

(No Model.)

F. G. CALDWELL.
METAL CEILING.

No. 409,916.

Patented Aug. 27, 1889.

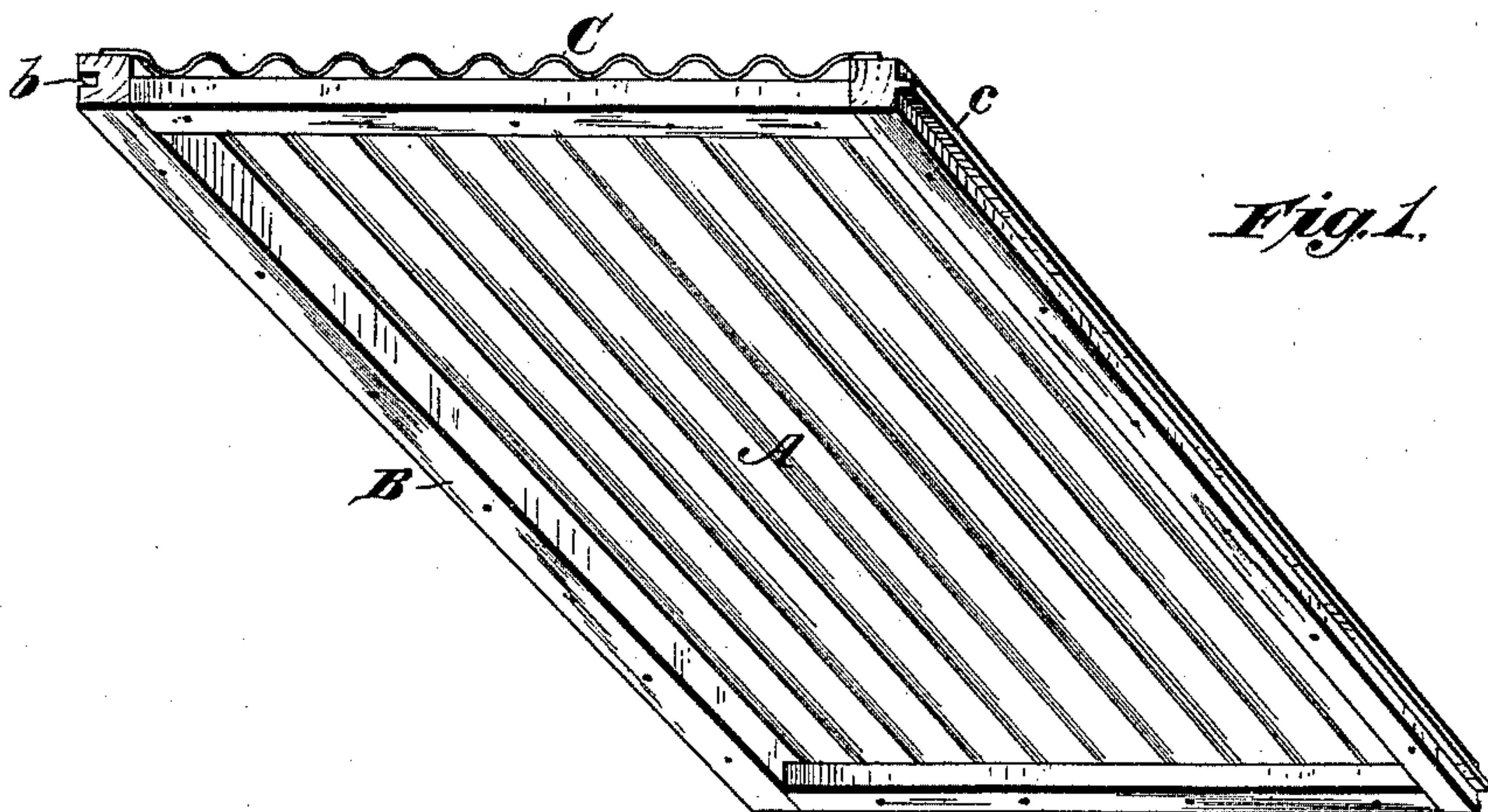
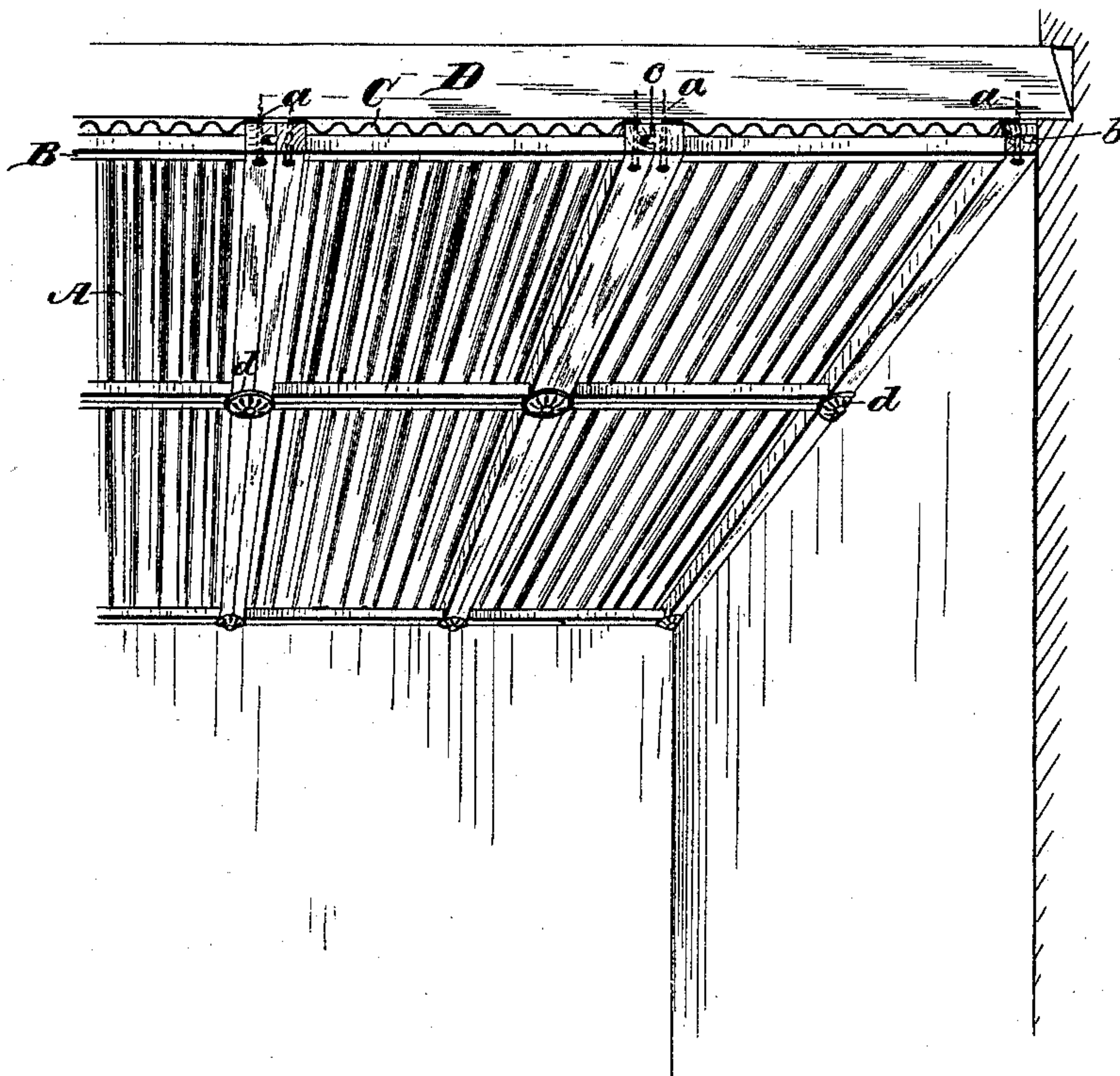


Fig. 1.

Fig. 2.



Witnesses:
Photo Engraving
J. A. Rutherford

Inventor:
Frank G. Caldwell
By *James L. Norris*
Atty.

UNITED STATES PATENT OFFICE.

FRANK G. CALDWELL, OF WHEELING, WEST VIRGINIA.

METAL CEILING.

SPECIFICATION forming part of Letters Patent No. 409,916, dated August 27, 1889.

Application filed June 8, 1889. Serial No. 313,595. (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 Metal Ceilings, of which the following is a specification.

My invention consists in a recessed ceiling-panel composed of a frame of wood or other suitable material and a sheet of metal secured to one side of said frame, the object being to produce a light, inexpensive, and durable article that can be conveniently employed in the construction of ceilings and partitions, and which can be completed at the factory and supplied to the trade in readiness to be joined and put in place without requiring the services of a specially skilled mechanic.

The invention is illustrated in the annexed drawings, in which—

Figure 1 is a view of one of my improved metal-ceiling panels. Fig. 2 shows in perspective a portion of a metal ceiling composed of my improved recessed panels.

Heretofore in the construction of metal ceilings sheets of metal have been nailed to the rafters or to strips of wood previously secured to the rafters. Metal ceilings have also been made from wooden slabs separately clad with metal sheets, the edges of each slab being formed with grooves, into which the edges of the metal sheets are turned, and which receive separate narrow iron strips that lock together the metal-clad wooden slabs of which such ceiling is composed. In both these forms of ceiling the wood supports are entirely concealed and the ceiling presents a uniform unbroken surface.

According to my invention the ceiling is composed of sunken or recessed panels A, each consisting of exposed open frames B and metal sheets C, secured to the upper sides of said frames. These panels are separately secured to the rafters D by nails or other fast-

enings *a*, passed through the open frames. If desired, the edges of each frame may be provided with suitable grooves *b* and tongues *c*, by which the panels can be interlocked. Any suitable ornaments *d* can be used to cover the joints at the corners of the frames where the panels intersect.

While it is preferable to attach the panels A to the rafters with the frames B downward, so that the ceiling will present a series of recesses, it is obvious that the panels may be secured in place with the frames next to the rafters and concealed by the metal sheets. The frames B can be made of wood, metal, or other suitable material, and may be of rectangular or other shape, as preferred. The metal sheets C may be plain or corrugated, or they can be ornamented in any appropriate manner.

It will be seen that a recessed ceiling-panel of this character can be readily manufactured and put on the market in complete condition for immediate use. By reason of the open frame the panel is light and easily handled, and this frame, by imparting a recessed appearance to the ceiling, adds greatly to the ornamental effect.

What I claim as my invention is—

1. As a new article of manufacture, a recessed ceiling-panel composed of an open frame and a metal sheet secured to one side of said frame, substantially as described.

2. As a new article of manufacture, a recessed ceiling-panel composed of an open frame having tongued-and-grooved edges and a metal sheet secured to one side of said frame, substantially as described.

In testimony whereof I have affixed my signature in presence of two witnesses.

FRANK G. CALDWELL.

Witnesses:

C. H. SENSENEY,
W. F. PETERSON.