

(No Model.)

J. A. FLINT.

TILE CONSTRUCTION FOR WALLS, ARCHES, &c.

No. 497,234.

Patented May 9, 1893.

Fig. 1

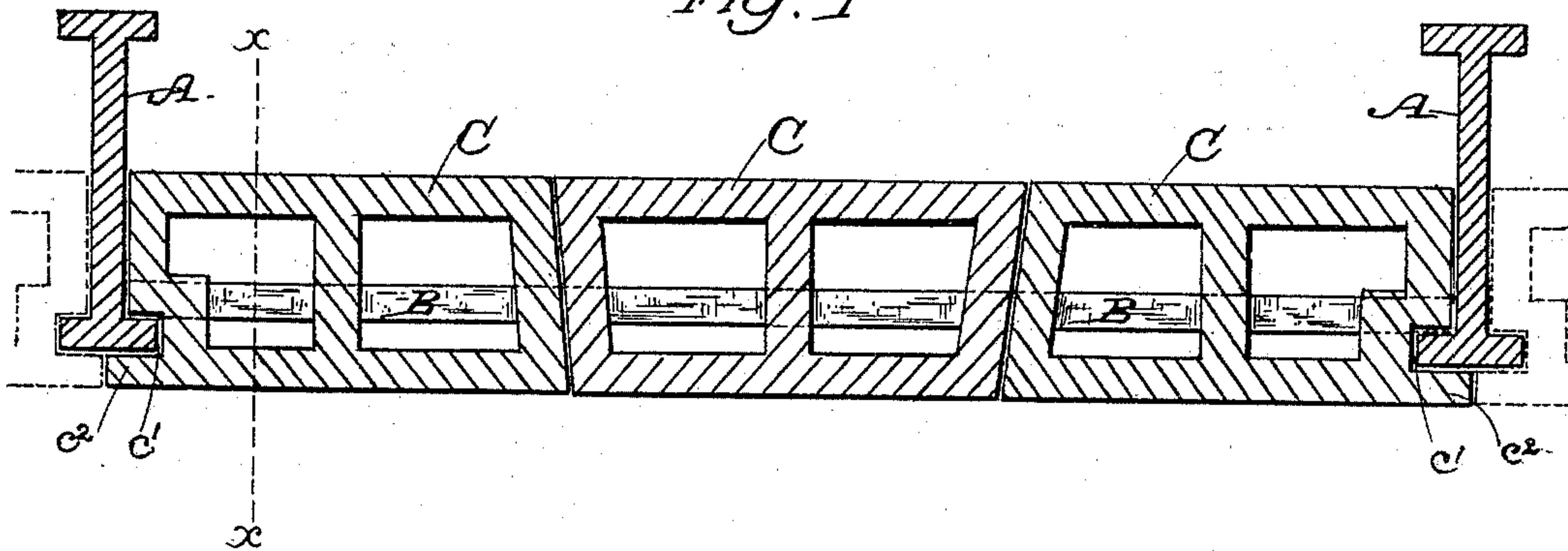


Fig. 2.

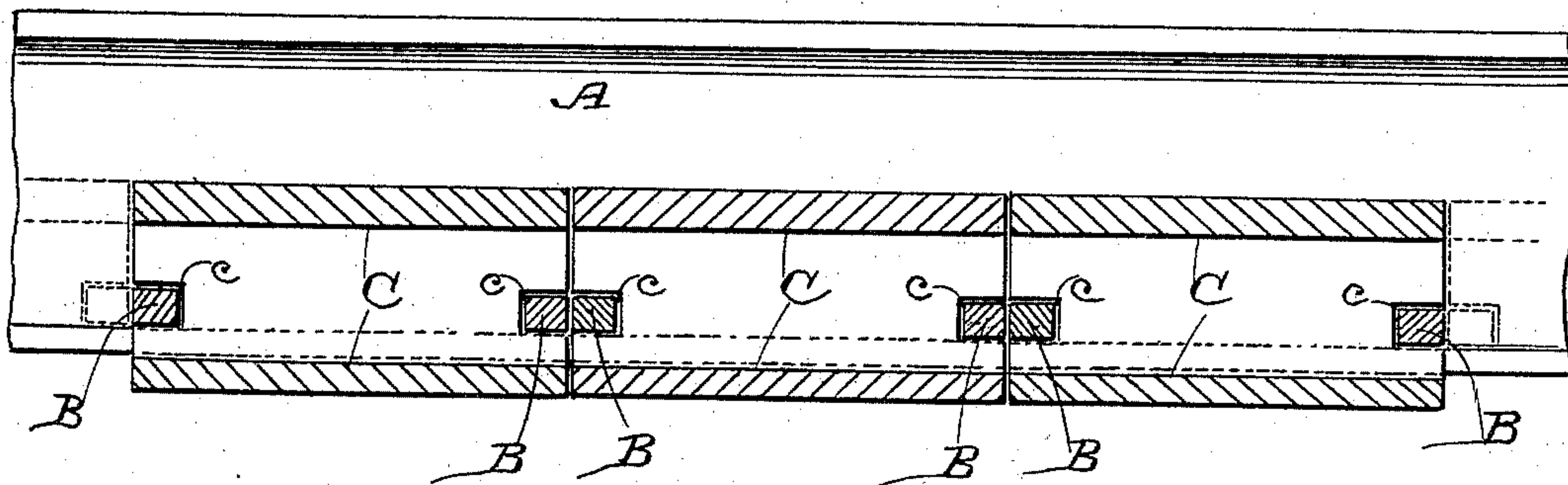
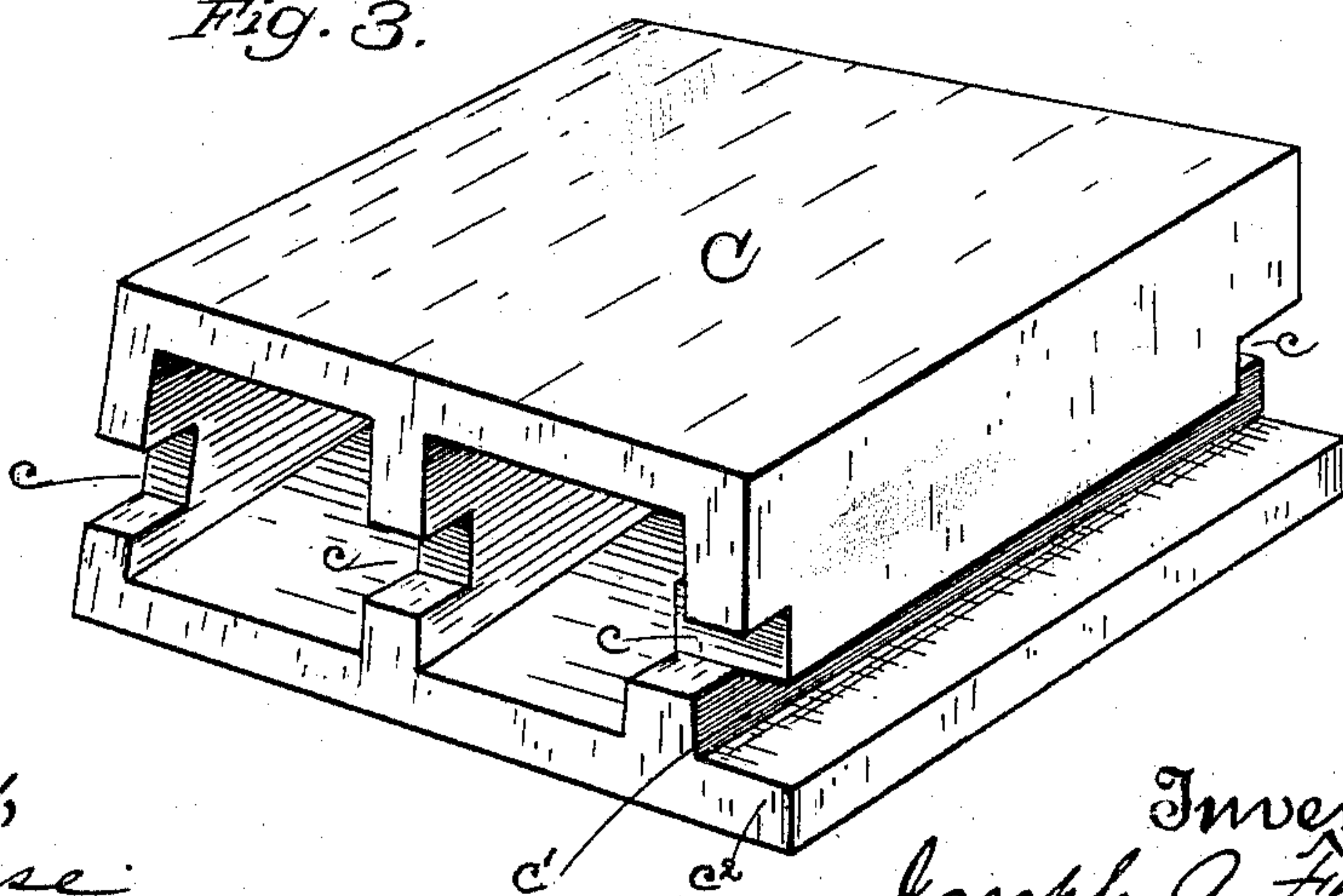


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEPH A. FLINT, OF SAN FRANCISCO, CALIFORNIA.

TILE CONSTRUCTION FOR WALLS, ARCHES, &c.

SPECIFICATION forming part of Letters Patent No. 497,234, dated May 9, 1893.

Application filed January 28, 1893. Serial No. 460,129. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. FLINT, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Tile Construction for Walls, Arches, Partitions, and Roofs; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of hollow fire-proof tiles, and to the art of using them in the construction of walls, partitions, arches and roofs.

It consists in the novel construction of the tiles themselves, and in the means for laying them together and supporting them in the constructions mentioned.

The principal utility of my invention is in the construction of flat arches and roofs wherein by reason of the peculiar form of the tiles, and the means for supporting them, they can be laid with the greatest convenience and safety, and without the annoyance and expense of the usual hanging scaffold and the subsequently used framing below. They are also adapted to be laid up in the same manner in walls and partitions and to be properly supported therein.

Referring to the accompanying drawings,—
Figure 1 is a cross section through the beams, showing the ends of the tiles and the supporting bars of a flat arch. Fig. 2 is a section on the line $x-x$ of Fig. 1. Fig. 3 is a perspective view of one of my tiles.

A A are two I-beams. Extending between these and resting on the lower flanges thereof are the supporting bars B.

C are the tiles, here shown of the usual hollow fire-proof pattern. The ends of these tiles, upon a line between their tops and bottoms are formed with grooves c in which the bars B are fitted flush with the tile ends. As shown in Fig. 2, where rows of tiles adjoin, there are two bars B, one for each row, and lying close up to each other, so that being let into the tiles they are out of sight and the tiles come up close to each other forming a continuous surface for the plaster. The sides of the tiles, next to the beams A, are also formed with grooves c' which fit over the beam flanges, and the outer walls c^2 of these grooves overlap the under side of the beam

to its median line, whereby the row of tiles in the sameline, but between adjacent beams, come up close to one another, thus concealing the beams and leaving a continuous tile surface over each beam.

In laying the arch, a supporting bar B is first placed. Then the tiles are fitted to the beam flanges by their side grooves c' and slipped up until their end grooves receive the bar B. Another bar B is then fitted to the other end grooves of the row of tiles, and a third bar is placed beside it. Thereupon a second row of tiles are slipped into place and so on. A flat arch or floor may be thus made without the use of the temporary supporting scaffold, and on account of the construction of the tiles, the supporting bars and beams are wholly hidden, leaving a smooth, unbroken tile surface.

For walls and partitions, the studs or beams are vertical and the supporting bars B are properly secured to them. The tiles are on end and while they are vertically sustained by each other, the bars B support them against lateral strain.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A tile formed with grooves in its ends to receive the bars upon which it is supported, and with a groove in its side to fit and overlap the supporting beam, substantially as herein described.

2. A tile construction consisting of supporting beams, supporting bars extending between said beams and tiles with end grooves which receive said bars and with a side groove fitted to and overlapping said beams, substantially as herein described.

3. A tile construction consisting of supporting I-beams, supporting bars resting on and between the flanges of said beams, and tiles with end grooves receiving the bars and with a side groove fitted to and overlapping the flanges of said beams, substantially as herein described.

In witness whereof I have hereunto set my hand.

JOSEPH A. FLINT.

Witnesses:

S. H. NOURSE,
J. A. BAYLESS.