(No Model.)

T. BAILEY.

FIREPROOF PARTITION, CEILING, &c.

No. 564,299. Patented July 21, 1896.

Fig. 1.

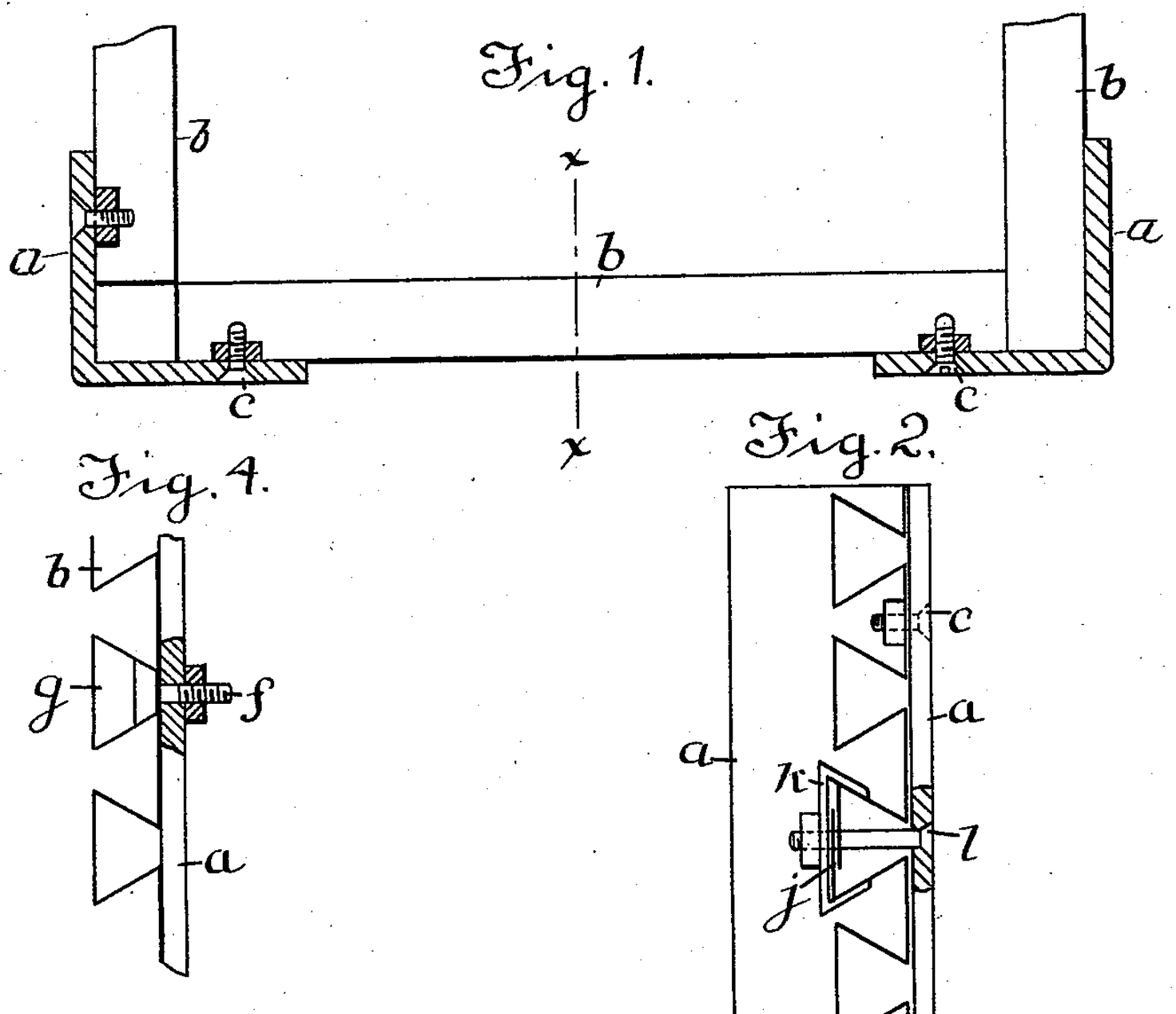


Fig. 4.

Fig. 5.

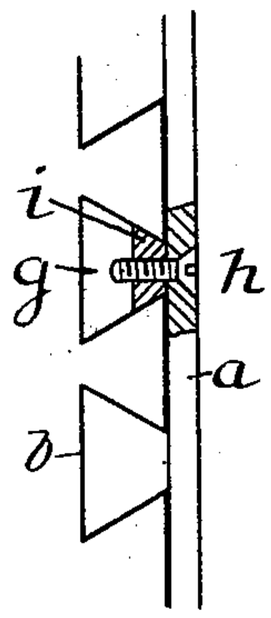


Fig. 2.

Fig. 3.

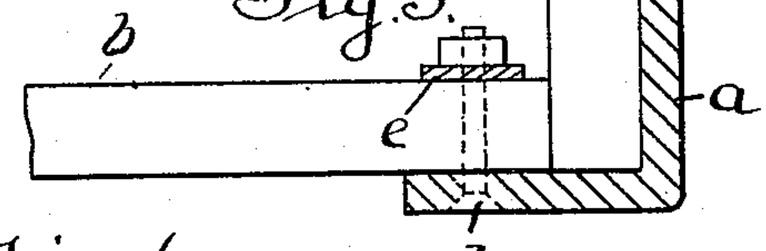
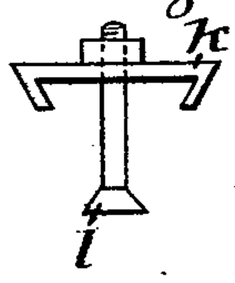


Fig. 6.



Witnesses.
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UNITED STATES PATENT OFFICE.

THOMAS BAILEY, OF NEW YORK, N. Y.

FIREPROOF PARTITION, CEILING, &c.

SPECIFICATION forming part of Letters Patent No. 564,299, dated July 21, 1896.

Application filed October 23, 1894. Serial No. 526,673. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BAILEY, a citizen of the United States, and a resident of New York city, in the county and State of New York, have invented certain new and useful Improvements in Fireproof Partitions, Ceilings, &c., of which the following is a specification.

My invention relates more particularly to constructing fireproof partitions for elevator, dumb-waiter, and light and air shafts in which plastered dovetail ribbed and grooved sheet-metal plates having fireproof supports constitute the partitions; and it consists, essentially, of the improvement in the construction of the corners of such shafts or like corners of other partitions or ceilings as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1 represents a horizontal section of part of an elevator or other like shaft, or other partitions comprising two corner structures. Fig. 2 is a section on line *x x*, Fig. 1, with a part broken out to show the manner of splicing the meeting ends of two sheets or plates. Fig. 3 is a horizontal section of a single corner, showing a modification in the application of the fastening-bolt. Figs. 4 and 5 are details showing other modifications of the fastening-bolts; and Fig. 6 is an elevation of the splicing-yoke of Fig. 2 detached.

I employ angle-iron posts *a* for the corners, with the insides set inward relatively to the inclosed space of the shaft or room, and place the dovetail corrugated sheets *b* with the ends of two side sheets meeting in said angles, preferably as at the right hand of Fig. 1 and in Fig. 3, so that the end of one plate abuts against the side of the other plate, whereby bolting one plate to the flange of the angle-post locks the other plate in its position, but they may both be bolted if desired, and if both are bolted they need not necessarily be made to abut one against the other, but may both terminate short of the entire depth of the angle, as at the left hand of Fig. 1.

The sheets may be bolted to the angle-posts in any approved way, as by the countersunk bolts *c*, Figs. 1 and 2, inserted from the outside of the posts and through ribs of the sheets bearing against the surfaces of the posts, and receiving the nuts in grooves of the sheets, or longer bolts, as *d*, may be used, said bolts reaching through to the insides of the sheets and through a strip or washer *e*, bearing on and clamped to the sheets by the nuts of the bolts.

Another form of bolt for connecting the sheets *b* to the bars or posts *a* may consist of the bevel-headed bolt *f*, inserted in a groove *g*, the open side of which is next to the surface of the post or bar *a* and extending through and receiving the nut on the outside, or a countersink-bolt *h* may be inserted from the outside through a nut *i* of like form as the head of bolt *f*, similarly located in a groove *g;* but I do not limit myself to any particular way of securing the sheets to the posts or bars. It may be desirable in some cases to rivet the sheets to the posts or bars.

The sheets of one side of the shaft or room or of two opposite sides may be secured to the posts before the posts are set up and secured in position, if desired.

Where the ends of two sheets meet, they may be lapped so as to form a rib on the inside of the sheet, as at *j*, and be confined by dovetail yokes, as *k*, slipped on the rib from the ends and secured by bolts *l*, inserted through the post or bar, also through the lapped ends of the sheets and also through the yoke.

In my patent, No. 527,649, I have represented and claimed corner structures of fireproof partitions, consisting of dovetail ribbed and grooved plates placed with the ribs and grooves horizontally and entered at the ends in the grooves of vertical channel-bars having duplex grooves in angular relation to each other, corresponding with the angles of the corners, and in one form of the structure therein claimed I represented the vertical channel-bars as composed of two angle-bars placed one within the other and apart from it sufficiently to afford two grooves or spaces adapted to receive the ends of two corrugated sheets, respectively.

My present invention is an improvement of that structure whereby such grooves or spaces and one channel-bar are dispensed with, and the structure is considerably simplified and cheapened.

I am aware of the patent to Dean, No. 464,172, wherein angle-strips of thin sheet

metal are placed over the joints of metallic sheet siding of houses as a means of excluding wind and rain, the siding being first placed on and nailed to the wood sheathing of the building; and I do not claim such devices, my invention being specially designed for thin, simple, and cheap, but substantial, self-supporting fireproof partitions, inclosing angular spaces, as elevator-shafts, but applicable also to the corner structures of larger spaces.

I claim as my invention—

The combination with the meeting ends of the dovetail corrugated sheets lapped on a rib, of the dovetail yoke embracing said rib, the bar or post at the opposite side of the sheets, and the bolt inserted through said bar or post, sheets and yoke, and securing the sheets to the said bar or post substantially as described.

Signed at New York city, in the county and State of New York, this 17th day of October, A. D. 1894.

THOMAS BAILEY.

Witnesses:

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