

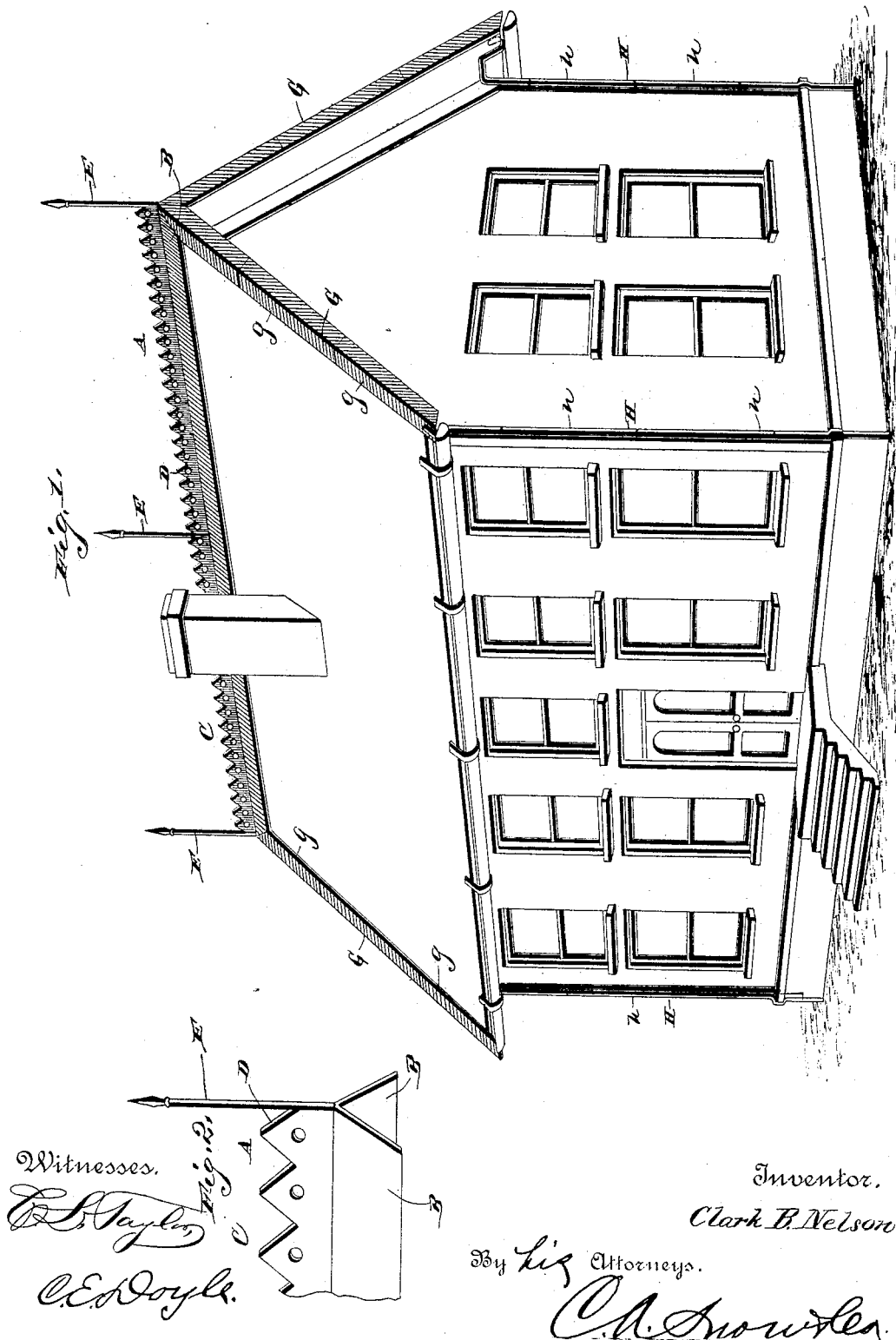
(No Model.)

C. B. NELSON.

METALLIC CREST TILE LIGHTNING ROD.

No. 384,384.

Patented June 12, 1888.



UNITED STATES PATENT OFFICE.

CLARK B. NELSON, OF CRAWFORDSVILLE, INDIANA, ASSIGNOR OF ONE-HALF TO JAMES H. WATSON, OF SAME PLACE.

METALLIC CREST-TILE LIGHTNING-ROD.

SPECIFICATION forming part of Letters Patent No. 334,384, dated June 12, 1888.

Application filed November 16, 1887. Serial No. 255,341. (No model.)

To all whom it may concern:

Be it known that I, CLARK B. NELSON, a citizen of the United States, residing at Crawfordsville, in the county of Montgomery and State of Indiana, have invented new and useful Improvements in Metallic Crest-Tile Lightning-Rods, of which the following is a specification.

My invention relates to improvements in lightning rods or conductors, having for its object the provision of a device which will protect the entire roof and at the same time serve as an ornamentation to the roof. When simple points are used, only a certain pre-
scribed area is protected, and therefore a great number of points must be used to protect a large building.

My invention consists in constructing a saddle or crest-tile for the roof in a peculiar shape and connecting it with the ground. The crest-tile I form of copper or other conducting metal, and I form the connections also of copper. The crest-tile is provided with a series of points, of any preferred shape, to attract the lightning and also render the device ornamental, and at intervals along the said crest-tile I attach points of the ordinary form, such as are used on the upper ends of the lightning-rods now in use. I connect the crest-tile with the ground by means of two strips—namely, a strip extending down the pitch of the roof, and a vertical strip, which is attached at the upper end to the lower end of the first strip and inserted at the lower end in the ground.

The invention is more fully described hereinafter in connection with the accompanying drawings, wherein—

Figure 1 is a perspective view of a portion of a house provided with my improved lightning-protector. Fig. 2 is a detail perspective view of a portion of the crest-tile used in connection with my device.

Referring by letter to the drawings, A designates the crest-tile, comprising the diverging flanges B B and the vertical rib C at the apex of the said diverging flanges, and provided on the upper edge with the points D D, of any preferred shape.

E designates a point of the ordinary form,

which I attach to the rib of the crest-tile so as to form an electrical connection. These points E are placed at intervals along the ridge of the roof.

G represents a strip which extends from the end of the crest-tile down the front edge of the gable to the eaves of the roof. I have shown it at the front edge of the gable in the drawings; but it may obviously be disposed at any convenient point on the roof to suit the shape of the latter.

H represents a vertical conductor, which is attached at the upper end to the lower end of the strip G. The conductor H is inserted at the lower end in the ground, to which it will convey the charges of electricity which are attracted by the metallic crest-tile.

The conducting-strips G and H are preferably made in sections *g g* and *h h*, as shown in the drawings, which are connected when they are applied to the house.

The crest-tile and conducting-strips, as before mentioned, are preferably formed of copper, and they may be applied to any roof which is not composed of metal.

One objection offered to the ordinary lightning-rods is that their capacity for carrying charges is not great enough, and, being only capable of protecting a limited area of roof, they must be used in great numbers.

When my improved device is used, the crest-tile is applied in exactly the same way as the ordinary ridge board or saddle to all the ridges of the roof, and the conducting-strips are used in all convenient places, and it will be seen that they will be almost invisible at a small distance from the house.

The crest-tile is intended to be made ornamental, and it will resemble in appearance the ordinary ornamentation of the roof.

It will be seen that this conductor will be very easily applied to the roof, and as it takes the place of the ordinary ridge-saddle the expense of the latter is not incurred.

Having thus described my invention, I claim—

A metallic crest-tile forming part of the electric connections of a house with the ground, serving as a part of the lightning-protective

system thereof, and consisting of the diverging flanges B, forming the saddle, the vertical flange C, integral with the saddle and provided with the triangular teeth or points D to attract
5 electricity, and the integral pointed rod E, rising from one end, substantially as specified.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in presence of two witnesses.

CLARK B. NELSON.

Witnesses:

JAMES Q. W. WILHITE,
GEORGE D. HURLEY.