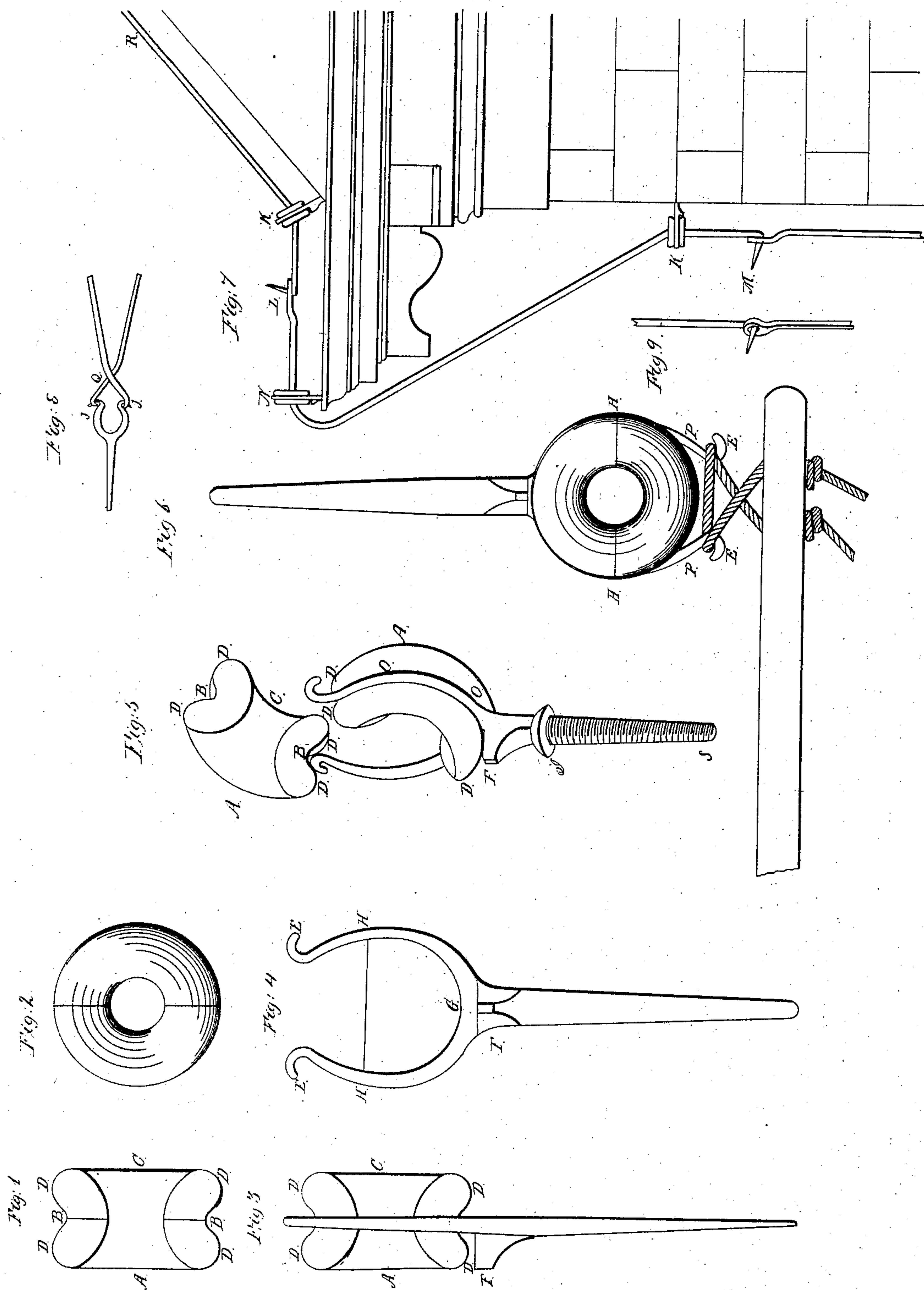


## INSULATOR AND FASTENING FOR LIGHTNING RODS.

Patented Aug. 15, 1854.



# UNITED STATES PATENT OFFICE.

TIMOTHY U. WEBB, OF JERSEY CITY, NEW JERSEY.

INSULATOR FOR LIGHTNING-RODS.

Specification of Letters Patent No. 11,539, dated August 15, 1854.

*To all whom it may concern:*

Be it known that I, TIMOTHY U. WEBB, of Jersey City, in the county of Hudson, the State of New Jersey, have invented a  
5 new and Improved Mode of Insulating Lightning-Rods, and Securing the Insulators; and I do hereby declare that the following contains a full and exact description thereof, reference being had to the accompanying drawings and to the letters of  
10 reference marked thereon.

The improvement in the construction of the insulator, which I claim consists in making the inner surface convex as represented  
15 at A, C, Figures 1, 3 and 5, this with the outer conformation represented by the drawing presents a circular surface both inside and out making the thickness of the insulator uniform in all parts; a conformation

which combines the greatest strength with 20 the greatest economy of material, and by having the least possible amount of surface in contact with the rod and opposing the least possible resistance to the passage or expansion of air produced by the lightning 25 renders less liable to be broken by the lightning or any other cause.

I do not claim making the outside of the insulator with a horizontal groove in the middle and a flange on each side of the 30 groove but

What I claim is—

Making the inner surface convex in the manner and for the purposes described.

TIMOTHY U. WEBB.

Witnesses:

M. S. BREWSTER,  
FRANKLIN BROWN.