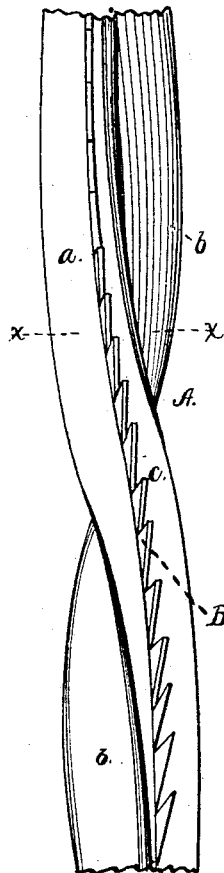


L. D. VERMILYA.  
LIGHTNING-ROD.

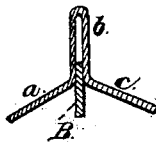
No. 189,286.

Patented April 3, 1877.

*Fig. 1.*



*Fig. 2.*



Witnesses;  
Cha. M. Peck  
Wm Ritchie

Inventor;  
Leland D. Vermilya  
by his Attys.  
Peck & Co.

# UNITED STATES PATENT OFFICE.

LELAND D. VERMILYA, OF DAYTON, OHIO, ASSIGNOR OF ONE-HALF HIS  
RIGHT TO HENRY WEBBERT, OF SAME PLACE.

## IMPROVEMENT IN LIGHTNING-RODS.

Specification forming part of Letters Patent No. **159,286**, dated April 3, 1877; application filed  
March 8, 1876.

*To all whom it may concern:*

Be it known that I, LELAND D. VERMILYA, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Lightning-Rods; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to that class of lightning-rods, for the protection of buildings, made of iron, or preferably of copper, strips, folded and twisted into various forms.

Taking advantage of the fact that electricity prefers to take its course upon a sharp edge, my object is to produce a rod provided with a serrated strip held in place between the folds of the rod, with the teeth projecting and pointing upward to aid in receiving the electricity and confining it to the rod.

To enable others skilled in the art to which my invention appertains, to make and use the same, I would thus proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 shows, in elevation, a rod provided with a serrated strip. Fig. 2 is a section view, taken through the line *x x*, Fig. 1.

A represents the rod, preferably of a copper strip, so folded that its cross-section is in the form of a three-pointed star. I designate the folds *a*, *b*, and *c*. The fold *b* is of two

thicknesses of the strip, as shown in Fig. 2. I then provide a metal strip, B, with its edge serrated, as shown, the teeth pointing upward. I secure this between the edges of the folds *b* by rivets, or in any convenient way. The rod with the strip is then twisted in the usual manner.

In addition to the effectiveness of a rod thus provided with a serrated strip, the location of the strip is such that the rod may be handled without injury to the hands, because the points lie within a circle drawn about the outer edges of the folds.

I am aware that a flat rod with its edges notched has been used, but it cannot compare with mine, either in the safety with which it can be handled or in the inclination of its serrated edge to receive the electric fluid from any direction in which it may dart.

Having thus fully described my invention, I claim as new—

A lightning-rod of twisted sheet metal, provided with a serrated strip, B, located between its folds, in the manner and for the purpose specified.

LELAND D. VERMILYA.

Witnesses:

HENRY WEBBERT,  
WM. RITCHIE.