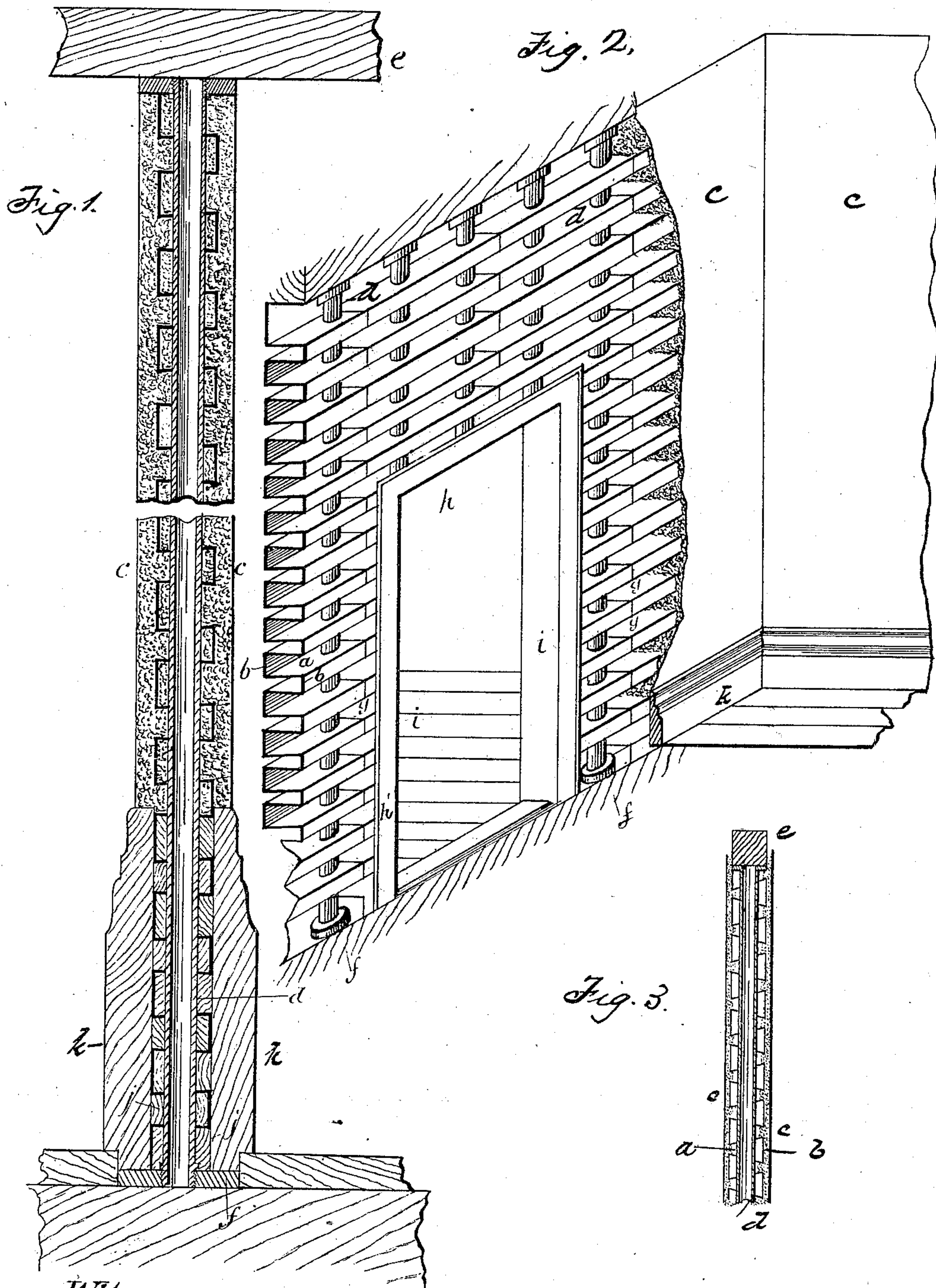


(No Model.)

T. BAILEY.
FIRE PROOF PARTITION.

No. 369,680.

Patented Sept. 13, 1887.



Witnesses.

W. J. Morgan
E. H. Morgan

Inventor.

Thos Bailey
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UNITED STATES PATENT OFFICE.

THOMAS BAILEY, OF NEW YORK, N. Y.

FIRE-PROOF PARTITION.

SPECIFICATION forming part of Letters Patent No. 369,680, dated September 13, 1887.

Application filed May 6, 1886. Serial No. 201,396. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BAILEY, a citizen of the United States, residing at New York city, in the county and State of New York, have invented a new and Improved Fire-Proof Partition, of which the following is a specification.

My invention consists of an improved contrivance of sheet-iron plates, metallic stays or posts, and fire-clay or other equivalent plaster in a simple, efficient, and economical arrangement for fire-proof partitions, ceilings, and floors, if desirable, of buildings, as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 is a transverse section of a partition constructed according to my invention. Fig. 2 is a perspective view partly in skeleton and partly in complete form. Fig. 3 is a detail.

I take thin sheet-iron, preferably of suitable length for the height of the partition after being prepared and of approved width, and bend it forward and backward transversely, so as to form the alternate dovetail grooves *a* and ribs *b* for stiffening the plates laterally, and also for adapting them to receive and permanently hold a covering of fire-proof cement or plaster, *c*, of approved kind on each side, and through each sheet, suitably perforated for the purpose previous to bending, I fit one or more metallic stays or posts, *d*, lengthwise of the sheet for increasing the lateral rigidity and for the supporting-studs of upper floor-beams, *e*, when required, and also for the supporting-joists of the ceilings. These stays may be of solid rolled iron, if desired; but I shall prefer to use common gas or steam pipe as being much lighter and cheaper for equal strength, and will fit them with the common coupling-flanges, *f*, at the ends when they are to support upper floor-beams. When the structure is to be used for ceilings, the flanges will serve for connecting the joist-rods to the sills or beams of the frame. The sheets will

be lap-jointed at the edges, as indicated at *g*, for connecting and extending the several sheets of the partitions the breadth of the rooms, and will be cut and some of the stays will be shortened for inserting doors, as shown at *h*, and the door-frames *i* will be cased over the edges of the sheets, so as to be held in position thereby instead of the usual studs, the frames being nailed, if desired, to wood cleats *j*, fitted into and held by the dovetail grooves. The base-board *k* may also be nailed onto and be held by such cleats. For ceilings the plaster coating need only be placed on one side, but may be applied to both sides, if desired. In constructing these partitions they may be made first, including the plaster, and be put up afterward to advantage, or after inserting the stays the skeletons may be put up and then be plastered.

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

1. The combination, in a fire-proof partition or ceiling, of the reversely-bent and alternately dovetail ribbed and grooved metallic sheets, the metallic studs of the partition or supporting-joists of the ceiling inserted through the sheets transversely to the ribs and grooves, and fire-clay or other plaster coating, substantially as described.

2. The combination, for a fire-proof partition, of the reversely-bent and alternately dovetail ribbed and grooved metallic sheets, metallic studs of the partition or supporting-joists of the ceiling inserted through the sheets transversely to the ribs and grooves, end flanges of the studs, and fire-clay or other plaster covering, substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THOMAS BAILEY.

Witnesses:

W. J. MORGAN,
S. H. MORGAN.