

(No Model.)

T. BAILEY.
FIREPROOF BUILDING CONSTRUCTION.

No. 527,649.

Patented Oct. 16, 1894.

Fig. 5.

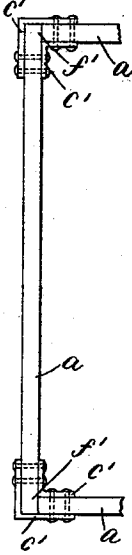


Fig. 1.

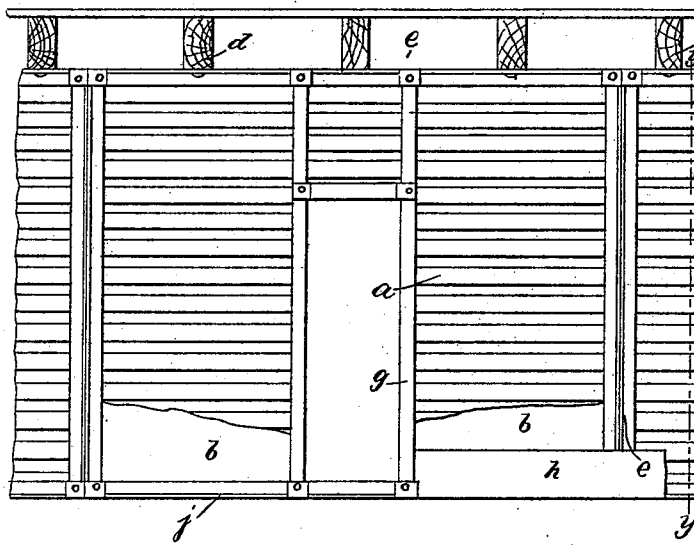


Fig. 4.

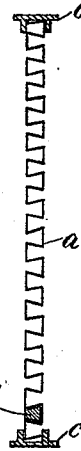


Fig. 2.

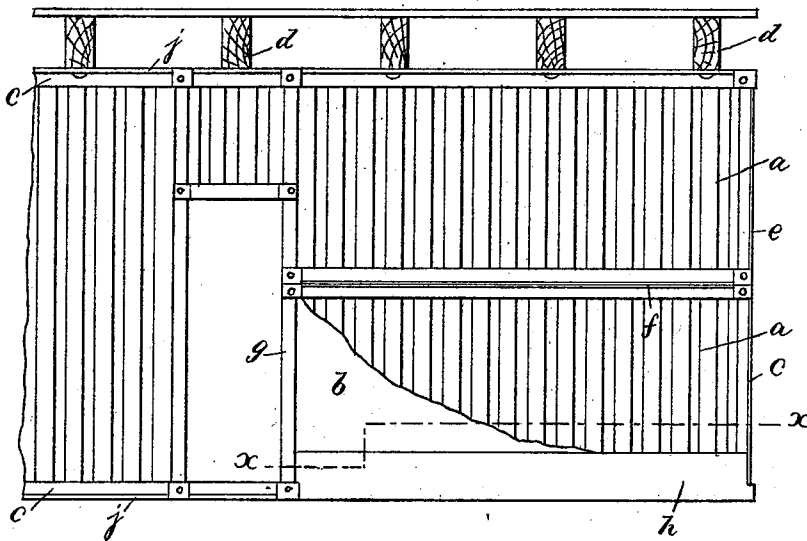
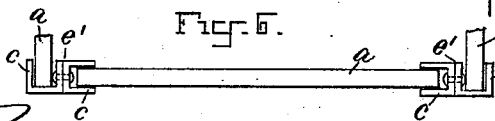


Fig. 3.



Fig. 6.



WITNESSES:

C. C. Whitney.
D. J. Morgan

INVENTOR=

T. Bailey.
By A. P. Thayer.
att'y.

UNITED STATES PATENT OFFICE.

THOMAS BAILEY, OF NEW YORK, N. Y.

FIREPROOF BUILDING CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 527,649, dated October 16, 1894.

Application filed April 12, 1893. Serial No. 470,002. (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 new and useful Improvements in Fireproof Building Construction, of which the following is a specification.

My invention relates more particularly to partitions but is also applicable for inclosing walls, composed of dovetailed ribbed and grooved sheet metal plates and channel supporting bars as foundations for walls or partitions of plastic material, and it consists essentially of an improvement in angle or corner structures of such walls or partitions, as hereinafter fully described, reference being made to the accompanying drawings, in which—

Figure 1, is a side elevation of part of a partition mostly in skeleton, but partly covered with the plastic finish, illustrative of the kind of structure to which my invention relates. Fig. 2. is a like view in which the dovetail ribbed and grooved plates are represented in the reverse of their arrangement in Fig. 1. Fig. 3. is a detail in section on line *x x*. Fig. 2. Fig. 4. is a vertical section on line *y y*. of Fig. 1. Fig. 5. is a plan view of part of the walls of an elevator or light air shaft showing the arrangement of channel bars for corners or angles according to my invention. Fig. 6. is a like view showing a modified arrangement of the corner channel bars.

In my patent of September 13, 1887, No. 369,680, dovetail ribbed and grooved metallic sheets are represented with metallic studs or joists interwoven with the sheets suitably perforated therefor to support the sheets, as the skeleton base for the plastic walls, ceilings or other structural parts composed of plastic material.

In my present invention I construct the partitions or walls of like dovetail ribbed and grooved metallic sheets *a*, to hold the plastic material *b*, with channel bars as *c*, or *c'* to support the sheets the ends or edges of the plates being entered in and confined by the grooves, and the channel bars being suitably secured to the floor beams, as *d*, and to

each other where intermediate bars are required as at *e* and *f*, where the meeting parts of the partitions are joined in the same plane according as the arrangements and dimensions of the sheets and the partitions or other structural parts to be formed thereof demand, the said channel bars being in the latter case formed of two angle bars *c'* riveted or bolted together through the plates. The door-ways as *g*, window frames, and other openings through the walls or partitions are also to be formed of such channel bars suitably joined and fastened together, the bars thereof being suitably disposed for reception of the ends or edges of the sheets in the channels; but I do not in this case claim broadly the combination of dovetail ribbed and grooved sheets, and channel bar supports in such structures, that being the subject of claims in another application, filed June 29, 1894, Serial No. 516,038.

For the connection of the partitions at the corners of the room, and especially for elevator and ventilating shafts to which my claim in this case specially refers, the dovetail ribbed and grooved plates are placed with the ribs and grooves horizontally and entered at the ends in the grooves of the channel bars having duplex grooves in angular relations to each other corresponding with the angles of the corners and thus make substantial and at the same time simple and cheap partitions of only from one to two and a half inches in thickness when plastered, which economizes space in very considerable measure, especially for elevator and light shafts. The base boards as *h*, are to be secured by nailing to dovetail cleats as *i*, secured in the grooves of the sheets same as in my former patent referred to.

The sheets may be crimped lengthwise or crosswise to suit the nature of the case. The ends or edges of the sheets may meet together anywhere along the channel bars, and will not require to be fastened together.

The channel bars may have flanges as *j*, by which to nail or otherwise secure them to the beams, or other parts of the building.

I claim—

Corner structures of fire proof partitions

consisting of dovetail ribbed and grooved
plates placed with the ribs and grooves hori-
zontally and entered at the ends in the grooves
of vertical channel bars having duplex grooves
5 in angular relation to each other correspond-
ing with the angles of the corners substan-
tially as described.

In testimony that I claim the foregoing as

my invention I have signed my name, in pres-
ence of two witnesses, this 31st day of March, 10
1893.

THOMAS BAILEY.

Witnesses:

W. J. MORGAN,
A. P. THAYER.