

(No Model.)

F. L. SLOCUM.
COKE OVEN TILE.

No. 575,133.

Patented Jan. 12, 1897.

Fig. 1

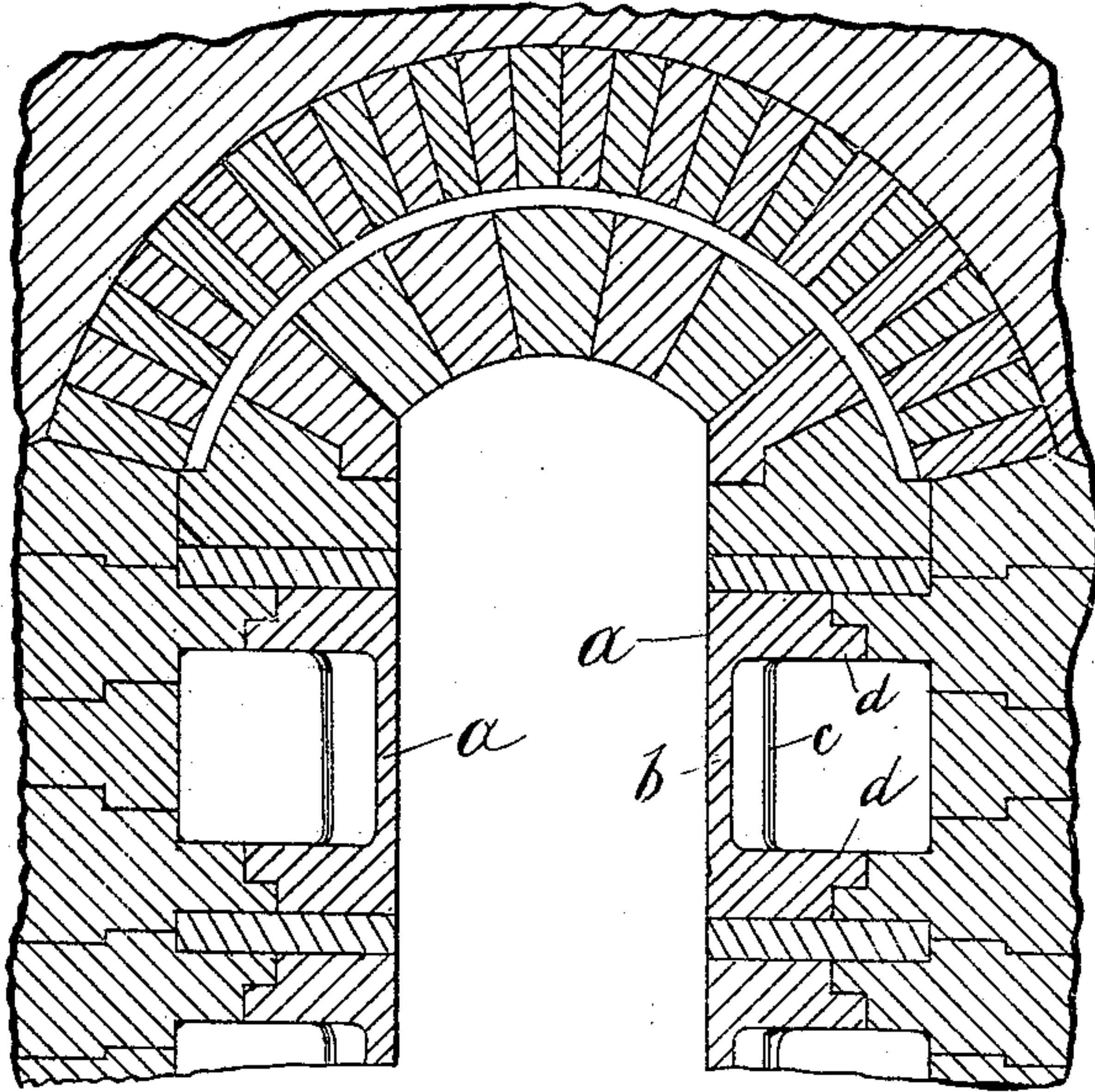


Fig. 4.

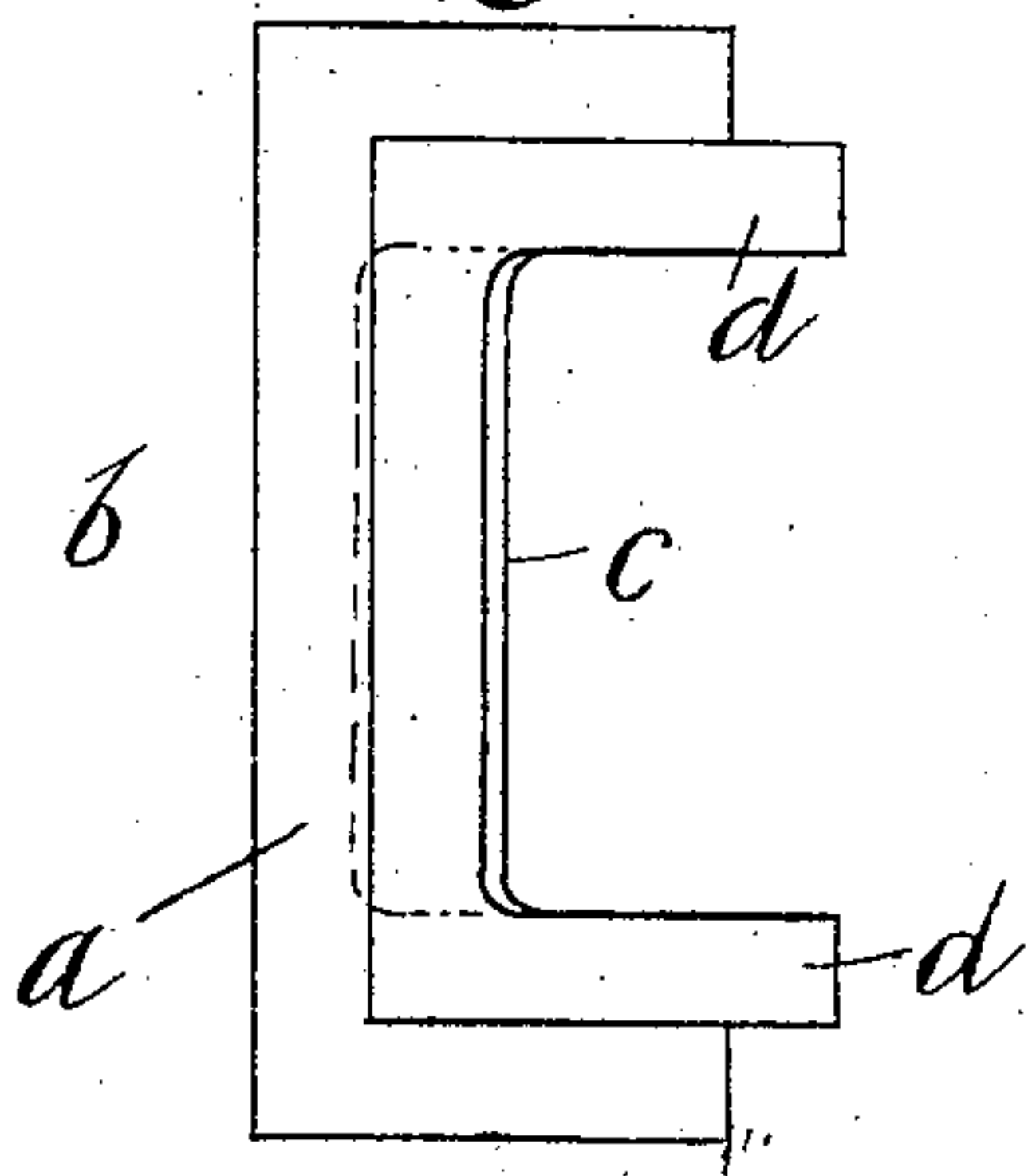


Fig. 2.

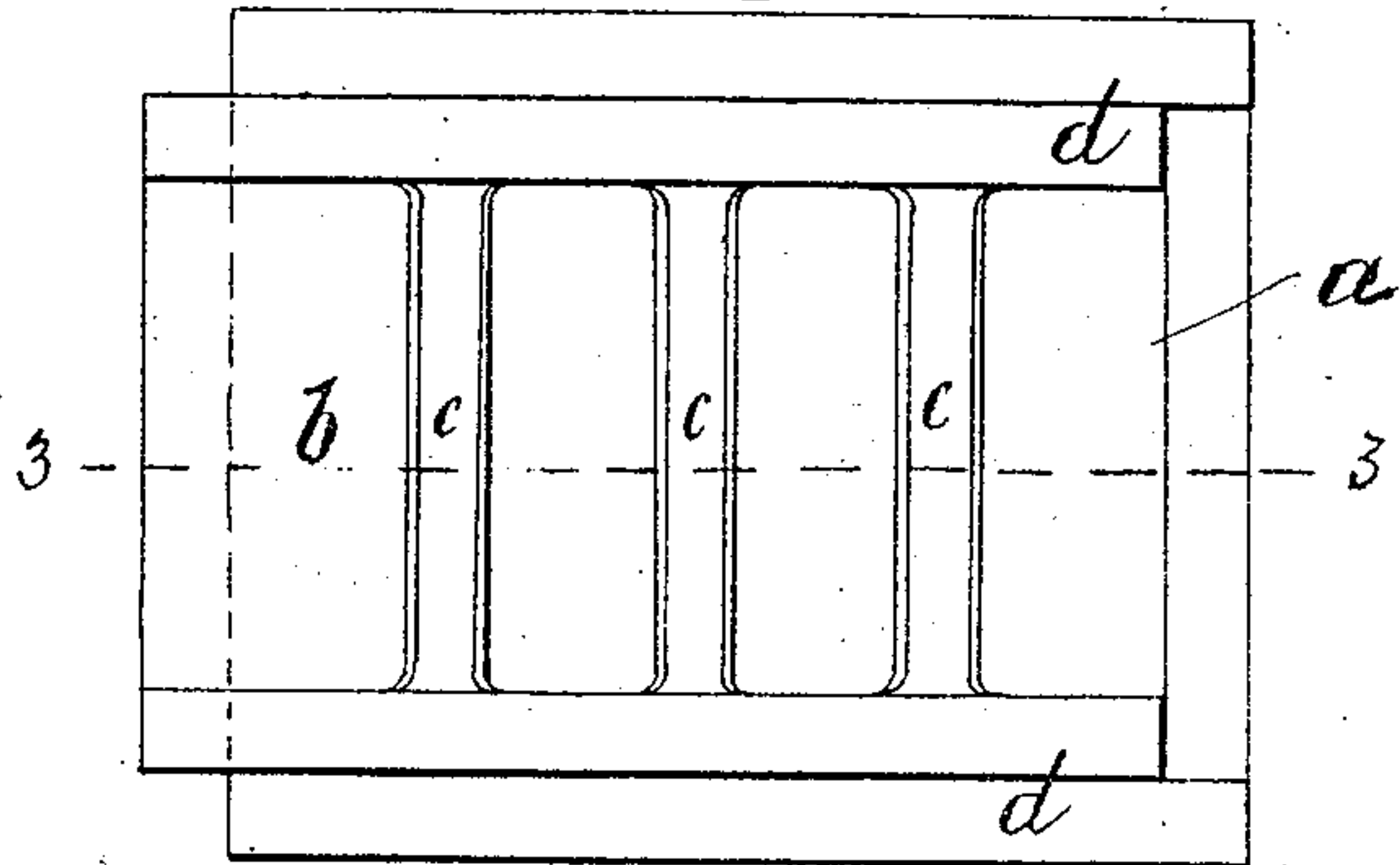
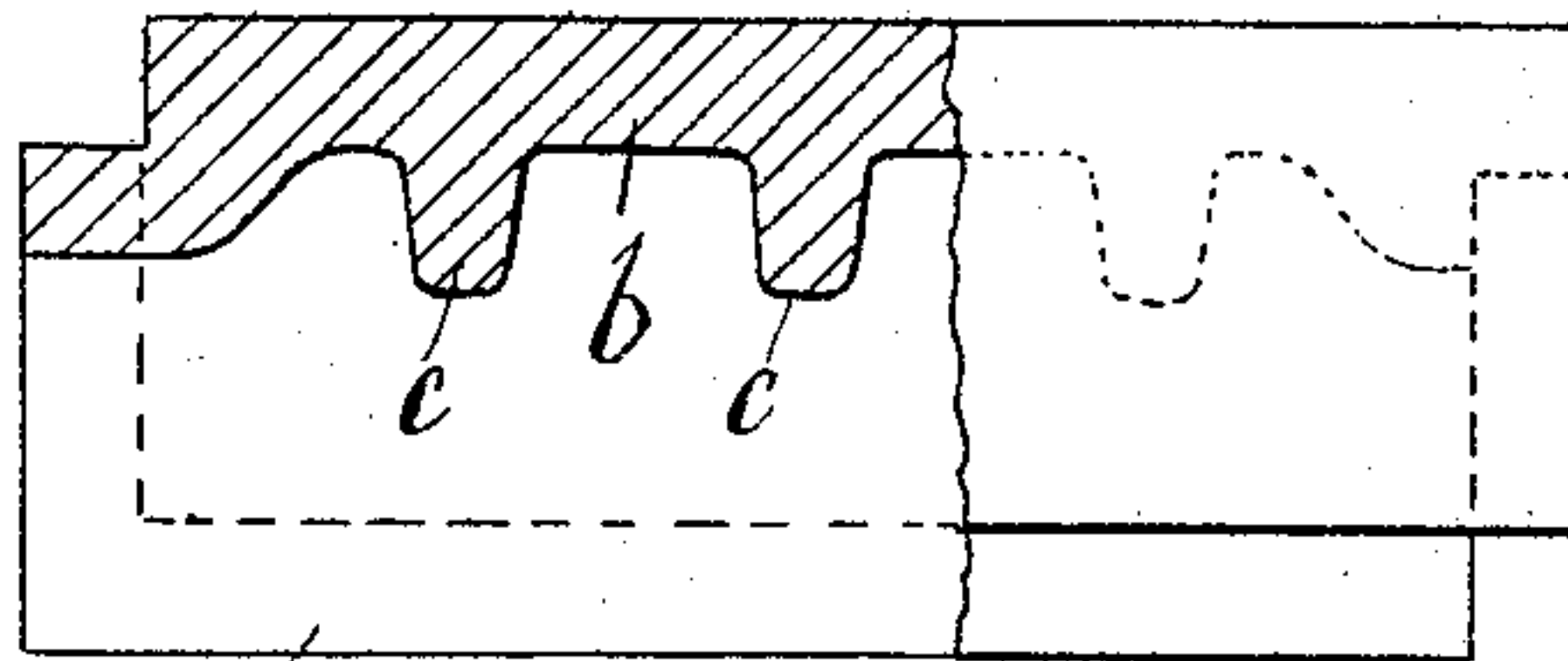


Fig. 3.



Witnesses
Chas. J. Farrar.
Robert C. Totten

Inventor.
Frank L. Slocum
By Kay & Totten
Attorneys.

UNITED STATES PATENT OFFICE.

FRANK L. SLOCUM, OF PITTSBURG, PENNSYLVANIA.

COKE-OVEN TILE.

SPECIFICATION forming part of Letters Patent No. 575,133, dated January 12, 1897.

Application filed July 8, 1896. Serial No. 598,407. (No model.)

To all whom it may concern:

Be it known that I, FRANK L. SLOCUM, a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Coke-Oven Tiles; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to coke-oven tiles.

10 The invention is closely related to an application for Letters Patent filed by me on the 23d day of May, 1895, Serial No. 550,336, for improvement in coke-ovens. In that application the inner walls of the coking-chamber are composed of a series of vertical tiles with horizontal and inwardly-extending flanges projecting over the top and bottom of the heating-flues. It was necessary to make these tiles of considerable thickness in order
20 that they might have the requisite strength to withstand the intense heat to which they are subjected, as well as the pressure against them. By increasing the thickness of these tiles the heat within the coking-oven was reduced, as the heat within the heating-flues could not so readily penetrate the tiles.

30 The object of my invention, therefore, is to provide tiles for coke-ovens which will have a requisite strength, and yet such that the heat will be enabled more readily to penetrate the same.

My invention comprises certain novel features, all of which will be more fully hereinafter set forth and claimed.

35 To enable others skilled in the art to make and use my invention, I will describe the same more fully, referring to the accompanying drawings, in which—

40 Figure 1 is a sectional view of a portion of a coke-oven with my improved device applied thereto. Fig. 2 is an enlarged interior face

view of one of my improved devices. Fig. 3 is the section on the line 3 3, Fig. 2; and Fig. 4 is an end view.

Like letters indicate like parts in each of the figures.

The tile *a* may be formed in any suitable manner and of suitable refractory material.

The tile consists of the vertical portion *b*, with the ribs *c* projecting therefrom, said ribs being arranged at suitable intervals. The inwardly-projecting flanges *d* at the top and bottom of said tile form a part of the top and bottom of the heating-flue. These flanges are rabbeted to engage with the tiles which form the remaining walls of the heating-flue and the pier-wall of the oven. The ribs *c* strengthen the tile and make it possible to construct the vertical wall *b* of less thickness, whereby the heat passing through the heating-flues is enabled more readily to penetrate the tile and increase the heat within the coking-chamber. This form of tile can be employed with great advantage in connection with the form of coke-oven referred to, as it does not in any way detract from the strength of the oven, while at the same time a greater heat within the coking-oven can be obtained.

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

A tile for separating the coke-oven from the heating-flue having inwardly-projecting flanges at the top thereof and open at its ends, and vertical ribs formed on its inner face, substantially as set forth.

In testimony whereof I, the said FRANK L. SLOCUM, have hereunto set my hand.

FRANK L. SLOCUM.

Witnesses:

ROBT. D. TOTTEN,
ROBERT C. TOTTEN.