

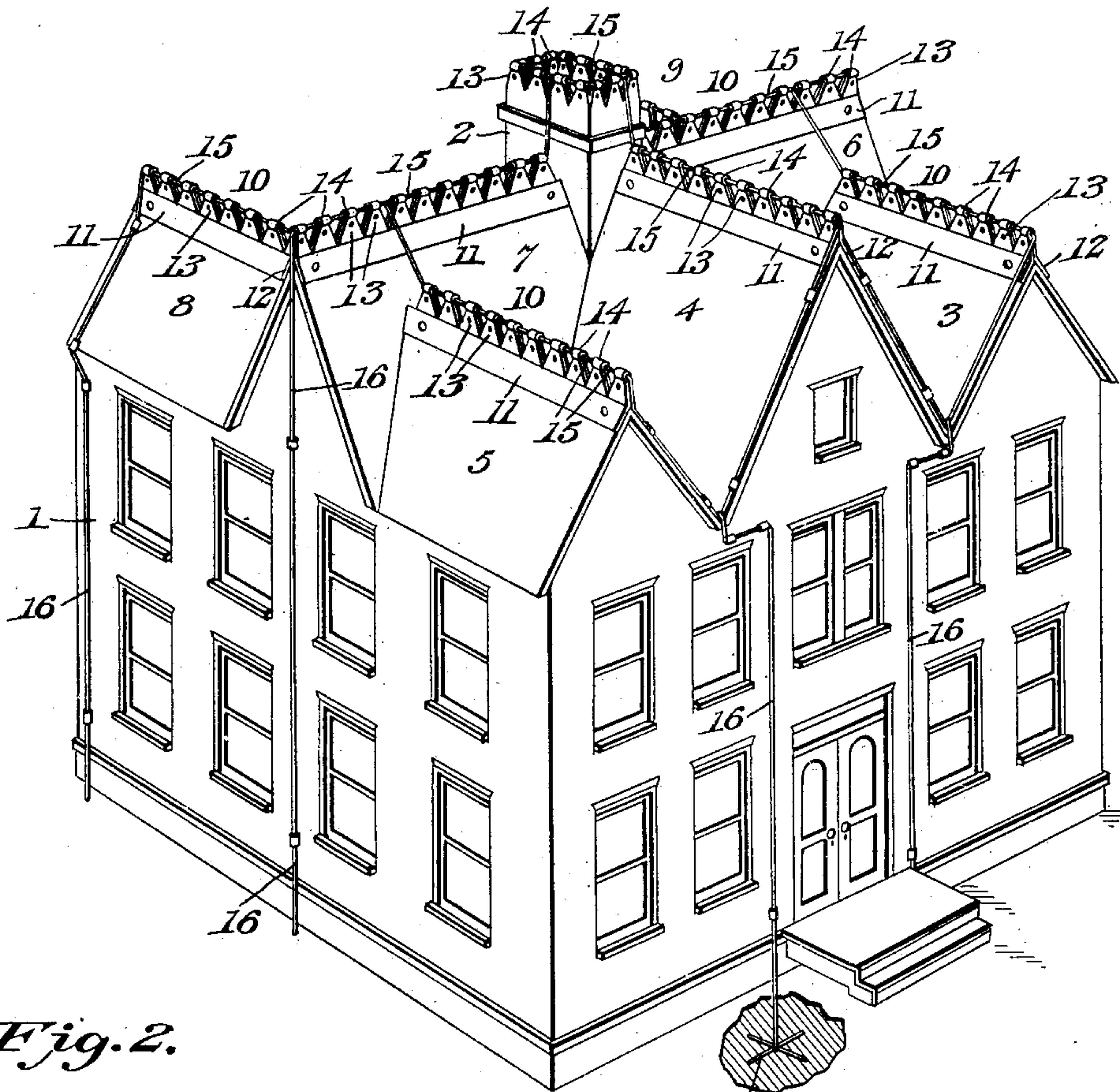
No. 665,986.

Patented Jan. 15, 1901.

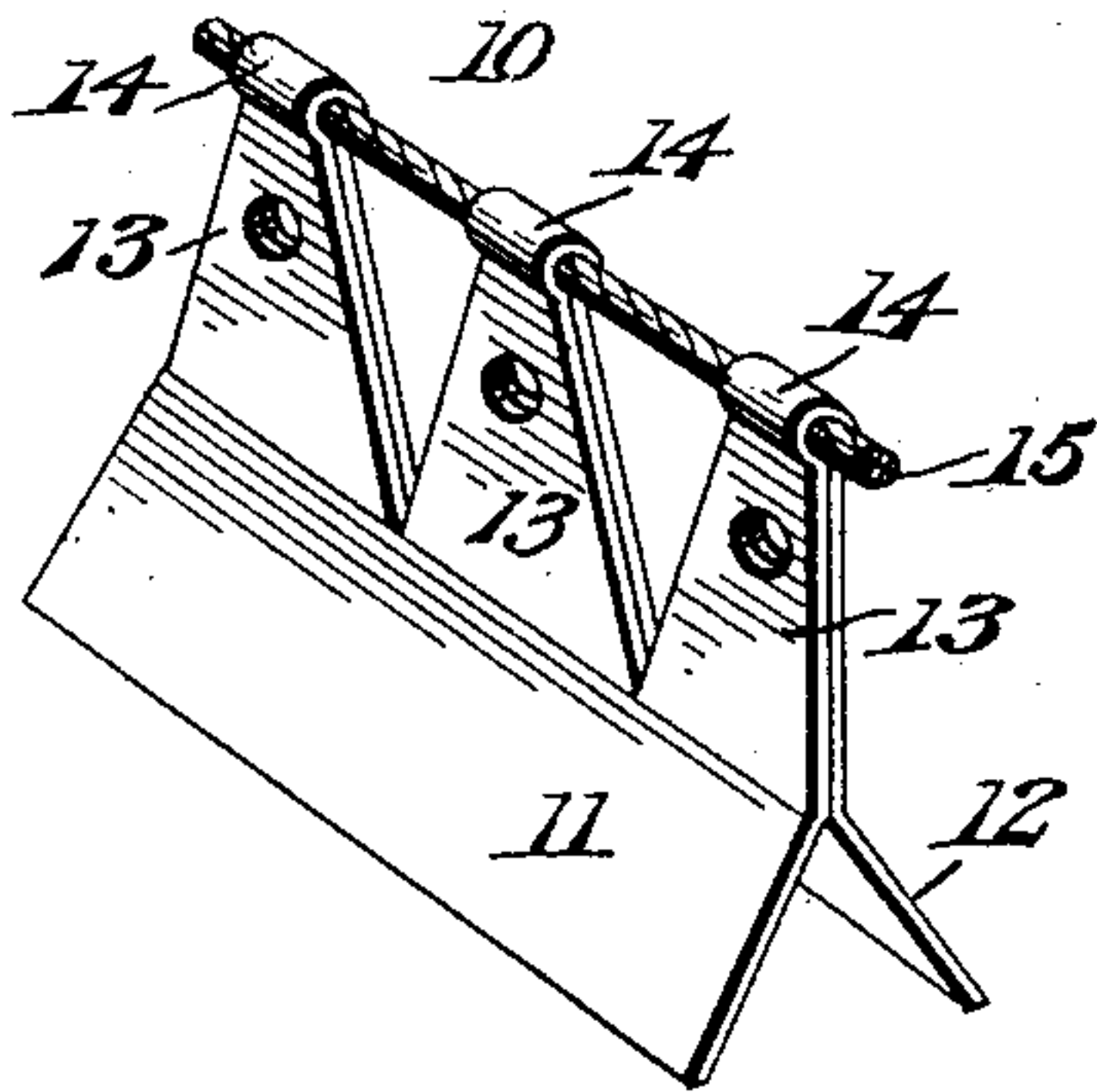
W. D. WOOD.  
LIGHTNING ARRESTER.  
(Application filed June 5, 1900.)

(No Model.)

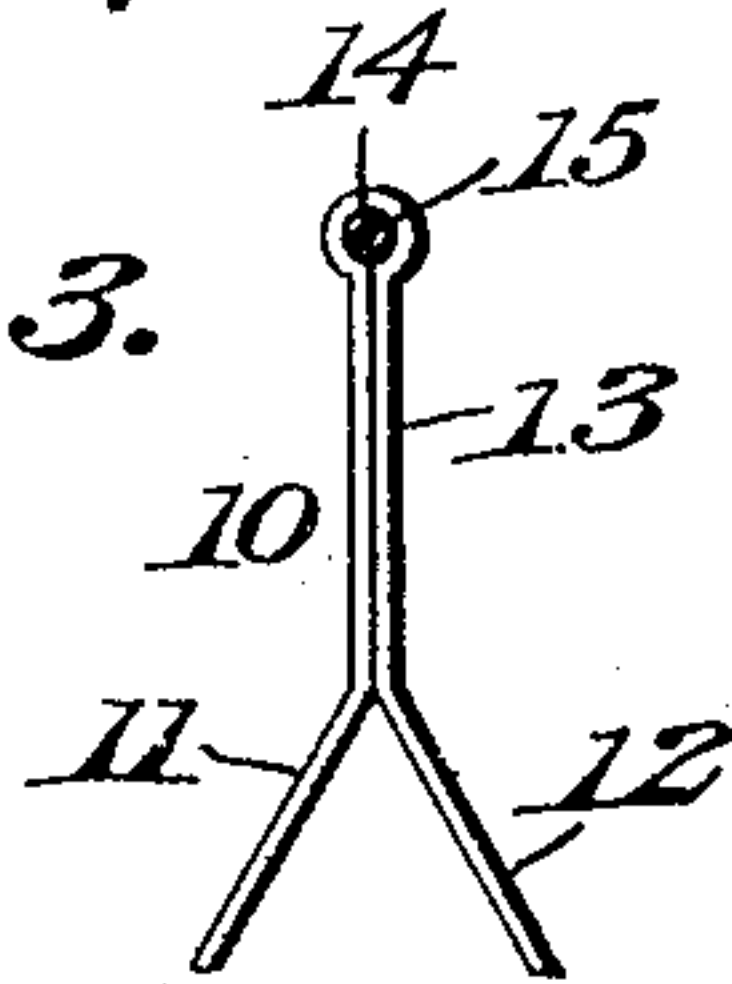
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
Edwin G. McKee  
Louis G. Julian

William D. Wood  
By Inventor

E. G. Singer  
Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM D. WOOD, OF PARIS, TEXAS, ASSIGNOR TO HENRY B. ROACH AND  
WILLIAM M. POTTS, OF SAME PLACE.

## LIGHTNING-ARRESTER.

SPECIFICATION forming part of Letters Patent No. 665,986, dated January 15, 1901.

Application filed June 5, 1900. Serial No. 19,128. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM D. WOOD, a citizen of the United States, residing at Paris, in the county of Lamar and State of Texas, have invented a new and useful Lightning-Arrester, of which the following is a specification.

My present invention relates to improvements in lightning-arresters, and has for its object the provision of a device whereby in the event of a building being struck with lightning the electrical current will be distributed over considerable area and will be grounded at a number of points.

To this end the invention consists in providing metallic cresting throughout the extent of the roof crest or crests and supporting in an elevated position an arresting rod or strand of a high degree of conductivity, the strand supported by each section of the cresting being in electrical connection with all of the other strands and with one or more grounding wires or strands extended below the surface of the ground and provided with suitable metallic anchoring devices.

The invention consists, further, in certain details of construction and in the arrangement of parts hereinafter described, illustrated in the accompanying drawings, and defined in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view of a building equipped with my novel arrester. Fig. 2 is a similar view of one of my cresting-sections detached, and Fig. 3 is an end view of the subject-matter of Fig. 2.

Referring to the numerals of reference, 1 indicates a building having a chimney 2 and a number of roof-crests 3, 4, 5, 6, 7, 8, and 9, the chimney and the several crests being surmounted by metallic crestings or strips 10, comprising diverging flanges 11 and 12, secured in any suitable manner upon the crests and supporting a series of points 13, each point being surmounted by an eyelet 14. Each of the cresting sections or strips is preferably formed from a single sheet of metal suitably apertured to define the points and doubled upon themselves longitudinally to form the flanges 11 and 12, points 13, and aligned eyelets

14. Through the eyelets of each crest is led a conducting-strand 15, having an electrical connection with the adjacent strands carried by the other crests and with ground-wires 16. The chimney is preferably surmounted by a strip of cresting bent into rectangular form and supporting a conducting-strand 15, which is also electrically connected with the various strands carried by the various cresting-sections throughout the roof. In fact, the entire structure is so organized and arranged that each elevated point or crest of the roof will be protected by a section of cresting supporting an arresting or conducting strand, the several strands throughout the entire system of protection against lightning being in electrical connection and being grounded at a number of points by the grounding-wires 16.

For the purpose of properly anchoring the wires 16 to prevent their casual displacement they are provided with metallic anchors 17, which insure electrical contact with the ground and serve to retain the wires.

From the foregoing it will be observed that I have produced a simple and inexpensive yet highly-efficient means for protecting a building against lightning by providing an arresting rod or strand extending continuously over the entire exposed area and having electrical connection with the ground at a number of points, the arresting-strand being of highly-conductive material and being directly grounded to preclude the possibility of the current being led through the house; but while the present embodiment of my invention appears at this time to be preferable I do not wish to limit myself to the precise construction and arrangement defined, inasmuch as it is obvious that the system of arresting rods or strands supported by sections of metallic cresting may be varied without limit to suit the various constructions of buildings to which the invention is to be applied. I therefore reserve the right to effect such changes, modifications, and variations as may come properly within the scope of the protection prayed.

What I claim is—

1. A lightning-arresting device comprising a strip of cresting and a conductive strand carried thereby.



2. A lightning-arresting device comprising a metallic cresting-strip surmounted by eyelets, and a conductive strand passed through said eyelets.

5 3. A lightning-arresting device comprising a metallic cresting-strip having diverging flanges at its base for facilitating its attachment to the crest of a building, a series of eyelets surmounting the strip, and a conductive strand passed through the eyelets.

10 4. The combination with a metallic strip doubled upon itself to form surmounting eyelets and having its edges bent into divergent relation, of a conductive strand extending  
15 through said eyelets.

5. The combination with a series of cresting-sections each having means of attachment to a roof, of conductive strands carried by the several cresting-sections, the several  
20 strands being in electrical connection, and

a plurality of grounding-wires having electrical connection with said strands.

6. In a lightning-arresting device, the combination with a series of metallic cresting-sections comprising metallic strips doubled  
25 upon themselves to form surmounting eyelets and having their edges bent to form divergent retaining-flanges, of a series of electrically-connected strands each carried by the eyelets of one of the cresting-sections, and a  
30 plurality of grounding-wires in electrical connection with the strands, said grounding-wires being provided with anchoring means.

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

WILLIAM D. WOOD.

Witnesses:

S. T. RIGGS,

R. L. LATTIMORE.