(No Model.)

W. R. KINNEAR.

METALLIC CEILING.

No. 382,093. Patented May 1, 1888.

Fig. 1.

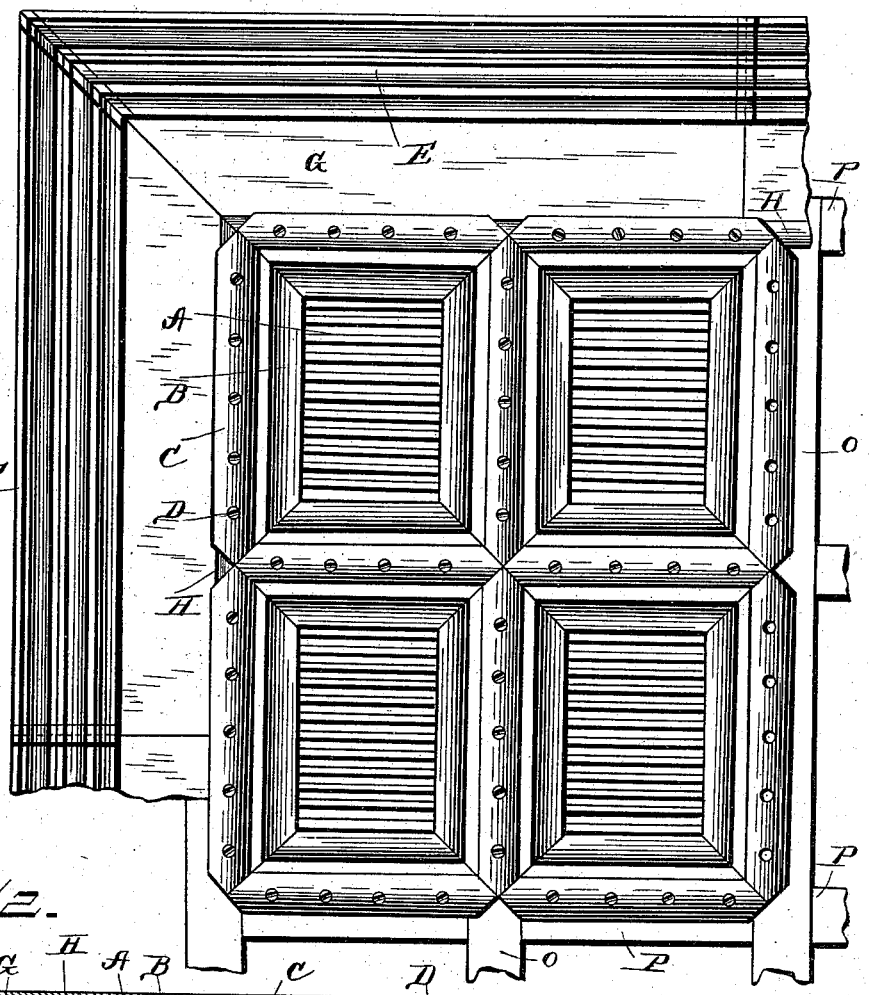


Fig. 2.

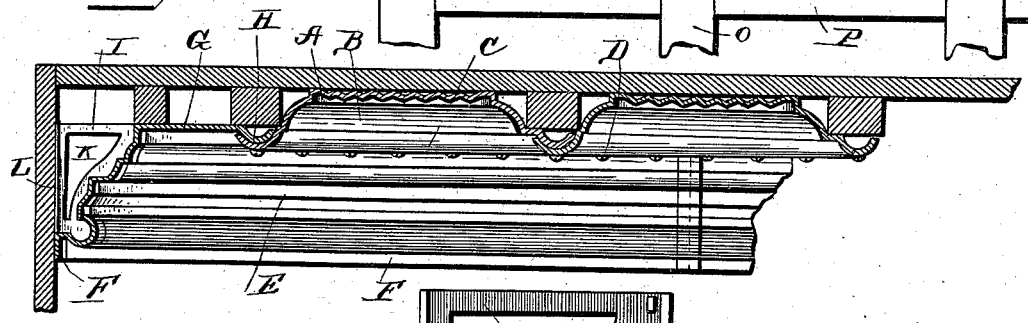
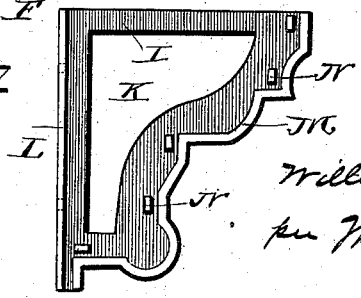


Fig. 3.



WITNESSES.

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WILLIAM R. KINNEAR, OF COLUMBUS, OHIO.

METALLIC CEILING.

SPECIFICATION forming part of Letters Patent No. 382,093, dated May 1, 1888.

Application filed October 1, 1887. Serial No. 251,229. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. KINNEAR, a citizen of the United States, and a resident of Columbus, county of Franklin, State of Ohio, have invented new and useful Improvements in Metallic Ceilings, of which the following is a full and exact description, reference being had to the accompanying drawings, making part of this specification.

This invention relates to improvements in metallic ceilings; and it consists in stamping sheets of metal in imitation of ceiling-panels, decorative or otherwise, and so fastening them together that the joints fit closely without the need of solder, and in providing a cornice of the same material, and in providing a means for hanging the said cornice, whereby the joints of the same are concealed and the said cornice prevented from warping out of shape.

In the drawings, Figure 1 is a plan view of a ceiling provided with the invention. Fig. 2 is a section of the same. Fig. 3 is a detailed view of the bracket for hanging the cornice.

The letters A designate the panels which form the ceiling. The said panels are oblong or any polygonal shape, and are provided upon the sides with the molding B, which terminates in the round bead C. The whole panel, including the moldings and bead, is stamped out at one operation. Upon the center of the said panel may be stamped, instead of the corrugation herein shown, any design. The corners of the panels are cut off at an angle of forty-five degrees from the sides of the panel, the line of the cut passing through the intersections of the centers of the beads, whereby when the said corners of any two of the said panels abut the line of the beading is not broken. The panels being stamped out of thin metal a rounded under surface, corresponding very nearly to the upper surface, is formed under the beads C. By means of this formation the panels are placed in position and held by one row of nails or screws, D, the beads on the one panel lapping upon the beads of an adjoining panel, and the said nail or screw being driven through perforations provided at regular intervals in them both. By thus lapping the beads the joints between the beads are concealed, being turned up and out of sight from the floor of the room.

The cornice consists of the molding E, with its depending flanges F, the plain edging G, and the bead H. The said depending flange F extends down below the cornice far enough to allow a line of nails to be driven into the same. The said bead H corresponds exactly to the beads C upon the panels, and is provided with perforations for screws corresponding to those in the said panels.

The bracket I, as shown in Fig. 3, is constructed of light cast-iron, having the center K open. It is provided upon the leg next the perpendicular wall with the flanges L, extending to either side of the same. The said flanges are provided with perforations to allow nails or screws to be driven through them into the said wall. The outer leg is provided with the flange M, which conforms in shape to the molding of the cornice. The said flange extends upon either side of the said leg far enough for the said cornice to rest upon it. Back from the said flange, the thickness of the material of which the cornice is constructed, are the lugs N. The said lugs are set close in the sharp angles formed by the molding, to keep the same from warping or being knocked out of shape. In the corner bracket the flanges L and M take the shape of the corner in which they are mounted. While I prefer to make this bracket, as herein described, out of cast-iron, it can, when so desired, be formed of sheet or wrought metal.

To suspend this ceiling, I prepare the room by nailing to the sheathing on the top of the same the long narrow strips O the width of the panels apart. Between these strips, at intervals equal to the length of the said panels, are nailed the cross-strips P. The said strips are in thickness equal to the depth of the said panels, minus the bead C, whereby when the said panel is placed between the said strips the said beads rest upon the same.

In suspending this ceiling in position I place the cornice around the sides of the room, so that the beads H rest on the outside strips, O and P. In the corners of the room and between each section of the said cornice as it is thus suspended are placed the brackets I. A line of nails are then driven through the depending flange F and the cornice held in position, the edge next the panels being loose.

When this is accomplished, I commence at the corner formed by two of the sides of the cornice and place a panel between the wooden strips. In doing this the beads C next the said cornice lap over the bead H of the same, while the opposite beads of the said panel rest upon the wooden strips, as aforesaid. Round-headed screws are now placed in the perforations of the beads C and H, next the cornice, and driven into the wooden strips underneath. The next panel is then placed in position along the cornice with its one bead lapping over the loose bead of the panel just placed in position, and its bead next the cornice lapping the bead H. As in the former panel, round-headed screws are placed through the lapping beads and driven into the wood, securing the first panel and the cornice more firmly. This is continued around the sides next the cornice, securing it firmly in position, while leaving the inner edge of each line of panels unsecured. I then return and repeat the same operation line after line, gradually working into the center. When this is reached, the beads of the last panel lap all of the surrounding panels, and the screws are driven through all round, making the completed ceiling firm and solid.

No solder is used in making any of the joints in this ceiling, they being concealed, as herein described. This is of great advantage, as it allows the use of ordinary sheet iron or steel, which in former constructions has been impossible, as solder can be used only in finished or galvanized work, at an advanced price over that herein described.

When the ceiling is in position as herein described, it is painted as desired, and when finished presents an agreeable effect.

What I claim is—

1. In a metallic ceiling such as described, the combination of separate panels provided upon their edges with corresponding beads or moldings, said moldings being each adapted to fit any of the moldings of the abutting panels, and mitered at the corners of the panels, so that the moldings of the obliquely-abutting panels meet without changing the line of the said moldings.

2. In a metallic ceiling such as described, the combination of panels provided with corresponding beads or moldings upon the edges adapted to fit one over the other, and a cornice having a bead or molding corresponding to those upon the said panels and adapted to pass under the same, and further provided with a depending flange and adapted to rest against the side of the room and to receive a line of nails, substantially as described.

3. In a ceiling such as described, and in a cornice therefor composed of separate pieces, brackets provided with flanges for concealing the meeting edges of the said pieces, substantially as described.

In testimony whereof I have hereunto set my hand this 28th day of September, A. D. 1887.

WILLIAM R. KINNEAR.

Witnesses:
DAVID E. WILLIAMS,
CHAS. W. MURDOCK.