

(No Model.)

F. G. CALDWELL.
SHEET METAL CEILING PANEL.

No. 476,185.

Patented May 31, 1892.

Fig. 1.

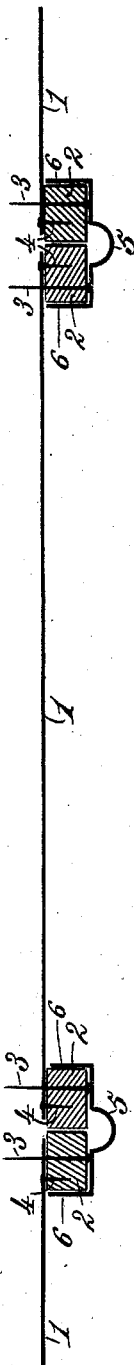


Fig. 2.

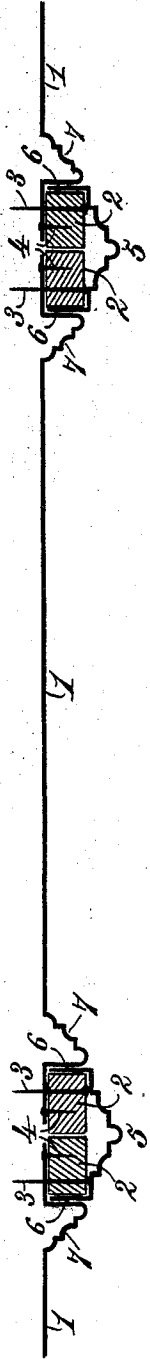
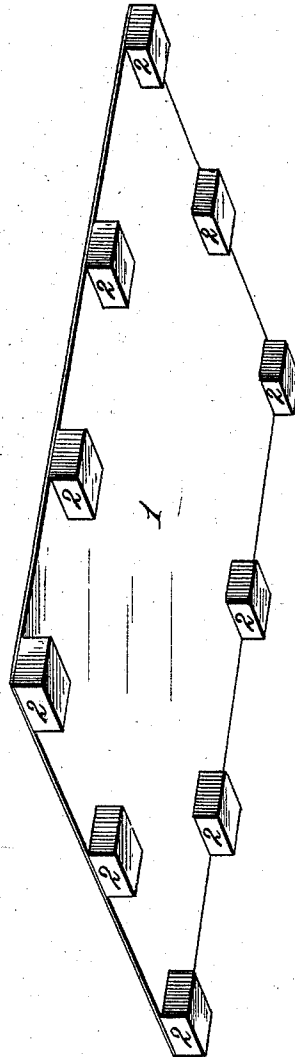


Fig. 3.



Witnesses.

Robert Grant.

J. A. Rutheford

Inventor.

Frank G. Caldwell.

By *James H. Norris.*

Atty.

UNITED STATES PATENT OFFICE.

FRANK G. CALDWELL, OF WHEELING, WEST VIRGINIA, ASSIGNOR TO THE CALDWELL & PETERSON MANUFACTURING COMPANY, OF SAME PLACE.

SHEET-METAL CEILING-PANEL.

SPECIFICATION forming part of Letters Patent No. 476,185, dated May 31, 1892.

Application filed March 1, 1892. Serial No. 423,410. (No model.)

To all whom it may concern:

Be it known that I, FRANK G. CALDWELL, a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented new and useful Improvements in Sheet-Metal Ceiling-Panels, of which the following is a specification.

This invention relates to that type of metallic ceiling-panels wherein metallic plates are secured to wooden frames capable of being fastened to the joists or beams and separate or independent sheet-metal moldings are secured over the wooden frames to conceal the same and provide an ornamental appearance.

The objects of my invention are to simplify the prior construction, reduce the cost of manufacture, and provide novel means for attaching the sheet-metal moldings used over the joints at the edges of the panels.

The invention consists in the combination of sheet-metal plates, gangs of separated or spaced wooden blocks arranged along the edges of the panels and nailed to the joists, and sheet-metal moldings applied over and secured to the separated or spaced blocks.

The invention also consists in a metallic ceiling-panel composed of a metal plate provided along each edge with a gang of separated or spaced wooden blocks, which are nailed to the joists or beams for the purpose of securing the panel in position.

The invention also consists in the combination of sheet-metal plates formed integral with moldings in juxtaposition to their edges to provide lateral flanges, gangs of separated or spaced wooden blocks secured to the lateral flanges and nailed to the joists or beams, and sheet-metal moldings applied over and secured by nails or similar fastenings to the separated or spaced wooden blocks.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a detail sectional view of metallic ceiling-panels constructed in accordance with my invention. Fig. 2 is a similar view showing a modification of the invention, and Fig. 3 is a detail perspective view of one of the metallic plates with its attached separated or spaced blocks.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a metallic plate, which may be rectangular or other form suitable for the conditions required. The plate is provided along each edge with a gang of separated or spaced wooden blocks 2, which are adapted to be secured to the usual joists or beams through the medium of nails or similar fastening devices 3. The separated or spaced blocks are arranged against the outer face of the metallic plate, or that face which is outermost when the ceiling-panel is secured in position. The edges of the metallic plate are preferably attached to the separated or spaced blocks by nails or similar fastening devices 4; but obviously the edges of the plates can be nailed to the joists or beams and subsequently the separated or spaced blocks secured in position along the edges of the plate by nails, which are driven into the joists or beams.

When a series of the panels are applied to constitute a ceiling, the adjacent blocks of the panels are covered and concealed by sheet-metal moldings 5, having parallel flanges 6, which embrace the blocks along the adjacent edges of the plates for the purpose of concealing the joints between the panels.

In Figs. 1 and 3 the metallic plate is perfectly flat throughout its extent; but obviously it can be fluted or corrugated, as usual in this type of ceiling-panels.

In Fig. 2 the metallic plate is formed integral with moldings 7 in juxtaposition to their edges to provide lateral flanges, which are attached to the gangs of separated or spaced wooden blocks 2 through the medium of nails or similar fastening devices 4.

By providing the metallic plates with gangs of separated or spaced wooden blocks along their edges I provide simple means for attaching the panels to the usual joists or beams and at the same time reduce the cost of manufacture in that small pieces of wood otherwise useless can be utilized for securing the panels and for attaching the sheet-metal moldings 5 by nails or similar fastening de-

vices driven through the moldings into the separated or spaced blocks. The separated or spaced wooden blocks also provide for the free circulation of air, which can flow between the blocks of the plates when the latter are applied to the joists or beams to constitute a ceiling.

Having thus described my invention, what I claim is—

10 1. The combination of sheet-metal plates, gangs of separated or spaced wooden blocks arranged along the edges of the plates and nailed to the joists, and sheet-metal moldings applied over and secured to the separated or
15 spaced blocks, substantially as described.

2. A metallic ceiling-panel composed of a metal plate provided along each edge with a gang of separated or spaced wooden blocks which are nailed to the joists or beams for

the purpose of securing the panel in position, 20 substantially as described.

3. The combination of sheet-metal plates formed integral with moldings in juxtaposition to their edges to provide lateral flanges, gangs of separated or spaced wooden blocks 25 secured to the lateral flanges and nailed to the joists or beams, and sheet-metal moldings applied over and secured to the separated or spaced wooden blocks, substantially as described. 30

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

FRANK G. CALDWELL. [L. S.]

Witnesses:

WILLIAM B. FISHER,
WM. H. STELLE.