

(No Model.)

W. BOOTH.

CONSTRUCTING AND FASTENING TILES.

No. 297,491.

Patented Apr. 22, 1884.

Fig. 1.

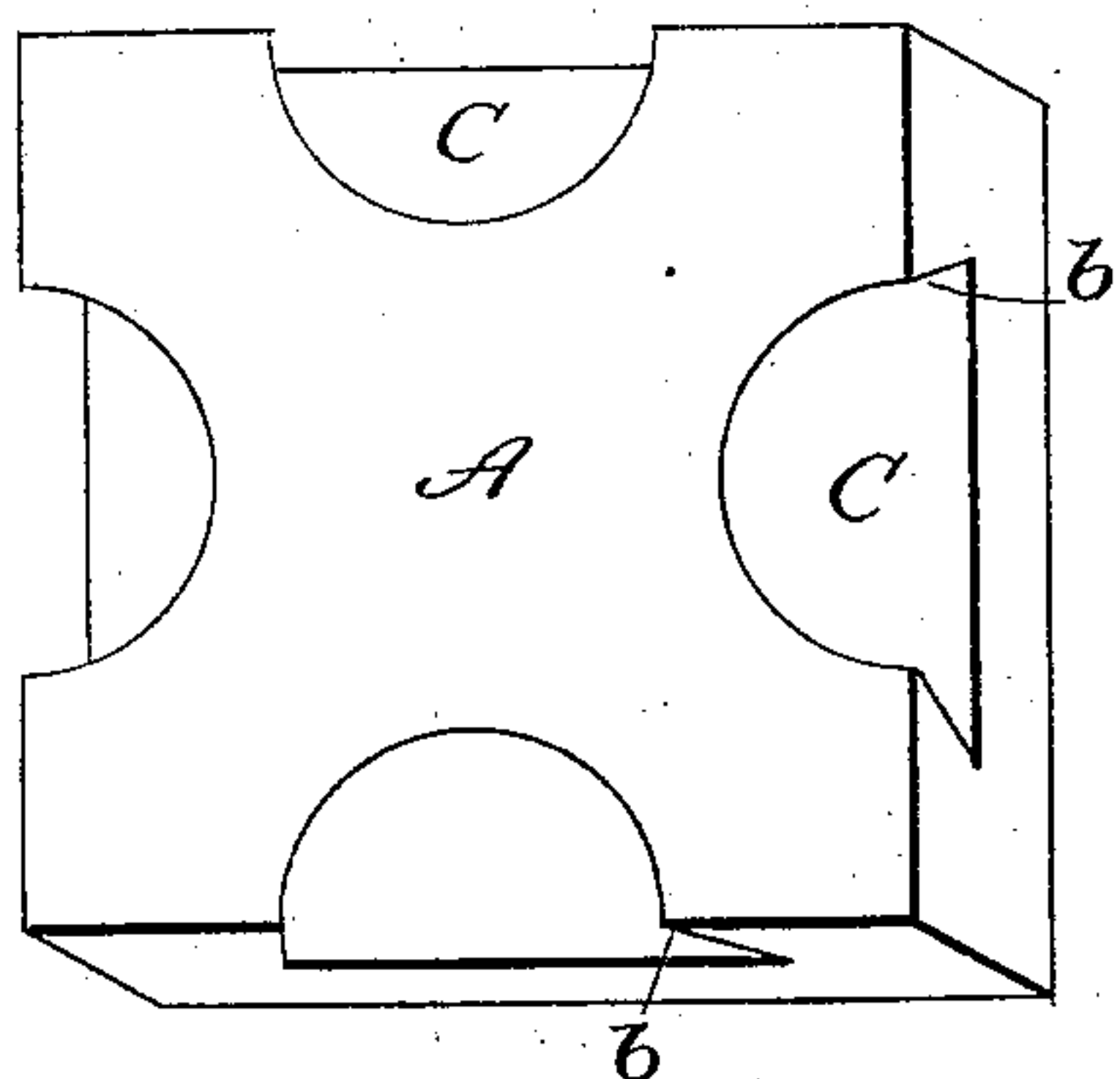


Fig. 2.

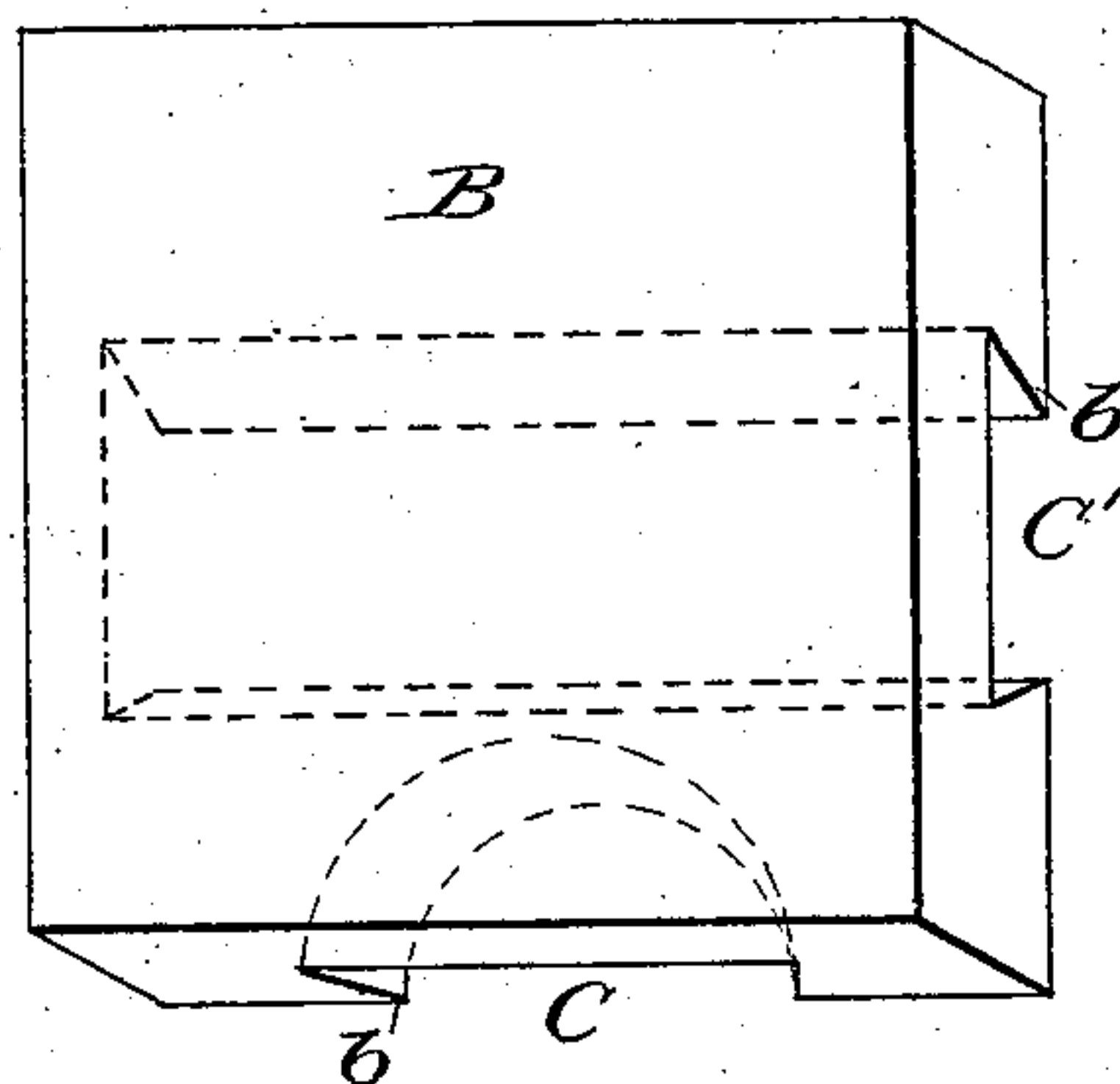


Fig. 4.

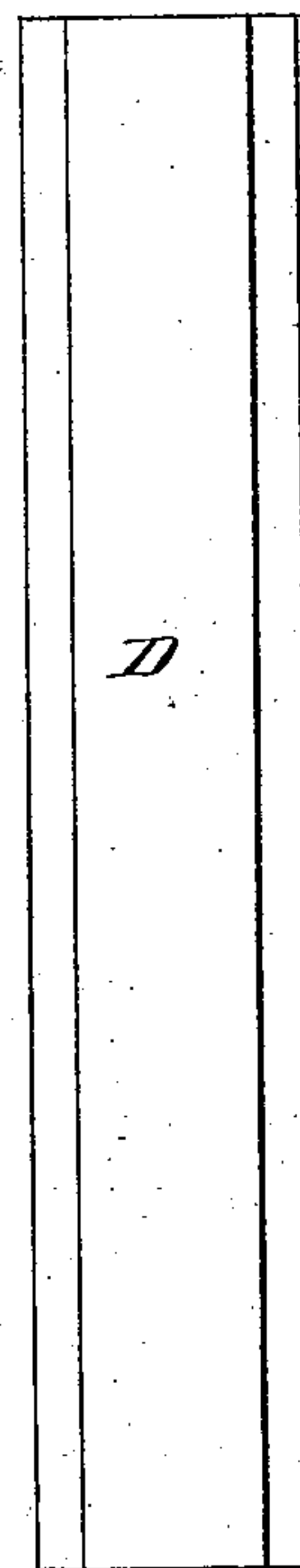


Fig. 8.

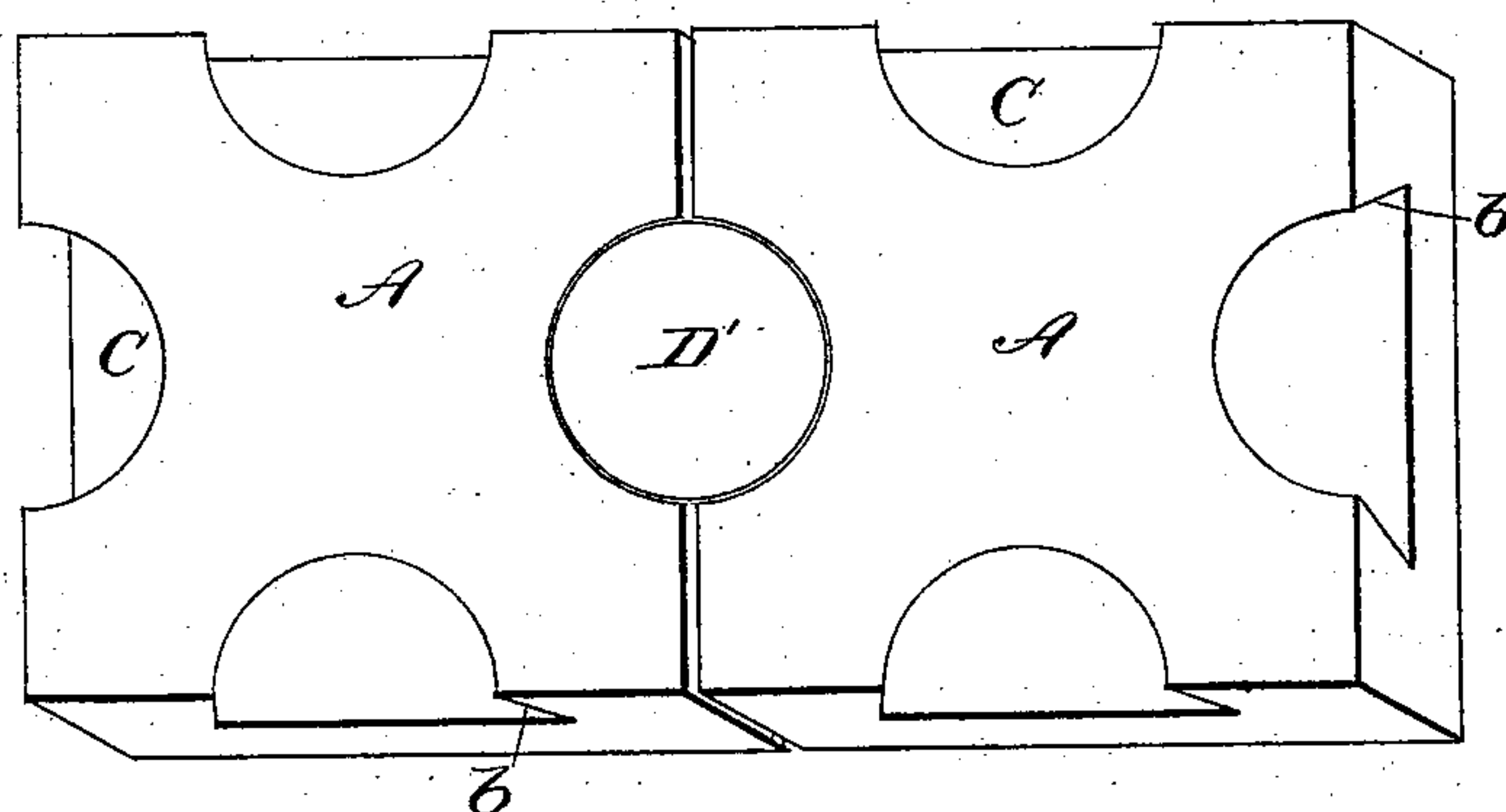


Fig. 5.

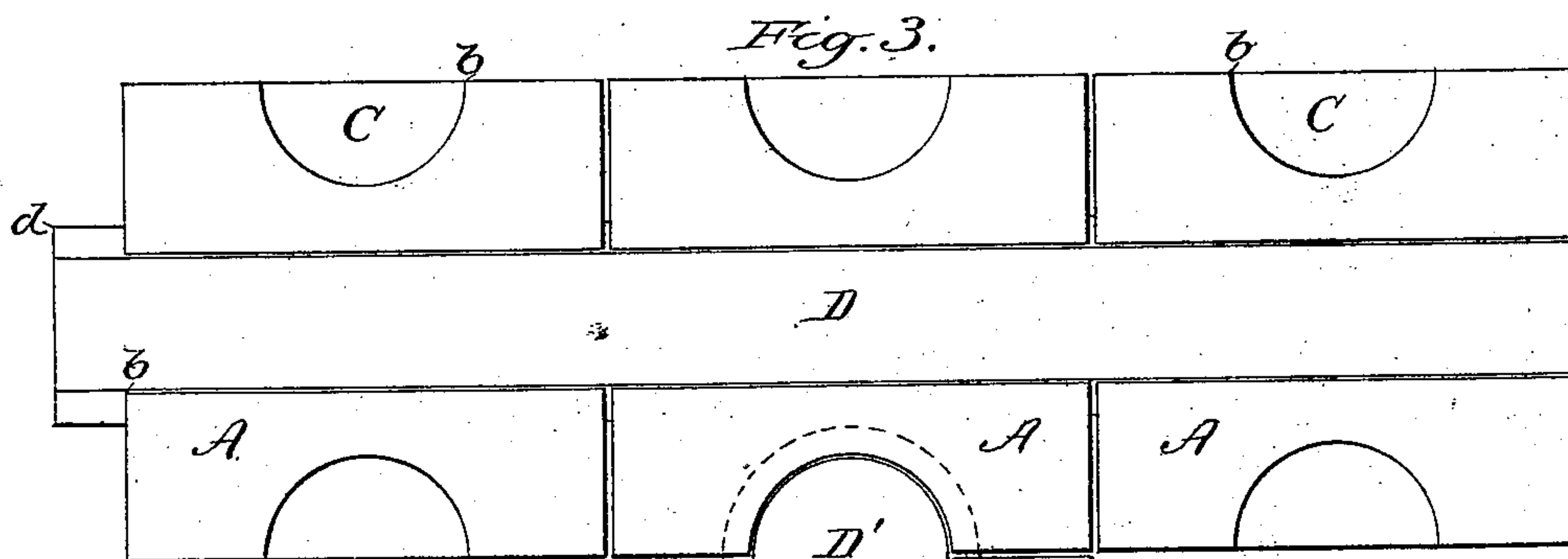
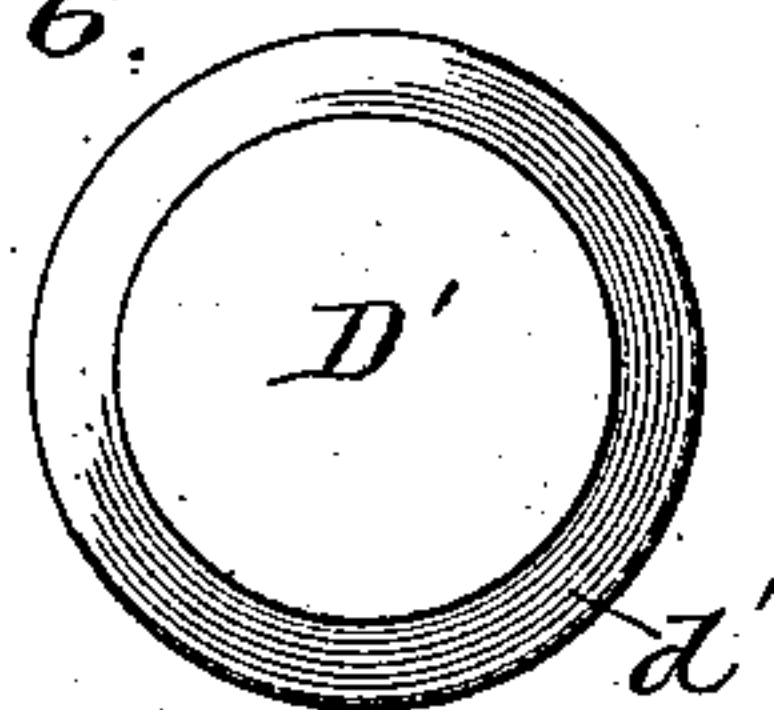


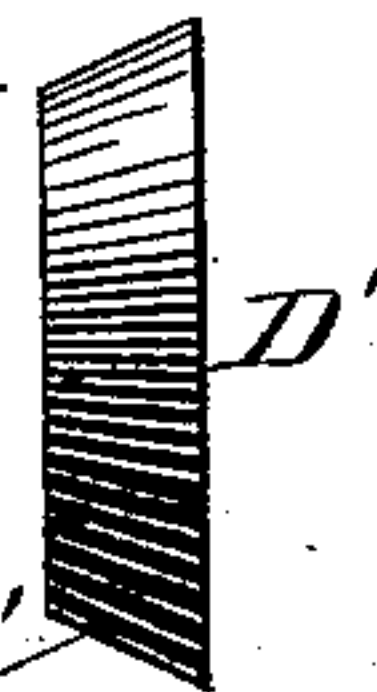
Fig. 6.



Witnesses:

J. Rombold
H. B. Grossett.

Fig. 7.



Inventor:
Walter Booth
by his attorney
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UNITED STATES PATENT OFFICE.

WALTER BOOTH, OF TARRYTOWN, NEW YORK.

CONSTRUCTING AND FASTENING TILES.

SPECIFICATION forming part of Letters Patent No. 297,491, dated April 22, 1884.

Application filed March 7, 1884. (No model.)

To all whom it may concern:

Be it known that I, WALTER BOOTH, a citizen of the United States of America, residing at Tarrytown, in the county of Westchester and State of New York, have invented a new and useful Improvement in Constructing and Adjusting Tiles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, wherein similar letters refer to similar parts throughout the several views.

My invention relates to so constructing tiles as to admit of their being united at their sides by means of connecting-ties set into recesses left in the backs of such tiles when molded, for the purpose of receiving such ties, whereby the tiles are united to each other adjacent one, and present a firm and inseparable tiled surface.

The difficulty in using tiles for flooring, walks, borders, fire-places, or walls is, that as they are not made so as to afford each other support except at their sides, they are easily displaced if they become loosened from their setting in cement or in plaster, which is friable and not capable of resisting shocks or pressure.

The object I have in view in my invention is to form tiled surfaces with tiles, so that as conterminous sides are brought in place in setting them a tie can be inserted at the backs of the tiles in suitable recessed openings, which shall afford them a mutual and adequate support and obviate the risk of displacement in case of the tiles becoming separated from the setting. This I effect by constructing or molding the tiles so that their backs shall present recessed openings having lips or edges around such recesses, or at the upper sides of such openings, projecting toward each other, whereby when I wish to unite one tile to another I insert in their opposite or contiguous recesses a suitable tie fitting into such recesses, so as to securely hold such sides by the binding of the tie within such recesses and against their lips or edges. Such recesses and lips may be of various shapes, as may be found most convenient; but the form I prefer, in order to secure rapid and firm linear adjustment, is a recess extending across the tile, and having its top or mouth narrower than the bottom or interior of the

recess, whereby I string the tiles on a slat, rod, or tie of any required length, and of such form and dimensions as to fit a series of such recesses. If the other sides are to be connected, as in a flooring, the conterminous recesses at such portions of the backs may be shorter, and short ties inserted therein, with an end fitting in each recess. Thus constructed, a flooring or wall will be less dependent upon the setting for its firmness, as each tile will bind its adjacent ones, and the whole surface will consist of dovetailed or mutually binding and supporting parts, without their connections being visible from the face.

In using the word "tiles" I do not intend to limit my invention to thin plaques of burnt clay, as it is evident that such tiles may be of varied dimensions, and composed of other materials capable of being cast or molded, as clay, dust, and kaolin, as well as of silicon or glass, or even of metal.

The ties are preferably made of wood; but they may be made of any suitable material which shall afford a support to the backs and which is not friable or brittle, and the edges are beveled or otherwise shaped so as to conform to the interior of the recesses.

In the accompanying drawings, Figure 1 shows in perspective the back A of a tile with the several recesses C C C C and projecting lips b b.

Fig. 2 is a front view of B, a tile showing at the right-hand side the opening of a recess, C', which extends from one side to the other, for the purpose of sliding it with others upon a slat, where several tiles are to be united in line, the bottom side showing the opening of the recess C for a shorter tie. It also shows the projecting lips b b b b at the sides of each recess.

Fig. 3 shows the manner of uniting tiles in line, as well as laterally, three tiles, A A A, being the backs of three contiguous tiles, into whose recesses C' C', extending across each one, is inserted a slat or rod, D, having edges d d beveled or shaped so as to fit in the recesses C' C' as the tiles A A A are strung or slid upon such slat. It also shows the shorter recesses C C, the lips b b on each recess, and a tile, A, joined laterally to the bottom of the middle tile by a short tie, D', the dotted lines

around which show the extent of the interior of the recess, and the extent of the beveled edge of such tie conforming to the recess, as is also shown in Fig. 8. It also shows the recess C' extending across the tile for the adjustment upon another slat.

Figs. 4 and 6 are plan views, respectively, of the long connecting tie or slat D and the shorter connecting-tie D', with their beveled edges *d d'*, of which Figs. 5 and 7 show the respective end views.

Of course, the shorter recesses can be made in dovetail shape; but as the expense of molding is thereby increased, I think the forms I have hereinbefore indicated are preferable, as being more economical.

Having described my invention so that one skilled in the art of making tiles, or in the art of laying them, can understand how they are to be made and united, what I claim as my invention, and for which I desire that Letters Patent may be granted to me, is—

1. The method of binding tiles to each other by means of retaining undercut depressions and a back-supporting tie or ties fitted therein, substantially as and for the purpose described.

2. The manufacture of tiles provided with retaining undercut depressions in the backs thereof, for the purpose of receiving a supporting and conforming tie or ties, substantially as described.

3. In tiling, the art of supporting and uniting tiled surfaces by means of ties fitting in recesses in the backs thereof, substantially as described.

4. A tile brace or tie for uniting and supporting tiles by its insertion within the recessed backs thereof, substantially as described.

WALTER BOOTH.

Witnesses:

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