

(No Model.)

H. C. THOMAS.
INSULATED METALLIC ROOF.

No. 283,166.

Patented Aug. 14, 1883.

Fig. 1.

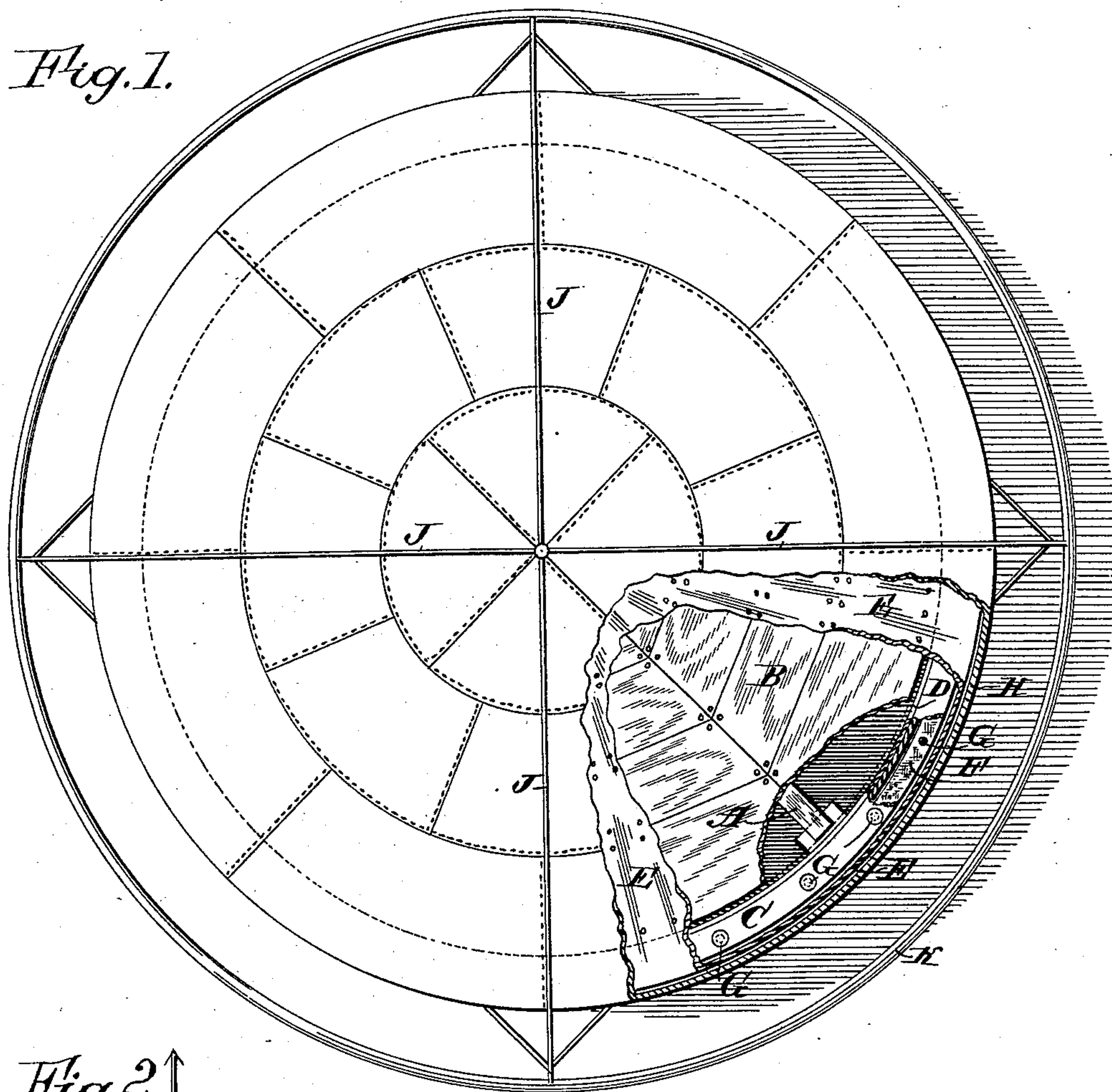
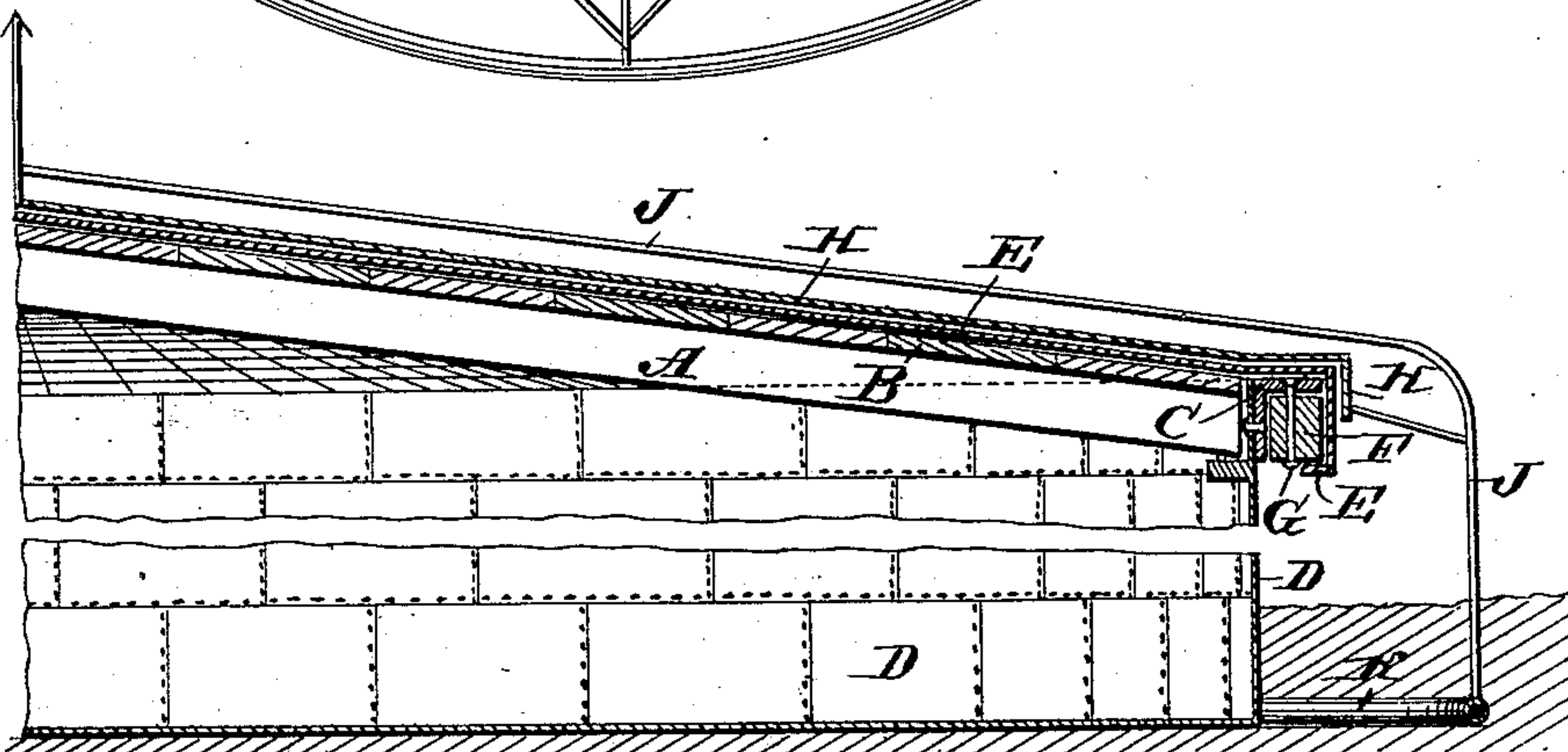


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY C. THOMAS, OF ROCK VIEW, NEW YORK.

INSULATED METALLIC ROOF.

SPECIFICATION forming part of Letters Patent No. 283,166; dated August 14, 1883.

Application filed May 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. THOMAS, of Rock View, in the county of Cattaraugus and State of New York, have invented a new and
5 Improved Insulated Metallic Roof, of which the following is a full, clear, and exact description.

The invention consists in a metallic tank with an insulated roof connected with the
10 ground by a lightning-rod, as hereinafter described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate
15 corresponding parts in both the figures.

Fig. 1 is a plan view of the tank provided with my improved insulated roof, parts being broken out and others shown in section; and Fig. 2 is a cross-sectional elevation of the same,
20 parts being broken out.

The roof is constructed with wood or iron rafters A, on which boards B are secured, which boards extend to the outer edge of an angle-iron, C, secured to the top of the outer sur-
25 face of the tank D, or building. An asbestos sheathing, E, is tacked on the boards, then lapped over the edge C' of the angle-iron, and lapped against the outer side and bottom edge of a wooden strip, F, held to the bottom of
30 the horizontal flange of the angle-iron by bolts G passed through the said flange and strips, as shown. The edge of the asbestos sheathing is tacked to the strip F. The heads of the bolts G are below the asbestos sheathing, and
35 are countersunk in the upper surface of the horizontal flange of the angle-iron.

A sheet-iron covering, H, is placed on the sheathing E, and projects beyond and down over the edge of the angle-iron. A series of
40 conductors, J, extend over the roof, and are connected with the edges of the metal covering H, and are carried down to the ground and connected to a gas-pipe, K, surrounding the tank and buried in the ground. A con-
45 ductor extends from the pipe K to marshy or other moist ground.

The asbestos insulator makes the tank fire-proof, and is a perfect electricity-insulator. If lightning strikes the tank and does not im-
50 mediately pass down the conductors J, it will pass down the metal covering H, and then through the conductors to the pipe K. The lightning will not leave the good metal con-
55 ductor and pass through the asbestos non-conductor or insulator. Likewise it is not apt to leave the good metal conductor and pass
60 through the wooden strip F.

I am aware that it is not broadly new to connect a metallic roof with the ground by a lightning-rod; but

What I do claim as new, and of my invention, is—

A metallic tank having its roof insulated and connected with the ground by a lightning-rod, substantially as shown and described.

HENRY C. THOMAS.

Witnesses:

JOHN MILLER,
JOSEPH PRESACK.