J. S. SWENSON.

LIGHTNING ROD HIGH TOP.

APPLICATION FILED JAN. 10, 1914.

1,128,261. Patented Feb. 9, 1915.

Fig. 2.

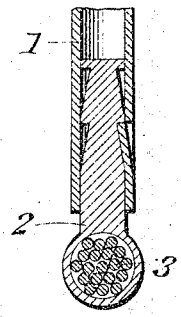


Fig. 3.

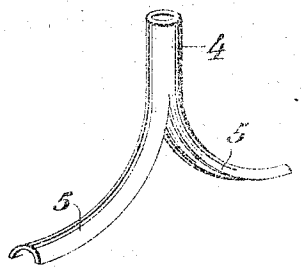


Fig. 1.

Inventor

J. S. Swenson

By Victor J. Evans

Attorney

Witnesses

W. F. Hamett

V. B. Hillyard.

UNITED STATES PATENT OFFICE.

JOHN S. SWENSON, OF CRESCO, IOWA, ASSIGNOR TO ELECTRA LIGHTNING ROD COMPANY, OF CRESCO, IOWA.

LIGHTNING-ROD HIGH TOP.

1,128,261. Specification of Letters Patent. Patented Feb. 9, 1915.

Application filed January 10, 1914. Serial No. 811,482.

To all whom it may concern:

Be it known that I, JOHN S. SWENSON, a citizen of the United States, residing at Cresco, in the county of Howard and State of Iowa, have invented new and useful Improvements in Lightning-Rod High Tops, of which the following is a specification.

This invention provides a high top for lightning conductors and aims to devise novel connecting and bracing means whereby a close joint is maintained between the top and conductor and such top is stayed from every direction so as to preserve a given position.

The invention resides in the connecting means between the top and conductor, and the peculiar form of brace for holding the top in vertical position, the several parts being attractive, light, durable and effective for the purpose intended.

The drawing illustrates an embodiment of the invention and it is to be understood that within the scope of the invention as claimed various changes in the form, proportion and minor details may be resorted to without departing from the spirit of the invention.

Referring to the attached drawing,—Figure 1 is a perspective view of a high top for lightning conductors illustrating the application of the invention. Fig. 2 is a sectional view of the lower portion of the top. Fig. 3 is a detail view of the brace.

Corresponding and like parts are indicated in the several views by the same reference characters, like reference characters being employed in the following description to indicate corresponding parts.

The top 1 preferably consists of a tube and is usually above five feet in length, said top being pointed at its upper end and having a coupling 2 fitted to its lower end for making connection with the lightning conductor 3 which may consist of a copper cable or other form of conductor commonly employed for carrying off atmospheric charges of electricity. The coupling 2 comprises an annular member fitted on the conductor 3 and the vertical projection *b* adapted to be received by the top 1, the latter being provided with an instruck tongue *c* for engagement with the shoulders of the porjection *b* to retain the parts operatively associated. The coupling 2 engages the conductor 3 which is connected with the top 1 by means of a slip joint. A stay-piece 4 is slipped upon the top 1 and is formed with opposed braces 5 which overlie the conductor 3 and are secured thereto and to the structure 6 to which the lightning appliance is fitted. The stay-piece 4 consists preferably of a length of tube which is adapted to slip upon the top, said tube having its lower portion formed with a longitudinal slit, the parts thus separated being bent in opposite directions to form the braces 5 which are secured, by means of staples 7 or like fastenings, to the structure 6. The same fastenings 7 also serve to secure the conductor 3 to the structure 6.

A brace stays the upper portion of the top 1 and consists of an upper ring 8, a lower ring 9 and a plurality of legs 10, such legs having their upper portions engaged with the rings 8 and 9 and their lower portions oppositely inclined and adapted to be secured at their lower ends to the structure 6. The top 1 and stay-piece 4 are usually of copper whereas the brace is generally formed of galvanized iron. The legs 10 may consist of light rods whose upper ends are attached to the rings 8 and 9 by passing through openings formed therein. The rings 8 and 9 have a comparatively close fit with the top 1 so as to prevent any play. It is to be understood that the legs 10 may be provided in any number in order to brace the top in each direction.

It is noted that the stay-piece 4 constitutes positive connecting means between the top and conductor and also serves to hold the top in the required position both with reference to the structure 6 and the conductor 3. The brace consisting of the the rings 8 and 9 and the legs 10 acts solely as staying means between the upper portion of the top and the structure 6 to prevent movement of the top in any direction.

From the foregoing, taken in connection with the accompanying drawing, the advantages of the construction and method of operation of the invention will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the device which I now consider to be the best embodiment thereof, I desire to have it understood that the device shown is merely illustrative, and

that such changes may be made when desired as are within the scope of the invention as claimed.

Having thus described the invention what is claimed as new, is:—

1. In combination, a lightning conductor, a tubular top therefor open at its lower end, a coupling between the conductor and said top, a brace comprising a tubular member fitted on said top, said member being split for a portion of its length to provide oppositely extending curved convex branches adapted to embrace the conductor, and means for securing the branches thereto.

2. In combination, a lightning conductor, a tubular top therefor having its lower end open and provided with an instruck tongue, a coupling fitted upon the conductor and having a vertical projection arranged within the top and engaged by said tongue, a tubular member fitted on the top and split for a portion of its length to provide oppositely disposed convex branches embracing said conductor, and means for securing the branches thereto.

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

JOHN S. SWENSON.

Witnesses:
ALICE M. DAVIS,
J. P. THOMSON.