

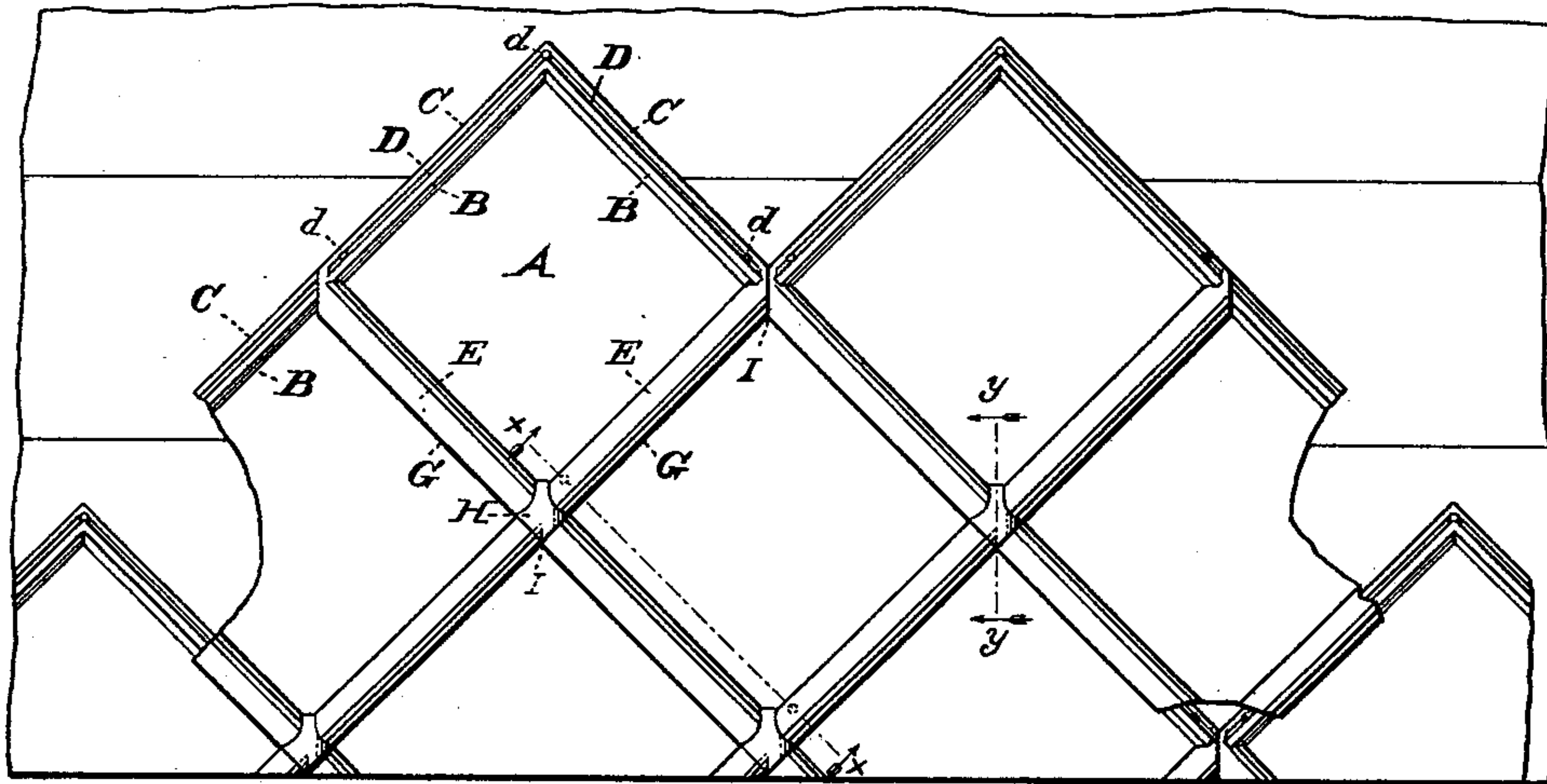
(No Model.)

J. E. GUSTEN & C. W. BRAUN.  
ROOFING TILE.

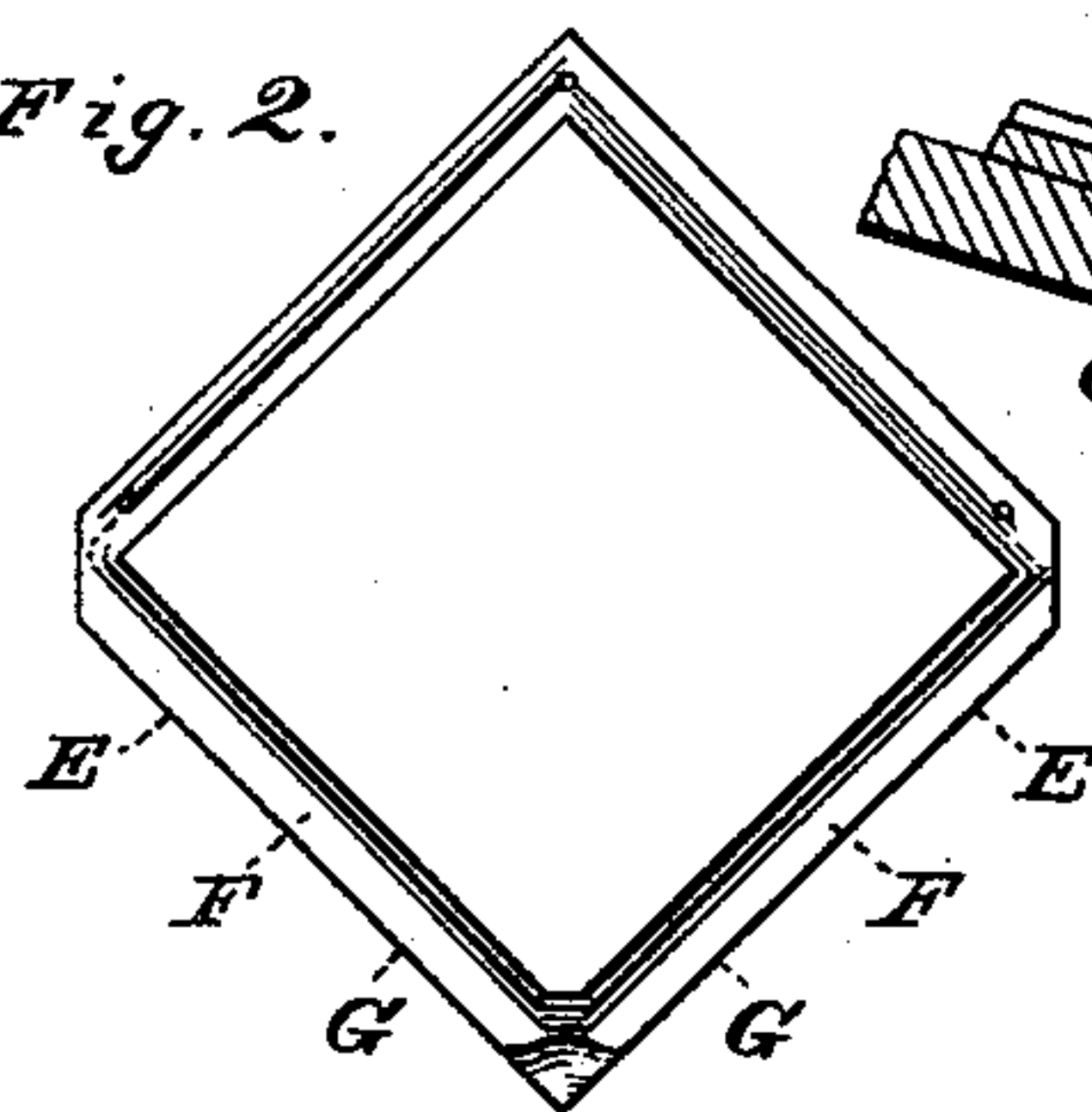
No. 403,837.

Patented May 21 1889.

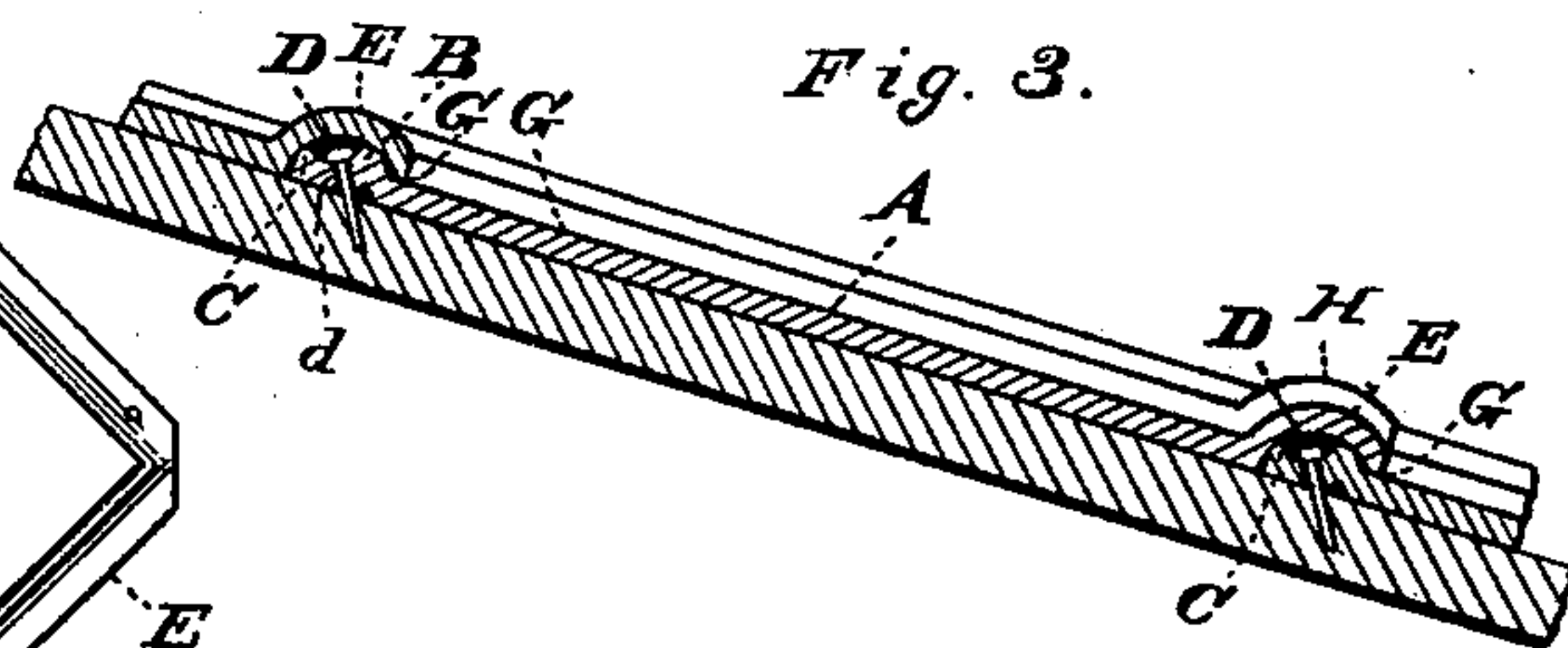
*Fig. 1.*



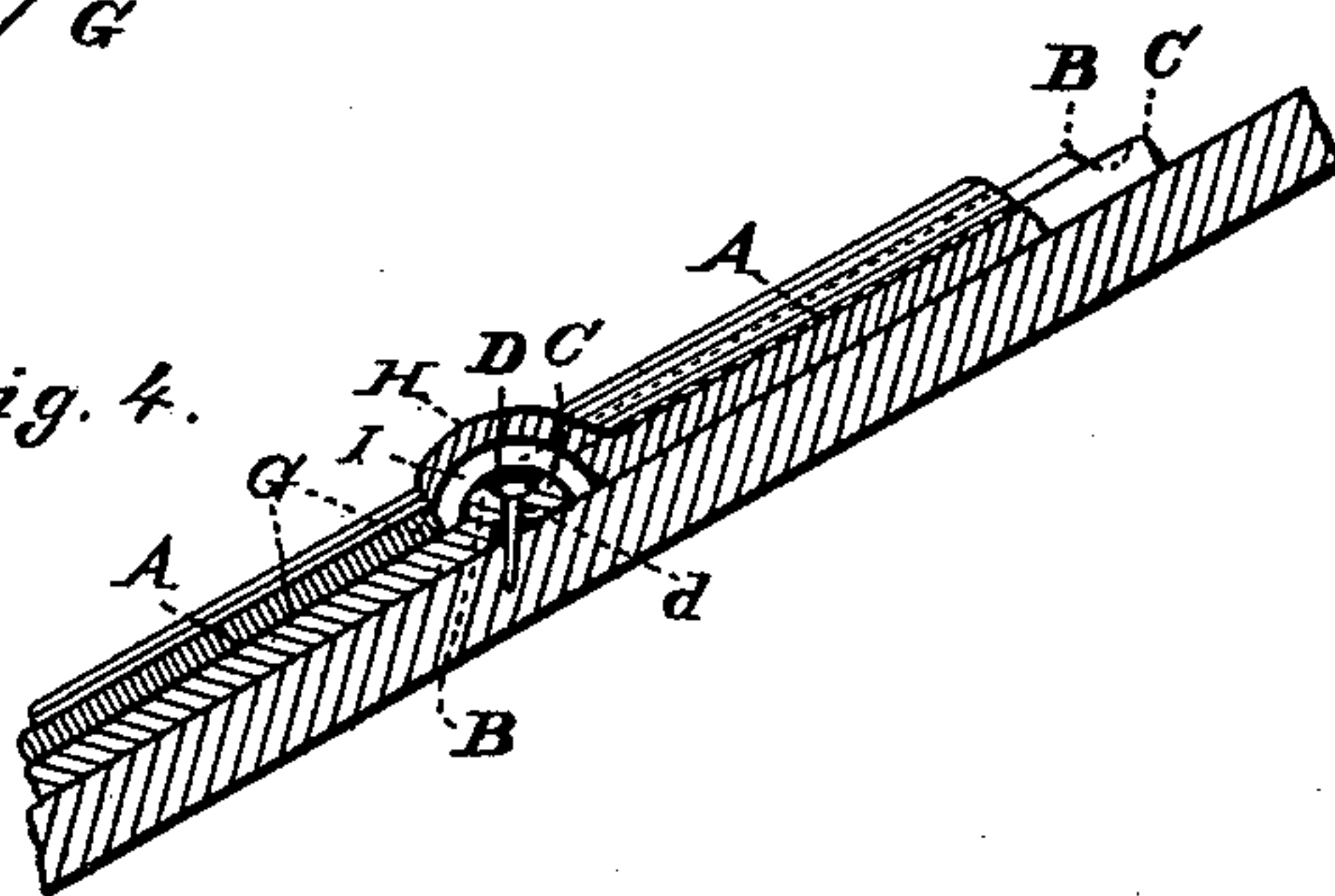
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES.

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# UNITED STATES PATENT OFFICE.

JOHN EREC GUSTEN AND CARL WILLIAM BRAUN, OF DENVER, COLORADO.

## ROOFING-TILE.

**SPECIFICATION** forming part of Letters Patent No. 403,837, dated May 21, 1889.

Application filed February 21, 1888. Renewed March 20, 1889. Serial No. 304,048. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN EREC GUSTEN and CARL WILLIAM BRAUN, citizens of the United States, residents of Denver, in the county of Arapahoe and State of Colorado, have invented certain new and useful Improvements in Roofing-Tiles; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a top view. Fig. 2 is a bottom view of one tile. Fig. 3 is a section taken where the broken line *x x* is marked on Fig. 1. Fig. 4 is a section taken where the broken line *y y* is marked on Fig. 1.

The invention relates to improvements in roof-tiling; and it consists of a rectangular tile of clay so pressed into form at its edges as to prevent the entrance of water, as will hereinafter appear.

Referring to the drawings, A designates the flat exposed surface of the tile, having near two of its edges the ribs B, and having on its extreme edges the ribs C, parallel to the ribs B. A channel, D, is thus formed between the ribs B and C, that will retain any moisture that may be possibly forced over the rib B, and it also serves to countersink the heads of the nails driven through the openings D to secure the tiling to the roof-boards. The

edges E are pressed into a concavo-convex form in cross-section, as shown. The concave under surface, F, is designed to overlap the rib B at one edge of two adjacent tiles, the edge G coming in close contact with the flat surface. The meeting ends H of the concave portions are slightly raised, as indicated in the drawings, to cover the miter-joint I of two tiles lying beneath it.

The tiles are placed upon the roof with their mitered corners pointing lengthwise of the roof, so that the water or snow falling upon the tiles runs over the convexed portions without penetrating between the edges.

The tiles herein described are indestructible by fire.

Having described our invention, what we claim is—

1. A roofing-tile consisting of the flat surface having the ribs B near two of its edges, and the concavo-convex, having the miter portions I, substantially as specified.

2. A roofing-tile consisting of the flat surface A, having the ribs B and C and the channel D at two of its edges, the nail-opening, as described, and the concavo-convex edges having the raised portions H and the miter ends, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN EREC GUSTEN.

CARL WILLIAM BRAUN.

Witnesses:

PERRY SEITZ,

PATRICK OWENS.