O. P. & G. O. ELTERICH.

TILE FRAME.

No. 477,746. Patented June 28, 1892. WITNESSES: INVENTORS: Otto P. Elterich,
By Gotthold Otto Elterich,
Catalux du Faurfr
ATTORNEY. Klas St. Ternsteat-in Joseph Elias.

(No Model.)

2 Sheets—Sheet 2.

O. P. & G. O. ELTERICH.
TILE FRAME.

No. 477,746.

Patented June 28, 1892.

Rg.6.

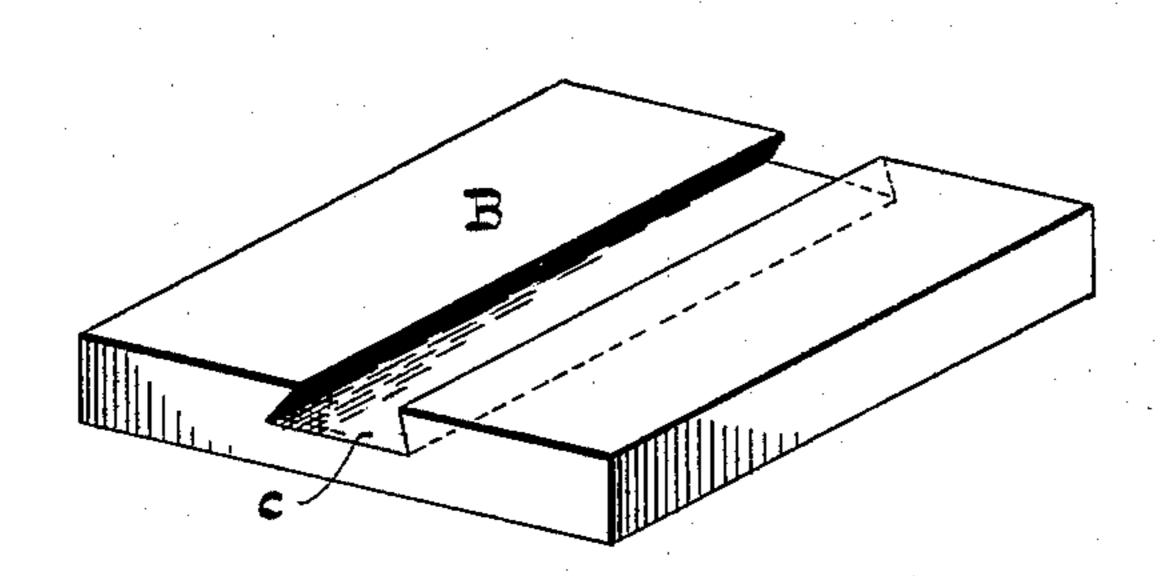


Fig.7

Fig.8

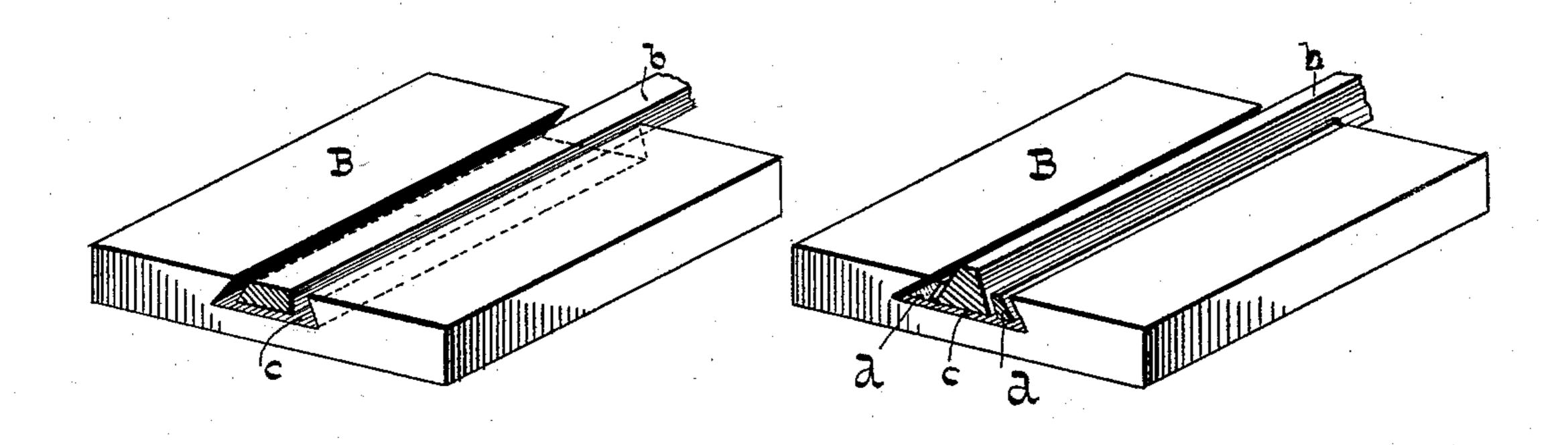
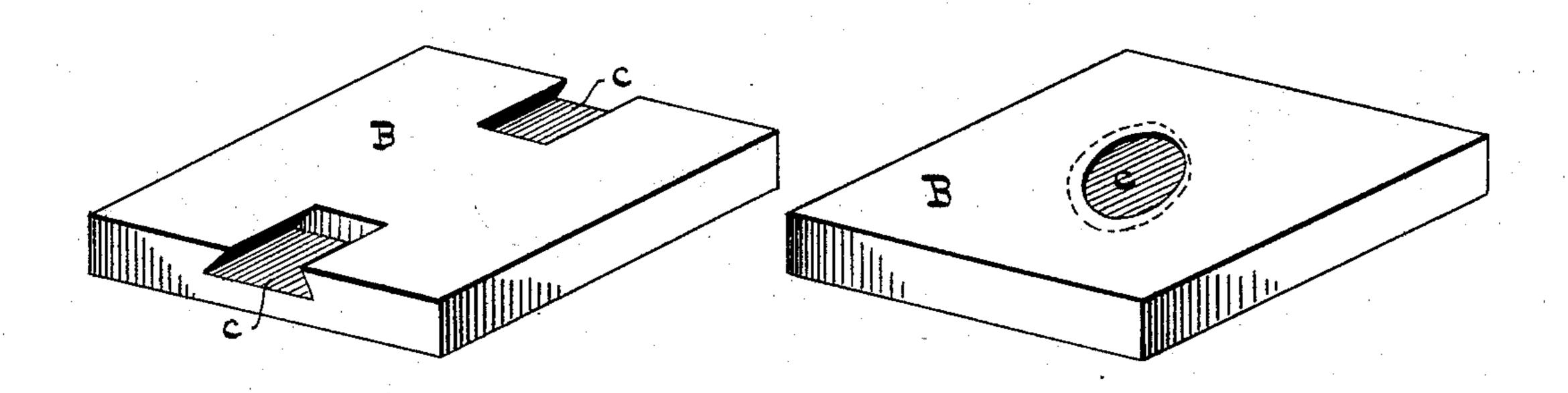


Fig.9.

Fig.10.



WITNESSES:

Klas A. Ternstedt. Joseph Chases Otto P. Elterich,
By Gotthold Otto Elterich
OGabuda Jamp.
ATTORNEY.

## United States Patent Office.

OTTO P. ELTERICH AND GOTTHOLD OTTO ELTERICH, OF MAYWOOD, NEW JERSEY, ASSIGNORS TO THE ELTERICH ART TILE COMPANY, OF NEW JERSEY.

## TILE-FRAME.

SPECIFICATION forming part of Letters Patent No. 477,746, dated June 28, 1892.

Application filed December 16, 1891. Serial No. 415,275. (No model.)

To all whom it may concern:

Beit known that we, Otto P. Elterich and GOTTHOLD OTTO ELTERICH, citizens of the United States, and residents of Maywood, in 5 the county of Bergen and State of New Jersey, have invented certain new and useful Improvements in Tile-Frames, of which the following is a specification.

Our invention has reference to frames upon o which tiles are mounted for the purpose of covering large surfaces-for instance, in forming ornamental wainscoting, floors, walls, ceilings, stoves, mantels, and the like—the object of our said invention being both to facilitate 5 the application of the tiles and the frames and to render the whole structure perfectly secure.

To this end our invention consists in certain novel features in the construction of the various parts, as fully pointed out in the followo ing specification and claims, and illustrated in the accompanying drawings, in which-

Figure 1 represents a rear elevation of a frame constructed according to our invention. Fig. 2 is a vertical section thereof in the plane x x, Fig. 4. Fig. 3 is a horizontal section in the plane y y, Fig. 1. Fig. 4 is a face view with part broken away, showing the frames with their attached tiles secured in place. Fig. 5 is a horizontal section in the plane zz, Fig. 4. Fig. 6 is a perspective, on a larger scale than the preceding figures, of a tile adapted for the frame shown in the preceding figures. Figs. 7, 8, 9, and 10 show various modified forms for the grooves or sockets in the tiles.

Similar letters indicate corresponding parts throughout the several views.

In the drawings, referring at present to Figs. 1 to 5, the letter A designates an open frame, preferably made of cast-iron, with its several component parts integral. The frame consists, primarily, of two parallel longitudinal bars a and cross-bars b, distributed at equal distances apart on the front side of the longitudinal bars, said cross-bars, as best seen in Fig. 2, being transversely tapered.

The tiles B, Fig. 6, made of clay or other suitable material, are provided with tapering grooves c, extending centrally across the same from edge to edge, said grooves being wider

and deeper than the cross-bars b, so that when they are placed over the same intervening spaces or interstices are left, which are filled with the usual cement, the whole forming a dovetail joint and holding the tiles firmly to 55 the frame. If desired, an additional thin layer of cement may be spread over the back of the entire section, (frame and tiles.) To further increase the effectiveness of the joint, the taper of the two parts (tile and bar) are best made 60 different, as shown in Fig. 7.

Again, if desired, the mode of securing the tiles illustrated in Fig. 8 may be used, where we have shown strips or wedges d inserted between the bar and tile, the whole being 65 finally cemented.

In Fig. 9 the grooves are shown extending only partially into the tile from opposite edges, while in Fig. 10 a central circular socket is illustrated. It is evident that the frames 70 could be cast with corresponding projections to match these sockets. For securing the sections to a wall or the like, each frame is preferably provided with slotted lugs ff' on opposite sides thereof, the opposite lugs being 75 arranged in different planes—i. e., the lugs f'on one side of the frame A are located toward the front, while the lugs f on the opposite side are located toward the rear, so that in bringing the sections together the lugs will overlap. So

In applying the sections the first section is secured in place by screws g or nails or equivalent devices passed through the lugs f and f'. The second section A' is now slid into place, with the lugs f passing beneath the lugs f' of 85 the first frame and straddling the shanks of the screws g. The remaining sections are similarly applied. The contact-surfaces of the lugs ff' are made tapering, thereby facilitating the insertion of the sections, and also 90 causing the sections to be tightly wedged together. The slots in the lugs need not necessarily be extended to the outer edge to bifurcate the lugs, as shown in the drawings, since it will be readily understood that they could 95 be in the form of holes, permitting the passage of nails or screws, our object in bifurcating the lugs being merely to facilitate the placing together of the sections in the manner before described.

It is evident that the lugs could be arranged at the top and bottom of the sections instead of at the sides; also, that each individual section could be secured directly by screws or nails passed through the slots or holes in the lugs thereof without overlapping the lugs in the manner specified, and that the form of the frame will vary under different circumstances, as well as the manner of applying the tiles thereto. Therefore we do not wish to restrict ourselves in these respects to what is herein shown and described.

What we claim as new, and desire to secure

by Letters Patent, is—

1. The frame A, provided with means for attaching the tiles thereto and with slotted lugs arranged thereon, substantially as and for the purpose set forth.

2. The frame A, provided with slotted lugs arranged on opposite sides and in different planes, substantially as and for the purpose

set forth.

3. The frames A, provided with slotted lugs on opposite sides, the several lugs being arranged to overlap each other when the frames are placed together, combined with screws or equivalent means passing through said lugs, substantially as described.

4. The frames A, provided with slotted wedge-shaped lugs arranged on opposite sides, the lugs of the several frames being constructed to overlap each other, combined with screws or equivalent means passing through said lugs, substantially as described.

5. A tile-frame formed integral, with means

for securing thereto two or more rows of tiles arranged adjacent to each other, and with lugs projecting outside of the frame for securing the frame in position, substantially as described.

6. A tile-frame formed of longitudinal bars a, and superimposed cross-bars integral therewith made tapering in cross-section and distributed at intervals on said longitudinal bars, and means for securing the frame in position,

substantially as described.

7. A wall or floor facing consisting of tile-frames provided with lugs projecting outside of the frames for securing the same in place and with two or more lines of projecting parts made integral with said frames, and tiles having grooves or sockets into which said projecting parts are sunk, substantially as described.

8. A wall or floor facing consisting of tileframes provided with projecting parts, tiles having grooves or sockets therein, into which the projecting parts are sunk, and strips or wedges inserted between the projecting portions and the tiles, substantially as described.

In testimony that we claim the foregoing as our invention we have signed our names, in presence of two witnesses, this 14th day of

December, 1891.

OTTO P. ELTERICH. GOTTHOLD OTTO ELTERICH.

Witnesses:

KLAS H. TERNSTEDT, JOSEPH ELIAS.