R. S. COLE.

LIGHTNING-RODS.

No. 183,370. Patented Oct. 17, 1876.

Fig. 1.

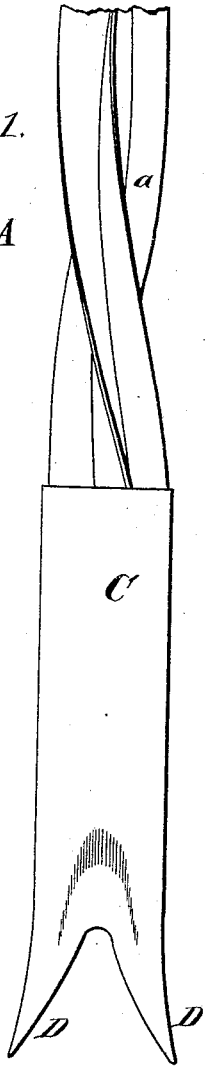
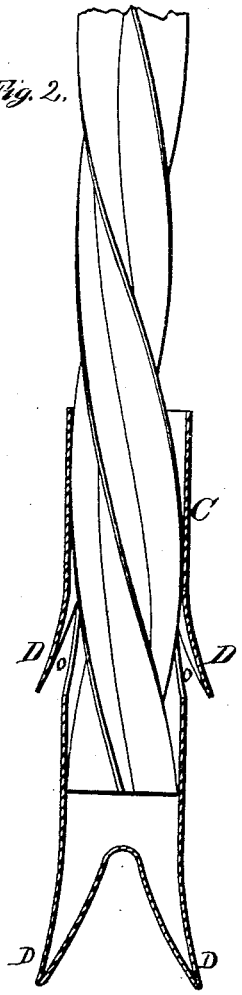


Fig. 2.



WITNESSES

Robert Everett

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ROBERT S. COLE, OF MOUNT PLEASANT, IOWA.

IMPROVEMENT IN LIGHTNING-RODS.

Specification forming part of Letters Patent No. **183,370**, dated October 17, 1876; application filed April 8, 1876.

To all whom it may concern:

Be it known that I, ROBERT S. COLE, of Mount Pleasant, in the county of Henry and State of Iowa, have invented a new and valuable Improvement in Lightning-Rods; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figures 1 and 2 are elevations of the ground-section of my improved lightning-rod and its sleeve.

My invention relates to improvements in lightning-rods; and it consists in the peculiar construction of the sleeve which receives the ground-section of the rod, said sleeve being provided with openings for the escape of water to moisten the ground around its lower end, thus rendering the connection more perfect, the sleeve being also provided with multiple discharging-points for the conduction of the electric fluid, as will be hereinafter more fully set forth.

In the annexed drawings, C is a sleeve, which receives the ground-section A of the lightning-rod, the sleeve being provided with openings *o o* for the escape of water to moisten the ground, and thereby render the conduction of the electric fluid more perfect. The openings *o o* in the sides of the sleeve are made some distance below its upper end, or may be made in its bottom, and any desired number may be employed, so that the rain-water contained in the sleeve may pass through the openings, and keep the earth about the lower end of the sleeve moistened. This sleeve is made of sheet metal, preferably of copper, and it may be either cylindrical or grooved to correspond with the shape of the rod. D D are discharging projections at the lower end of the sleeve, and also over the openings *o o*, by means of which the electricity is discharged into the moistened ground.

It will be seen that by attaching the tube C to the ground-section A of the rod the former will be partially filled with water in case of rain, which will flow through the openings *o o*, thus keeping the earth around the sleeve constantly moistened.

What I claim as new, and desire to secure by Letters Patent, is—

The sheet-metal sleeve C, provided with the discharging projections D D on its lower end and sides, and having openings *o o* in its sides, said sleeve being adapted to receive the ground-section A of a lightning-rod, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ROBERT S. COLE.

Witnesses:

W. J. BABB,

C. W. MEEKER.