

No. 641,323.

Patented Jan. 16, 1900.

J. W. RAPP.
FIREPROOF FLOOR.

(Application filed May 5, 1898.)

(No Model.)

Fig: 1.

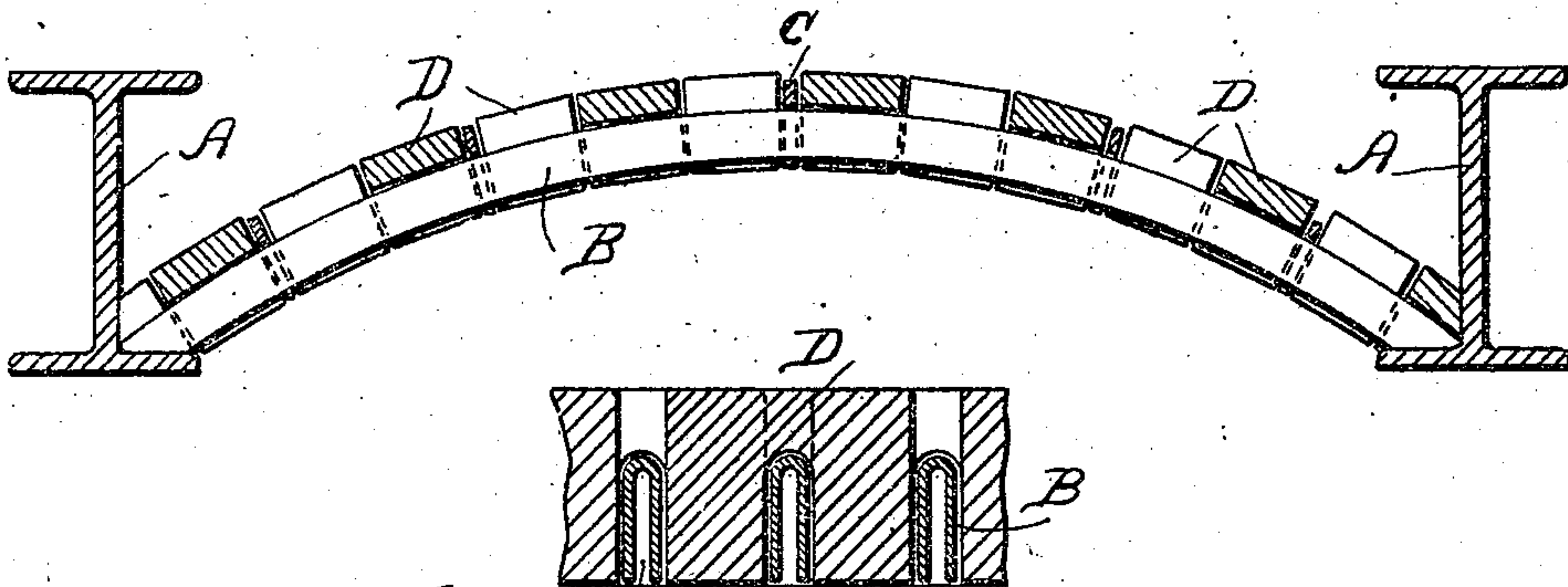


Fig: 3.

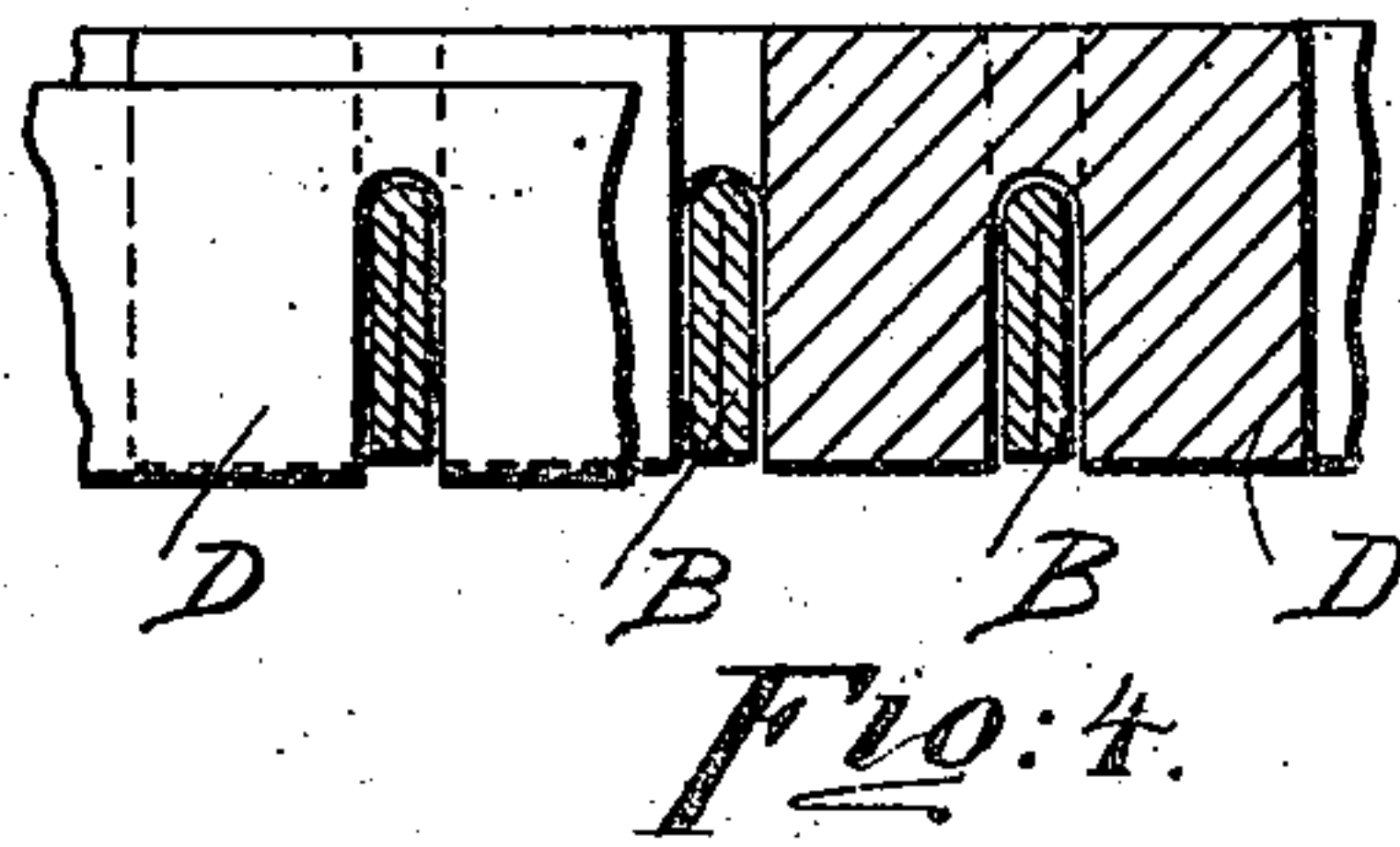
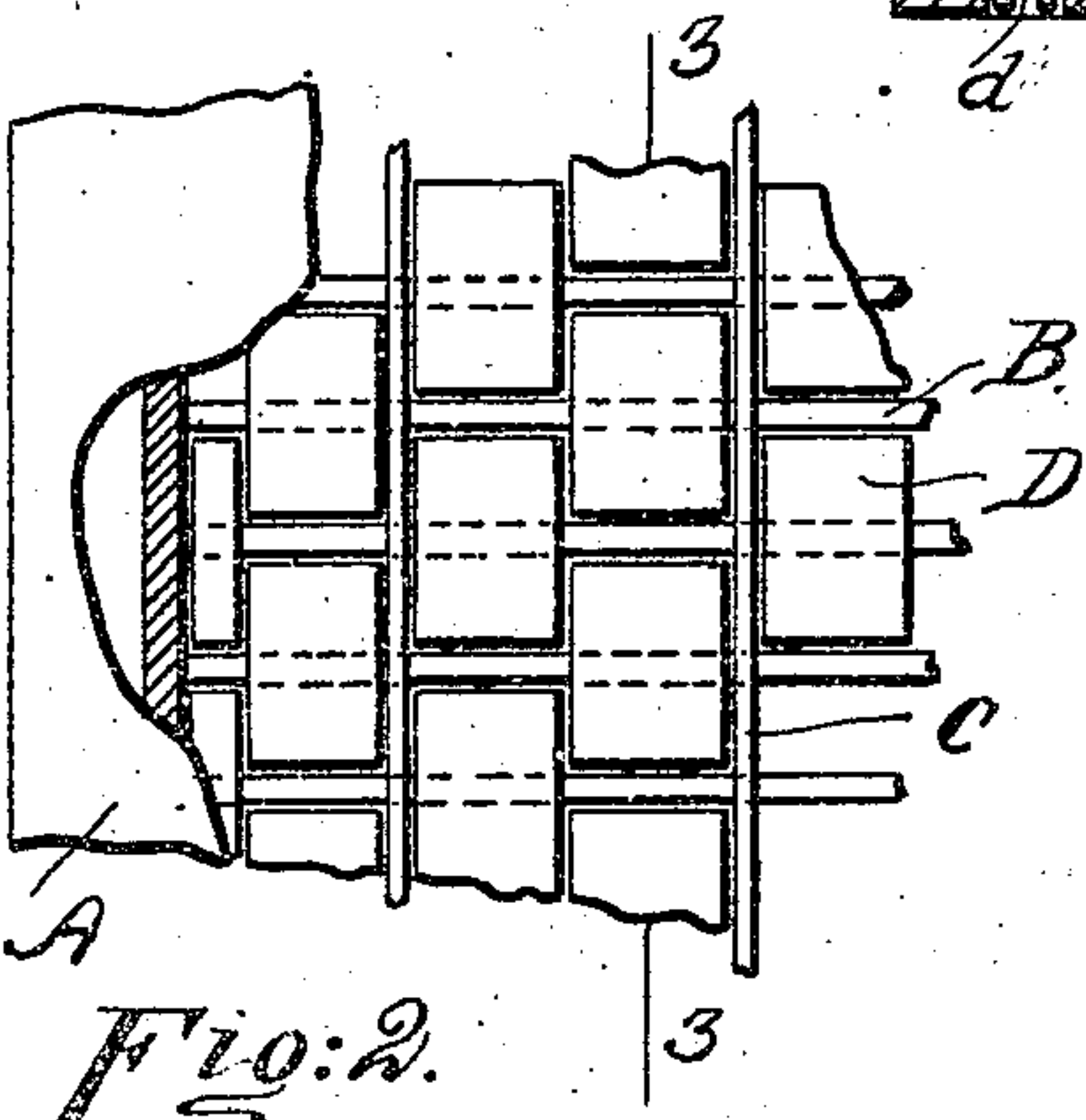


Fig: 5.

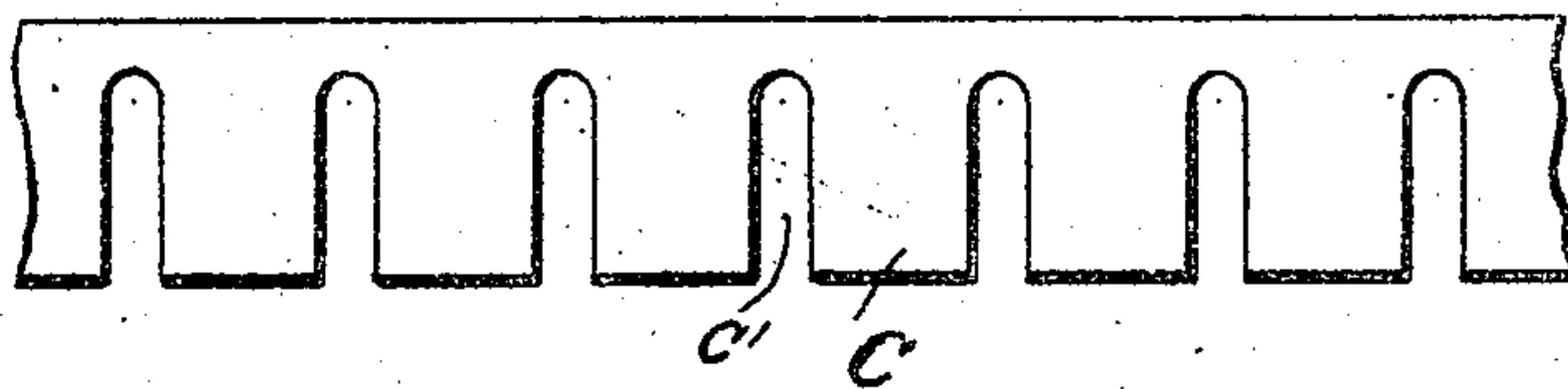


Fig: 6.

Witnesses
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UNITED STATES PATENT OFFICE.

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FIREPROOF FLOOR.

SPECIFICATION forming part of Letters Patent No. 641,323, dated January 16, 1900.

Application filed May 5, 1898. Serial No. 679,746. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. RAPP, a citizen of the United States, residing at New York city, in the county and State of New York, have invented a certain new and useful Improvement in Fireproof Floors, of which the following is a specification.

My invention relates to a fireproof floor construction.

I will describe a construction embodying my invention and then point out the novel features in the claims.

In the drawings Figure 1 is a transverse sectional view of a portion of a floor construction. Fig. 2 is a detail plan view of the same. Fig. 3 is a sectional view on a slightly-larger scale than Figs. 1 and 2, which is taken on the line 3 3 of Fig. 2. Fig. 4 is a detail sectional view similar to Fig. 3, but showing a modified form in cross-section of supporting-bars. Figs. 5 and 6 are detail views of spacing-strips for the supporting-bars.

A represents two of the ordinary I-beams used for supporting floors in buildings.

B represents arched or curved cross-bars, which are supported by their ends on the lower flanges of the I-beams. The cross-bars are preferably made from sheet metal and may be bent to form a U shape, as shown in Fig. 3, or the sides of the bar may be pressed together, as shown in Fig. 4, which would make substantially a solid bar. The supporting-bars are held in position on the flanges relatively to each other by means of spacing-strips C. The spacing-strips may be formed from a strip of metal in which are provided recesses *c*, as shown in Fig. 5; or the spacing-strips may be made over a metal band which is bent to form the recesses or pockets *c*², as shown in Fig. 6.

D represents bricks or other similar blocks, preferably a single layer of which is used to form a base for the filling ordinarily used in floor constructions. Each of the bricks or

blocks is provided with a recess or cut-out portion *d*, which extends transversely thereof and is located, preferably, at its middle portion. The recess is of such a width as to snugly fit the supporting-bars. By this arrangement, as will be seen from Fig. 2, I am enabled to obtain a flooring composed, essentially, of a permanent metallic support and a layer of bricks or blocks, which when they are placed in position upon the supports will overlap, thereby forming a lock for each other.

The spaces between the top of the I-beams and the bricks or blocks may be filled in in any desired manner and with any desired material, and the under side of the arch may be finished according as to whether an arched or flat ceiling is desired.

I claim as my invention—

1. In a floor construction the combination of the I-beams suitably supported, cross-bars intermediate said I-beams and supported by their ends on the flanges of said I-beams, suitable spacing-strips for said cross-bars, and blocks supported by said cross-bars, said blocks being arranged to overlap each other, substantially as described.

2. In a floor construction the combination of the I-beams suitably supported, cross-bars intermediate said I-beams and supported by their ends on the flanges of said I-beams, bricks or blocks supported by said cross-bars, each of said blocks being provided with a recess into which the cross-bars project and said blocks being overlapped when in position on the cross-bars, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. RAPP.

Witnesses:

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