

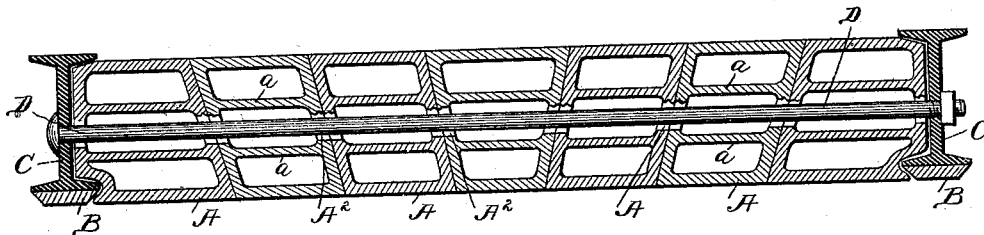
(No Model.)

J. PAJEAU.  
TILE.

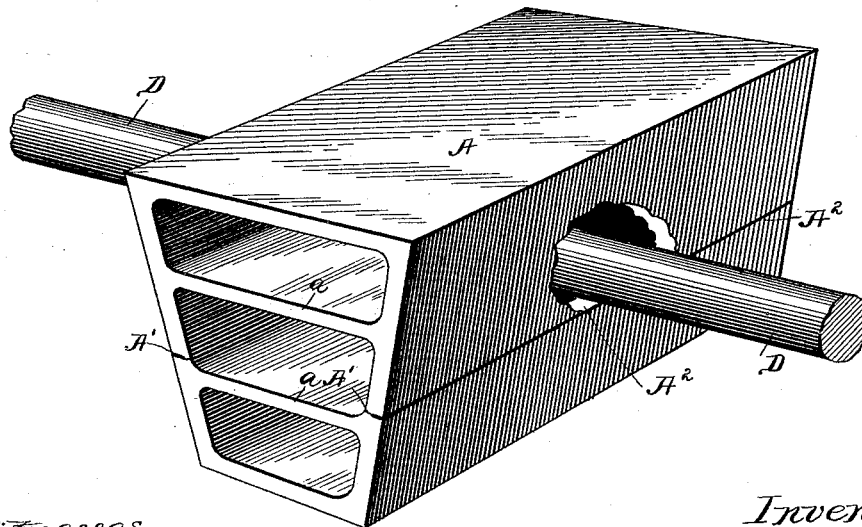
No. 420,731.

Patented Feb. 4, 1890.

*Fig. 1.*



*Fig. 2.*



Witnesses.

Wm. Rheem.  
J. L. Brown.

Inventor.

Joseph Pajean,  
By Charles F. Brown.  
Atty.

# UNITED STATES PATENT OFFICE.

JOSEPH PAJEAU, OF CHICAGO, ILLINOIS.

## TILE.

SPECIFICATION forming part of Letters Patent No. 420,731, dated February 4, 1890.

Application filed June 10, 1889. Serial No. 313,809. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH PAJEAU, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hollow Tile for Arches, of which the following is a specification.

My invention relates to tile employed in the construction of flat arches, upon which may be placed flooring, such flat arches and flooring resting thereon constituting the ceiling in the building wherein it is placed; and the purpose of my invention is to obtain a tile of the character named, which may be readily placed in position around the tie-rod ordinarily employed to connect the girders between which the arch is thrown, and prevent such girders from spreading.

I have illustrated my invention by the drawings accompanying and forming a part of this specification, in which—

Figure 1 is a cross-section of girders supporting an arch constructed of my improved tile, a cross-section of such arch, and an elevation of the tie-rod connecting the girders. Fig. 2 is a perspective of the tie-rod connecting the girders, and of one of the tile forming said arch having the tie-rod inserted therein.

As the several tile forming the arch are, so far as relates to my invention, similar in construction, I have not deemed it necessary to show in detail each of the tile forming the arch.

Like letters refer to like parts throughout the several views.

A A are the tile forming the arch.

A' is a cut extending along the sides of the tile about midway of and parallel to the upper and lower edges of the tile.

A<sup>2</sup> is a portion of the side wall of the tile broken away, in the manner hereinafter described, to permit the placing of the tile around the tie-rod.

a a are connecting-partitions in the tile.

B is the girder-protecting tile.

C is the girder, and D is the tie-rod connecting the girders C C.

The cut or groove A' is formed in the tile before the baking thereof by the insertion of a knife or other suitable instrument penetrat-

ing a sufficient distance into the material composing the tile, so that when the tile has been baked the breaking of the tile along the line of such cut will be greatly facilitated. Partitions a a, parallel with the upper and lower face of said tile, extend the whole length of the tile, and in the effort to break open the tile upon the line of the cut or groove A', as described, if the line of fracture extends to one or the other side of such cut A' it will be limited by these partitions a a at their point of junction with the side walls of the tile.

In the laying of an arch formed of my tile the same may be placed therein in the ordinary manner, except at the point in the arch where the tie-rod D comes. In laying the tile in the arch around such tie-rod the tile is broken open or fractured, as nearly as may be, upon the line A', by a hammer or other suitable instrument, the line of fracture being, as stated, determined by groove or cut A' and partition-walls a a. After the tile has been broken open a sufficient amount or quantity of the side wall of the tile is broken away to permit the tie-rod D to pass through the tile in the proper place when the tile is placed in position in the arch. The lower part of the tile may then be placed underneath the tie-rod, together with suitable cement or mortar, and the upper part placed in position upon said lower part in a proper manner and with suitable cement or mortar. In this manner I am enabled to construct a much stronger arch at the part thereof within which the tie-rod connecting the girders is placed, and at all other points in said arch I obtain substantially the same results as by the tile heretofore in use for such purpose.

I am aware that partitions similar to the partitions a a have been heretofore employed in the making of tile adapted to form an element in a floor-arch; and

What I claim, and desire to secure by Letters Patent, is—

A hollow tile open at the ends thereof, having an upper and an under wall in substantially parallel planes, converging side walls, intermediate walls extending from one to the other of the side walls and in a plane paral-

parallel to the upper and under walls, and grooves  
partially severing the side walls of the tile  
longitudinally the entire length thereof and  
between the intermediate walls, whereby such  
5 tile is adapted to form a member in a flat  
arch and to be broken open longitudinally in  
a line limited and controlled by the combined

influence of such intermediate walls and the  
partial severing of the side walls, substan-  
tially as described.

JOSEPH PAJEAU.

Witnesses:

CHARLES T. BROWN,  
A. Z. BAUM.