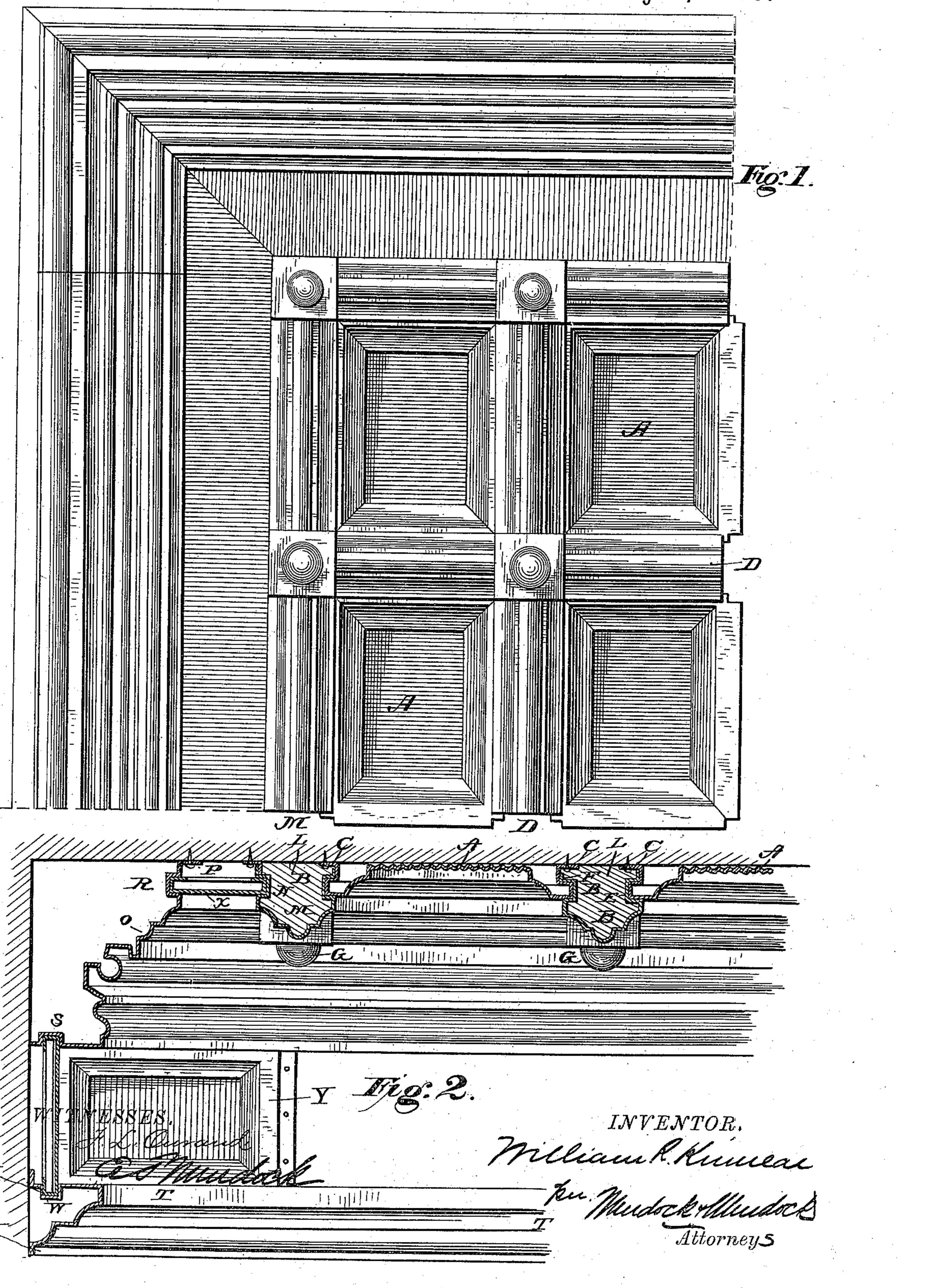
## W. R. KINNEAR. METALLIC CEILING.

No. 382,092.

Patented May 1, 1888.

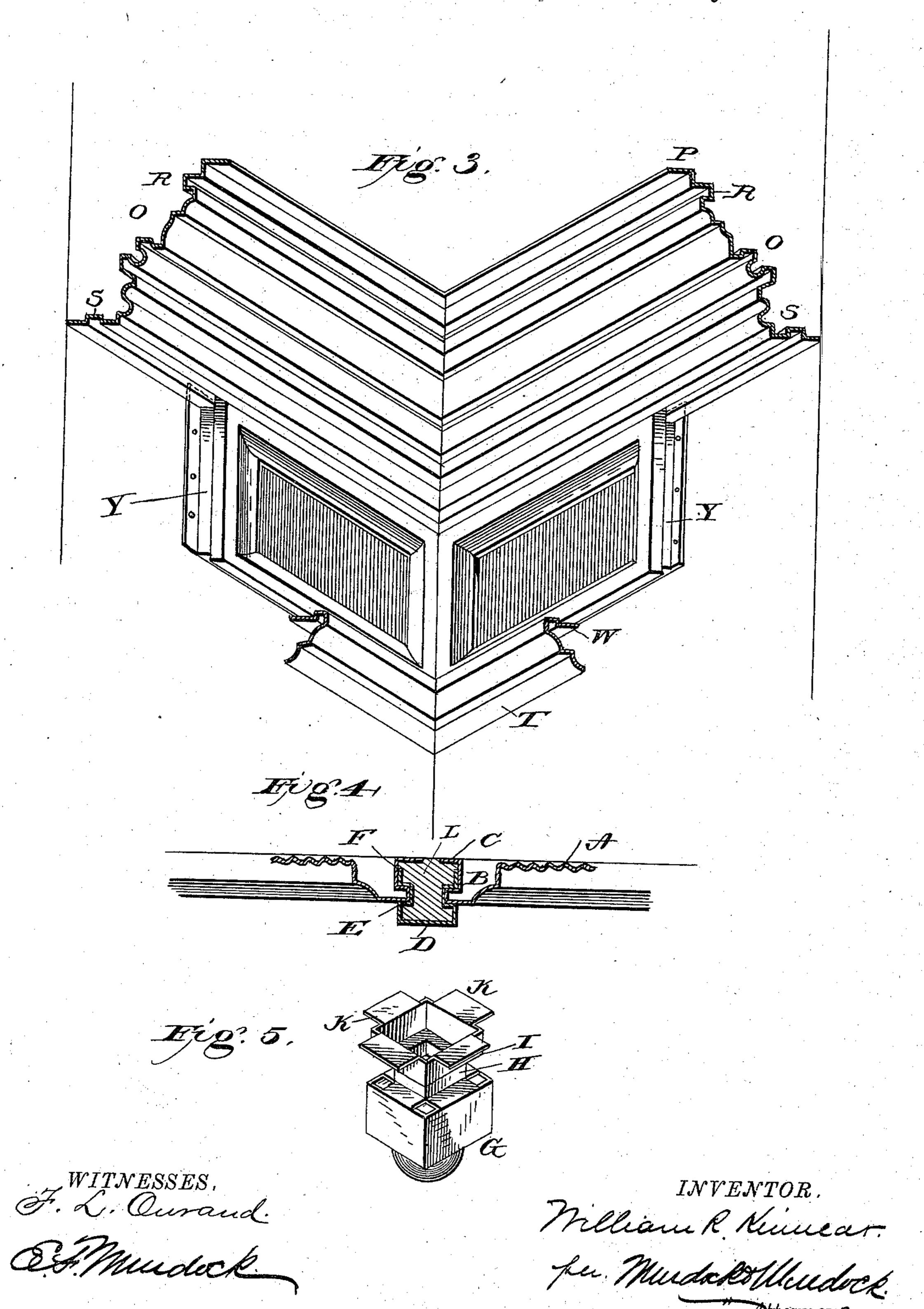


## W. R. KINNEAR.

METALLIC CEILING.

No. 382,092.

Patented May 1, 1888.



## United States Patent Office.

WILLIAM R. KINNEAR, OF COLUMBUS, OHIO.

## METALLIC CEILING.

SPECIFICATION forming part of Letters Patent No. 382,092, dated May 1, 1888.

Application filed October 1, 1887. Serial No. 251,231. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. KINNEAR, acitizen of the United States, and a resident of Columbus, county of Franklin; State of Ohio, 5 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; in fastening the said sheets to the sheathing at the top of the room and suspending in them ornaments and moldings; in providing a molding of the same material, and in providing a frieze to break the line of the cornice.

In the drawings, Figure 1 is a plan view of a section of the top of a room provided with this invention. Fig. 2 is a sectional view showing the manner of suspending the same and of constructing the cornice and frieze. Fig. 3 is a perspective of a corner of the cornice and frieze. Fig. 4 is a section showing a modification of the form of molding. Fig. 5 is a detailed view of the ornamental "drop."

The letter A designate the sheets of metal stamped into shape to form ceiling panels. 30 The centers of these panels, as herein shown, are corrugated; but they may be provided with stamped floral ornaments in relief. The said panels are oblong in shape, and upon the four edges are the square shoulders B and the 35 flanges C. These are formed by cutting square pieces out of the corners of the said panels, leaving a straight piece of metal upon each edge. These pieces are bent down and in to form the square shoulders B. They are then 40 bent down to the level of the bottom of the panels and out to form the flanges C. The said flanges extend out beyond the edge of the panels far enough to allow of nails being driven into them.

The moldings D are shaped substantially as shown in Fig. 2, and are in length a little less than the side of the panel to which they are being fitted to allow for the setting of the ornamental drops G. Upon the sides of the said moldings are formed the channels E and shoulders

F, the former of which fit over the shoulder B of the panel, and the latter rest under the same between them and the flanges C. The latter are used to brace the work and make it more solid.

The ornamental drop G is formed around a block of wood or any solid material, in order to prevent its becoming dented or crushed. In the style shown in the drawings the body is square. In this case the block is square. 60 The metal is now cut to the required dimensions and bent around the block to form the channels H, the shoulders I, and the flanges K. The metal where it meets around the block and below, forming the said channels 65 and shoulders, is soldered to form a solid construction.

To suspend this ceiling, I first mark upon the sheathing where the panels should go. Then beginning at one side of the room I 75 place the panels as per markings and secure them in position by driving nails through the flanges C into the sheathing. The moldings D are then slid into position between the said panels, the channels fitting over the shoulders 75 B and the shoulders F under the same. Under these moldings are now driven small pieces of wood, L. This is to stiffen the said molding and prevent its being either crushed or sprung from its lock on the sides of the said panels. 80 The next line is suspended one panel at a time, stopping on each to put the cross strips of molding in position and drive the wooden pieces L in the same, and to place in position the ornamental drops G. The said drops are so 85 placed that one of the flanges K extends under the same moldings between the panels of the first line, and the channel H passes over the shoulders B of the said panels. The said drops are secured firmly by the succeeding panels, the 90 shoulders B of which extend into the channels H and lock the same. When the second line of panels are suspended, the molding-strips parallel to those between the first line of panels are slid into position and the small wood 95 pieces L driven under them. This is continued until all the panels are suspended with the interposed moldings and drops. Around the edges of these panels are now suspended the molding-strips M, which differ from the strips 100

D only in the foot or flange N, which extends ! out beyond the edge of the molding to receive a line of nails. These strips are placed against the edge of the said panels and nailed in posi-5 tion through the flange N. Placed between the said strips in their proper positions are the drops G, which are secured in position by nailing through the outer flange, K. The cornice O, which is grooved out of the same material to and provided with the upper flange, P, and the channels R and S, is next suspended in position by nailing it to the sheathing through the said flange P. The lower edge of the said cornice rests loosely against the sides of the room, 15 substantially as shown. Upon the sides of the room below the said cornice is nailed the molding T, which is provided with the upper and lower flanges, U and V, and the channel W, the nails passing through the said flanges U and V.

20 As the said cornice is suspended in sections, the stiling X and the frieze Y are slid into position along the channels provided for them, the said stiling in the channels E and R and the said frieze in the channels S and W.

25 When all the parts are suspended, as herein

When all the parts are suspended, as herein described, they are painted in any style desired, making a pleasant effect. When the joints are slightly open, putty is used, as in ordinary painting.

It is obvious that I do not confine myself to any particular forms, as they may be as decorative as desired, or as plain, as shown in Fig. 4 of drawings.

What I claim is--

1. In a metallic ceiling such as described, 35 the combination of separate panels provided upon the sides with the shoulders B and flanges C, the said flanges adapted to receive a line of nails, and strips of molding suspended between the said panels and provided with the chan-40 nels E, adapted to fit over the shoulders B of the said panels, substantially as described.

2. In a metallic ceiling such as described, the combination of separate panels provided upon the sides with the shoulders B and flanges 45 C, the said flanges adapted to receive a line of nails, strips of molding suspended between the said panels and provided with the channels E, adapted to fit over the shoulders B of the said panels, and the ornamental drops G, provided 50 with the channels H, adapted to fit over the shoulders B of the said panels, substantially as described.

3. In a metallic ceiling such as described, the combination of the cornice O, provided 55 with the flange P and channels S, the frieze Y, and the beading T, said bead provided with the channel W and flanges U and V, substantially as described.

In testimony whereof I have hereunto set my 60 hand this 28th day of September, A. D. 1887.

WILLIAM R. KINNEAR.

Witnesses:

DAVID E. WILLIAMS, CHAS. W. MURDOCK.