 4 of the tubular standard 1.

The flattened end 5 of the slitted standard 1 is designed to be wrapped or doubled around the cable 2 as shown in Fig. 2, and clamped rigidly and securely in position by means of a bolt 10, said bolt passing through a hole 11 in the flattened end 5 of the tubular standard, and thence through a hole 12 positioned between the lower extremities of the flared edges 4. The bolt 10 is provided with a nut 13, means being thus furnished to draw the portion 14 of the flattened end tightly around the cable 2. It is understood that the holes 11 and 12 may be drilled separately as shown in Fig. 3, or simultaneously drilled after the end 8 has been bent into the position shown in Fig. 2.

It is plainly evident from the foregoing description of the invention that a simple, inexpensive and rigid connection is provided between the upright standard and the cable wherein a maximum contact surface for a given size tubular standard is obtained.

Having thus described our invention, what we claim is:—

1. A lightning rod including a single integral entity comprising a standard provided with a transversely curved flared portion, and a bent flattened portion, the end of the flattened portion being disposed between the edges of the transversely curved flared portion.

2. A lightning rod including a single integral entity comprising a standard provided with a transversely curved flared portion, a bent flattened portion, having its end disposed between the edges of the transversely curved flared portion, in combination with a cable lying within the bend of the flattened portion, and means for forcing the end of the flattened portion and the cable toward the edges of the transversely curved flared portion.

3. A lightning rod including a standard, comprising a body portion, a transversely flared portion and a bent flattened portion, said flared and flattened portions having coinciding holes, in combination with a cable lying within the bend of the flattened portion, and a bolt extending through said holes and adapted to press the cable against the edges of the flared portion.

In testimony whereof, we affix our signatures, in presence of witnesses.

JOHN S. SWENSON.
FRANK E. STEHLIK.

Witnesses:
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