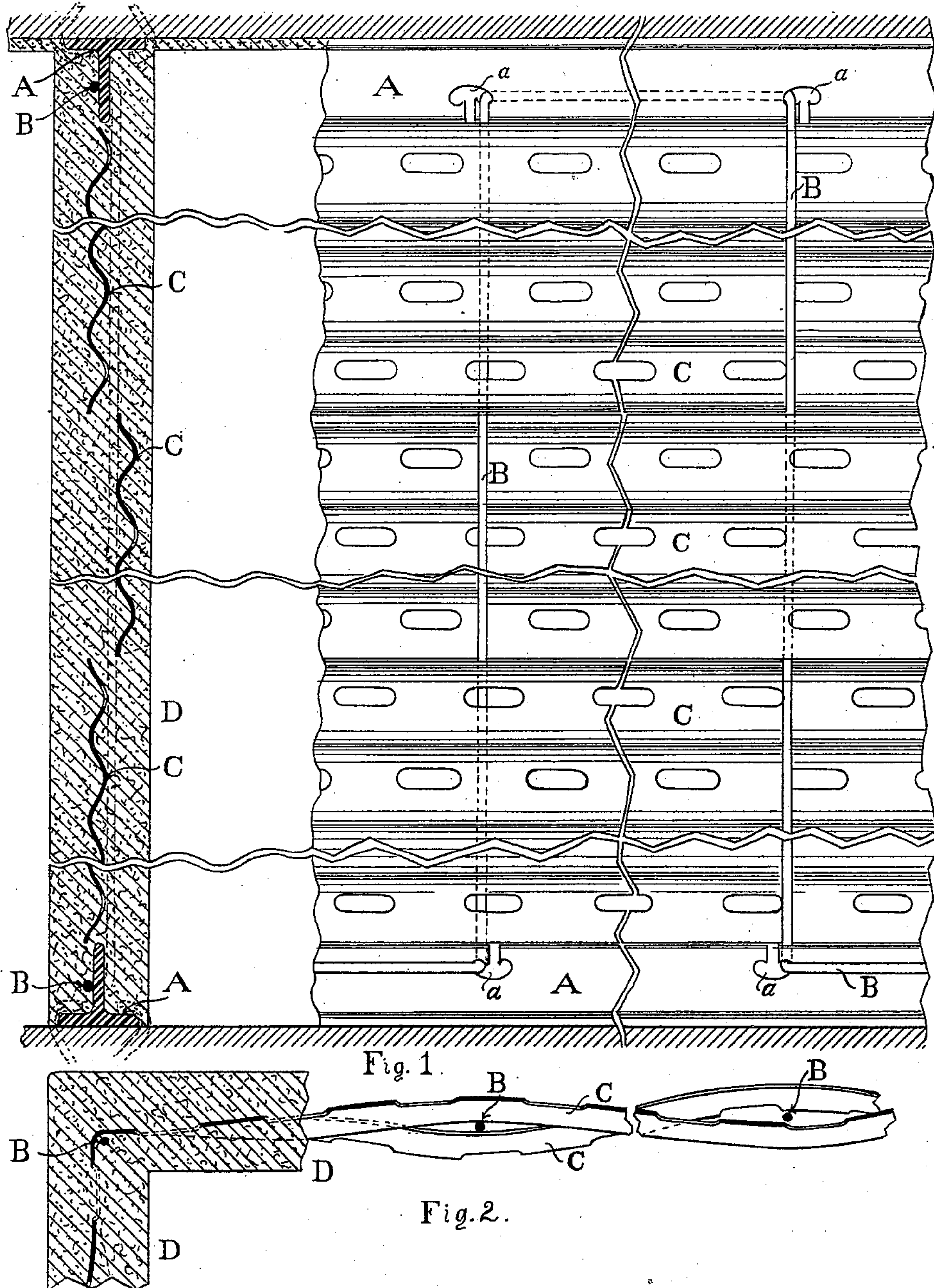


(No Model.)

N. POULSON & B. E. J. EILS.  
FIREPROOF PARTITION, &c.

No. 539,394.

Patented May 14, 1895.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

NIELS POULSON, OF FORT HAMILTON, AND BETTE E. J. EILS, OF NEW YORK, N. Y.

## FIREPROOF PARTITION, &c.

SPECIFICATION forming part of Letters Patent No. 539,394, dated May 14, 1895.

Application filed May 27, 1893. Serial No. 475,683. (No model.)

*To all whom it may concern:*

Be it known that we, NIELS POULSON, residing at Fort Hamilton, in the county of Kings, and BETTE E. J. EILS, residing in the city, county, and State of New York, citizens of the United States, have invented a new and useful Improvement in Fireproof Partitions and Furring, of which the following is a specification.

10 This invention relates to fireproof furrings, and partitions or walls in which a metallic web is used covered by or embedded in mortar or plaster.

Our improvement consists mainly in constructing the metallic web of an interwoven fabric composed of a continuous strained wire and belts of metallic lathing, with the view of providing a comparatively stiff web that can be constructed of a minimum of material at a minimum expense in labor.

Our invention consists further in certain details of construction more particularly specified in the claims.

25 In the annexed drawings, which show the invention as it has been practically embodied by us, Figure 1 represents an elevation, and Fig. 2 a horizontal section, of a portion of a partition, part of the mortar having been omitted to expose the metallic web.

30 The same letters are used in both figures to designate identical parts.

A A refer to bars, in this instance T irons, spiked respectively to the floor and to the ceiling, and provided at suitable intervals with eyes slotted as shown to facilitate the stringing of the wire. These slotted eyes indicated at a, we term T-slots.

40 B refers to a continuous wire strung back and forth from T iron to T iron through the T-slots therein as shown best in Fig. 1, providing upright strands of wire.

45 C refers to belts of metallic lathing which are placed crosswise of and preferably held in position by being interwoven with said strands. Each plate may be reversely woven or in alternate direction to the adjoining ones as shown most clearly in Fig. 2 so that they will support each other while the weaving progresses and render their application very easy.

The wire should be properly strained, but must admit of the ready introduction of the belts of lathing, after which the strands may be further strained if deemed expedient by twisting. The strained wires and belts of lathing thus form a woven fabric ready to be plastered with mortar or plaster D, either on one side only when the object is to make a fireproof furring, or on both sides when the object is to make a wall or partition, as shown in the drawings.

60 The covering employed may be common mortar, adamant, Keene's cement, or any similar substance that will furnish the requisite strength to make in connection with the metallic fabric a stiff furring or partition. We have found in practice that a partition of this description about two inches thick is stiff enough for all practical purposes.

70 It will be readily observed that the metallic web described possesses the advantages claimed for it hereinbefore. Besides the construction naturally furnishes a straight web.

We do not confine ourselves to any special style of metallic lathing, although for the sake of stiffness we prefer corrugated sheet iron provided with numerous openings for the clinching of the mortar or plaster. Nor do we confine ourselves primarily to the use of frame bars on which to string the wire, as other means may be used to secure the wire, especially in buildings with wood floors.

We claim as our invention—

1. In a fireproof furring or partition for receiving mortar or plaster, a continuous strained wire strung into parallel strands between suitable fixed supports in combination with cross-strips or pieces interwoven therewith, as and for the purpose described.

2. In a fireproof furring or partition, a continuous strained wire strung back and forth between suitable fixed supports, and plates of metallic lathing crossing the strands of said wire at right angles, the structure being plastered on one or both sides.

3. In a fireproof structure, the combination with a pair of fixed bars A, having suitable eyes or hooks disposed at intervals, of a continuous strained wire strung into parallel

strands between said bars to afford a support for lathing.

4. A fabric for receiving mortar or plaster composed of fixed bars with T slots, a continuous strained wire strung back and forth from  
5 bar to bar through the said T slots, and belts of metallic lathing interwoven with the wires

in alternate directions, substantially as before set forth.

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