

J. W. BASSETT.
Fire-Proof Ceilings and Floors.

No. 138,118.

Patented April 22, 1873.

Fig: 1.

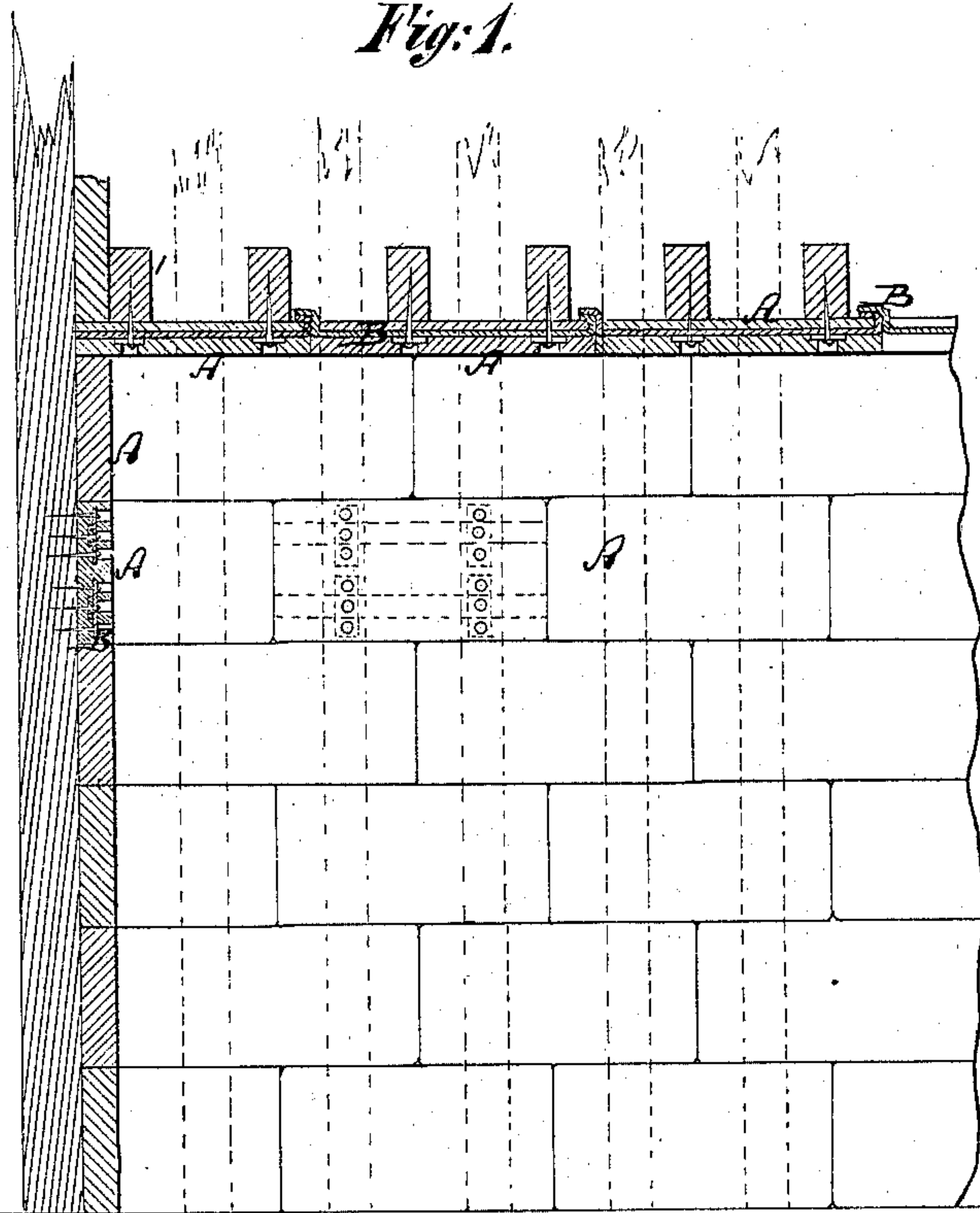


Fig: 2.

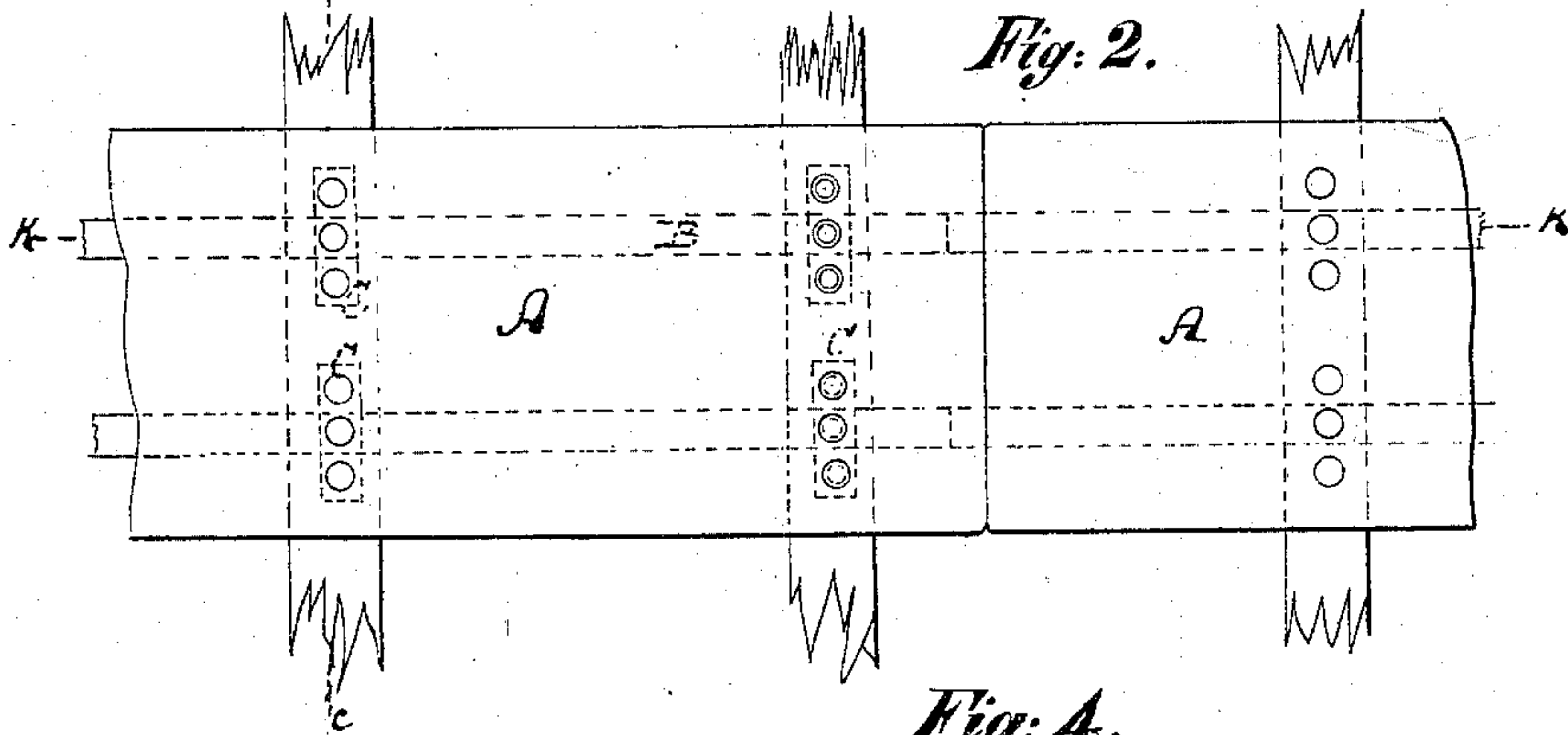


Fig: 3.

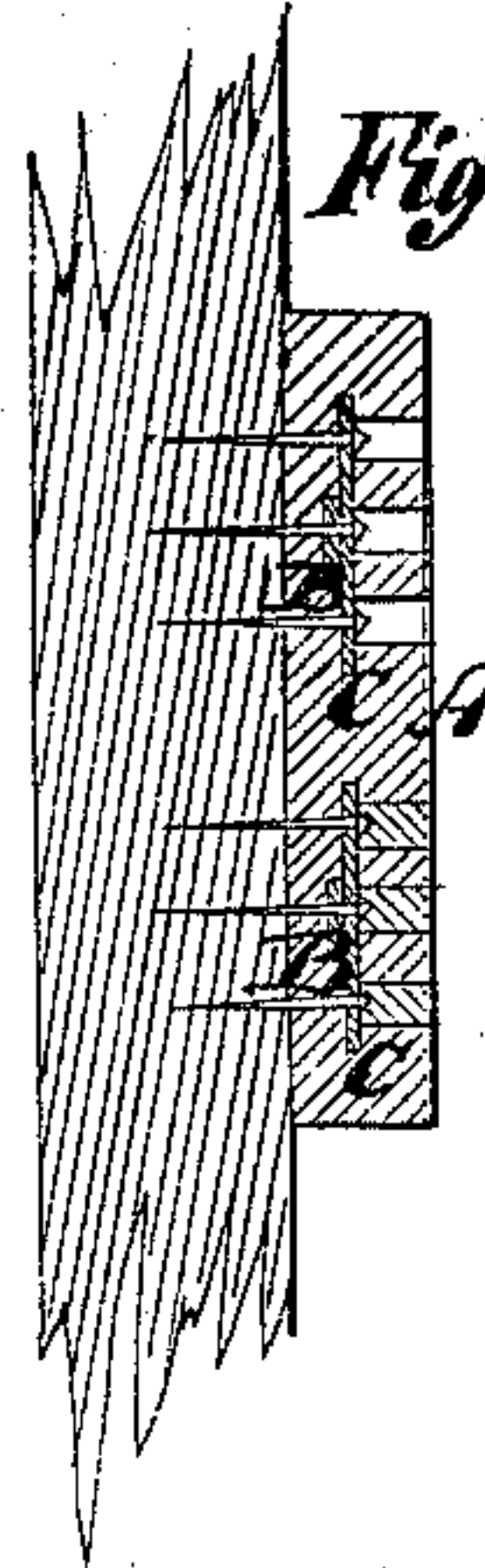
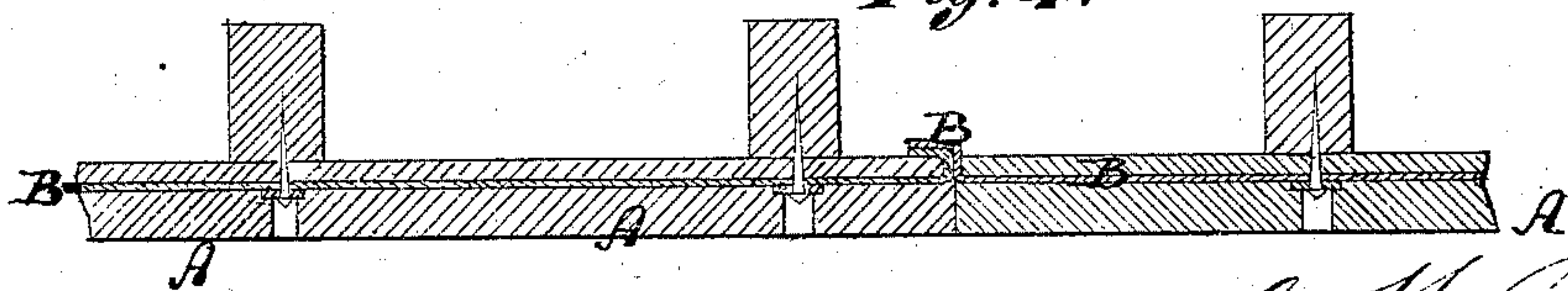


Fig: 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN W. BASSETT, OF NEW YORK, N. Y.

IMPROVEMENT IN FIRE-PROOF CEILINGS AND FLOORS.

Specification forming part of Letters Patent No. **138,118**, dated April 22, 1873; application filed March 24, 1873.

To all whom it may concern:

Be it known that I, JOHN W. BASSETT, of the city, county, and State of New York, have invented an Improved Cement and Plaster for Ceilings, Walls, and Floors, of which the following is a specification:

This invention has for its object to produce walls, ceilings, and floors of plaster or cement, of suitable composition, which, though applied to wooden frame-works, shall make the structures practically fire-proof. For effecting this purpose it is necessary to make the plaster or cement covering of the wooden frames of considerable thickness, in order to prevent the heat from striking through and reaching and consuming the wooden frames, and it is consequently also necessary to supply means for properly suspending heavy plaster ceilings from the wooden beams, and for fastening the plaster to the walls or floors. With this object in view I have contrived to produce a plaster or cement lining with internal metallic bracing, and with means for conveniently fastening it to the beams or posts. My invention consists in forming sections of ceilings with inner metal bars or straps, which are perforated to admit fastening nails or screws, the perforations being also continued through the outer portions of the plaster or cement, so that the nails or screws can be conveniently applied when it is desired to apply a section of lining to the beams or posts.

In the accompanying drawing, Figure 1 represents a vertical sectional view of an apartment provided with my improved plaster ceiling and wall. Fig. 2 is a bottom view of part of the ceiling. Fig. 3 is a vertical section on the line *c c*, Fig. 2; and Fig. 4, a horizontal section on the line *k k*, Fig. 2.

Similar letters of reference indicate corresponding parts in all the figures.

I propose to cast or mold the plaster or cement in slabs or sections *A A*, of convenient size and shape for transportation, so that I may be able to produce them at a shop and then transport them to the place where they are to be applied. Each slab or section *A* contains within it one or more strips or slats of metal, *B*, which extend lengthwise or diag-

onally through it about midway between the upper and lower faces of such slabs or sections.

These slats or straps *B* may be perforated at suitable intervals for the reception of fastening nails or screws, the perforations, wherever applied, extending through the outer part of the slab, as shown in Fig. 3, plugs of suitable kind being inserted in the mold where-in such slats are cast to produce such perforations in the plaster or cement.

Whenever a slab of this construction is to be fastened in place it is applied against the beam or supporting-post by introducing nails or screws through the aforementioned apertures in the outer part of the slab and in the strip or slat *B*, whereupon these apertures are closed by plaster or cement to conceal the nail-heads and give a proper surface to the slab.

The slabs may be formed with plain faces or ornamented, according to the work to be produced, either form being readily produced by suitably-shaped molds.

Small cross-pieces *C C* of strap metal may be placed across and over the strap *B* at such places where the same will be in line with the supporting beams or posts. When such cross-pieces *C* are used, they are perforated, as shown, the perforations extending through the outer part of the slab or section.

The ends of the straps *B* may, if desired, be bent against the ends of the slab, as shown in Fig. 4, and lapped against the reverse side of the slab, so that when several slabs are applied side by side their adjoining straps *B* may overlap each other in the manner indicated in Fig. 4.

Ceilings or walls made of the structure above described will not only possess the advantages already enumerated, but will furthermore be far less expensive to produce than ordinary plaster ceilings, inasmuch as they are completed in molds and ready to receive the finishing touches as soon as fastened in position, while with plaster ceilings or walls of ordinary construction a series of manipulations have to be performed over the

entire surface before the finishing touches can be applied.

What is here claimed, and desired to be secured by Letters Patent, is—

The plaster or cement slab or section A, made with an inner brace or strap, and with perforations extending through said strap and

through the outer parts of the slab, substantially as and for the purpose herein shown and described.

JOHN W. BASSETT.

Witnesses:

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