

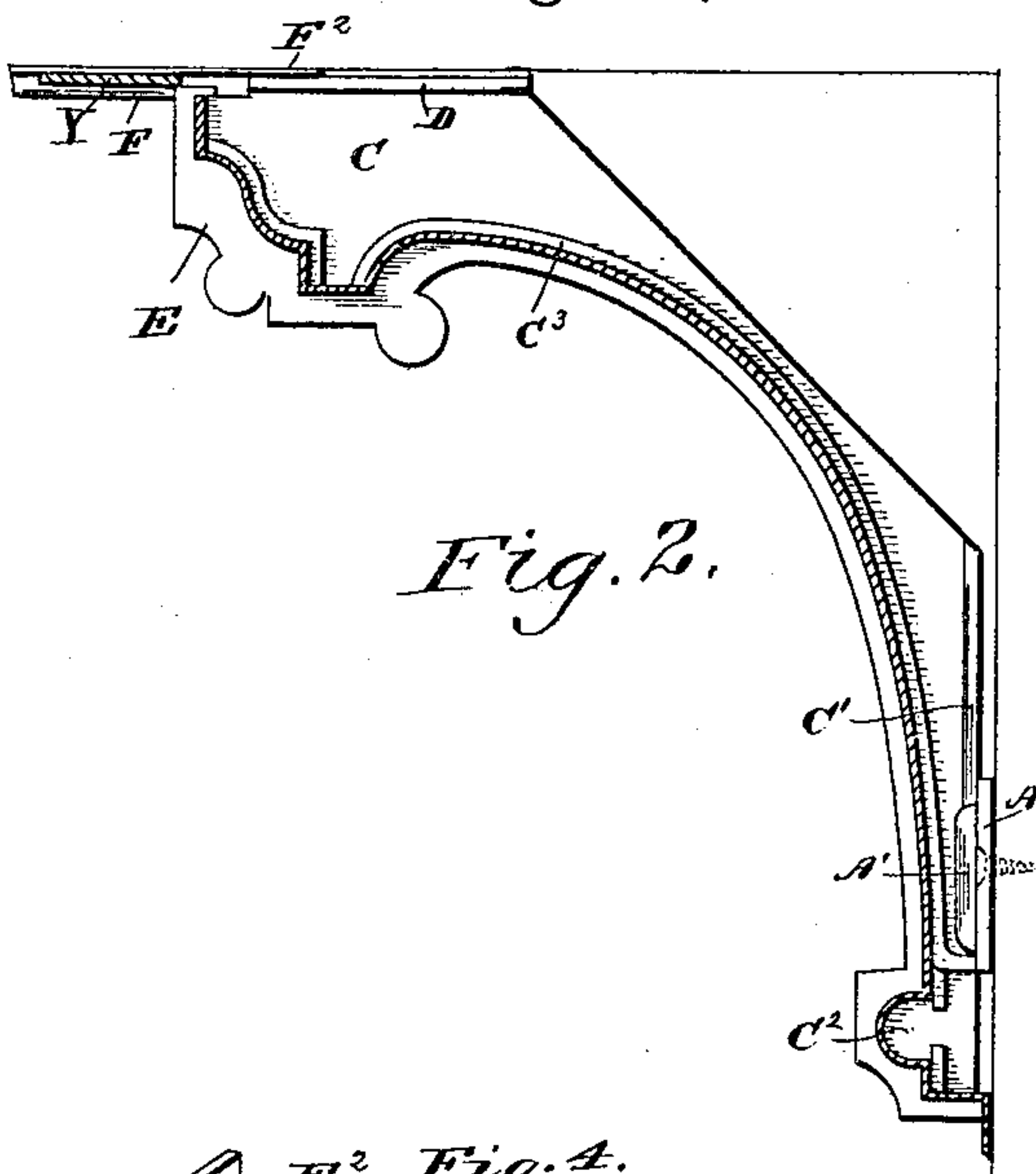
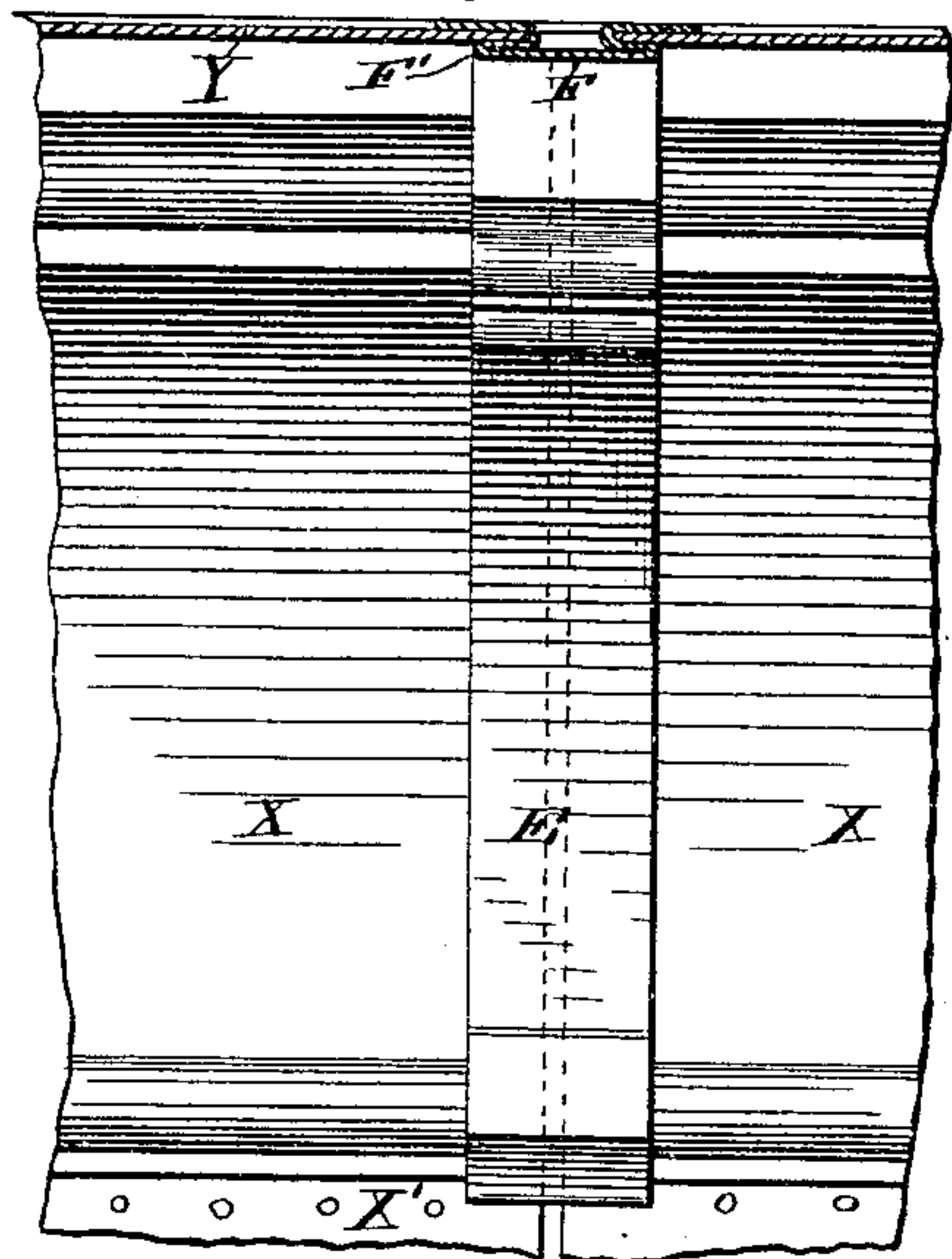
(No Model.)

W. R. KINNEAR.  
METALLIC CEILING.

No. 388,286.

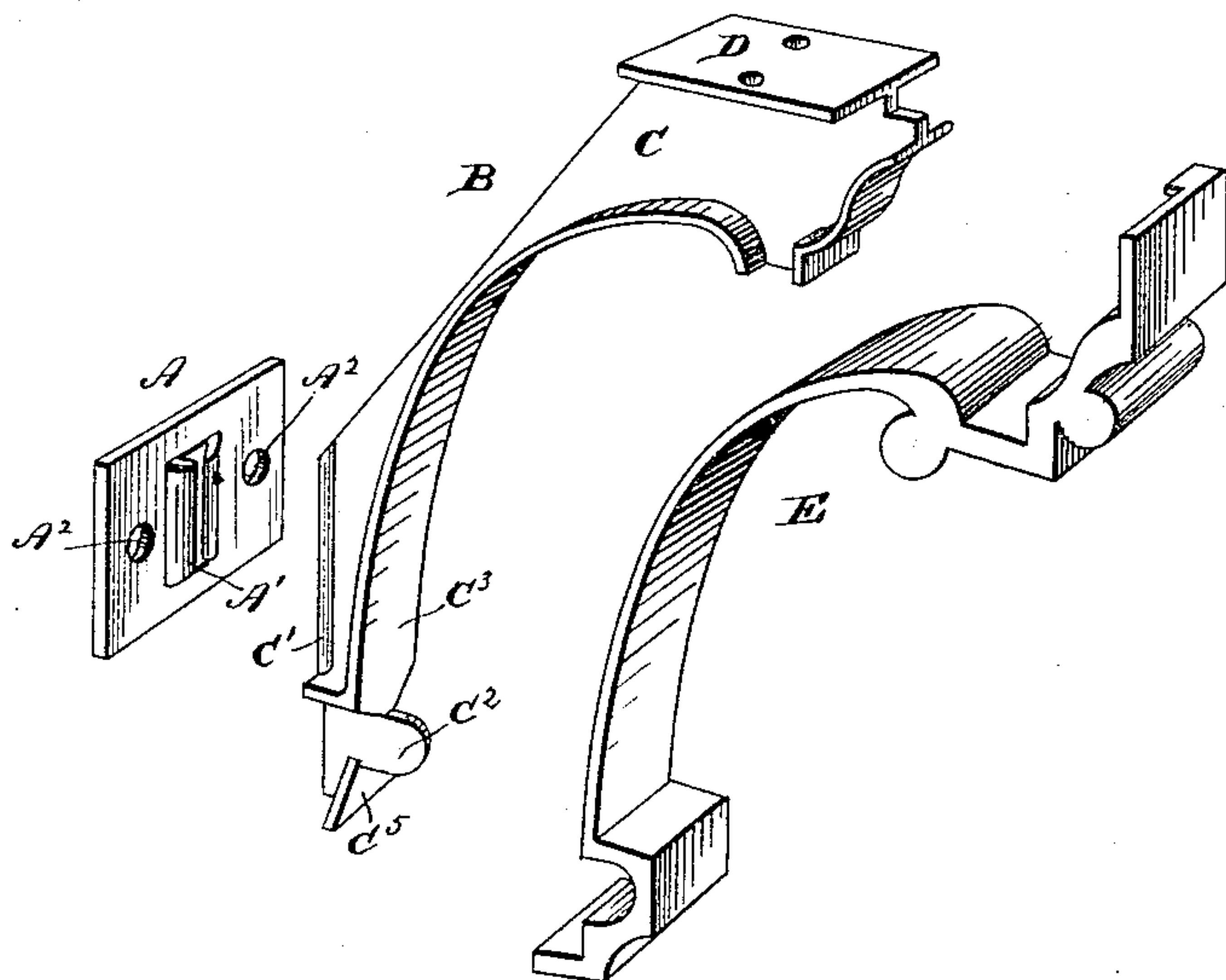
Patented Aug. 21, 1888.

*Fig. 1.*

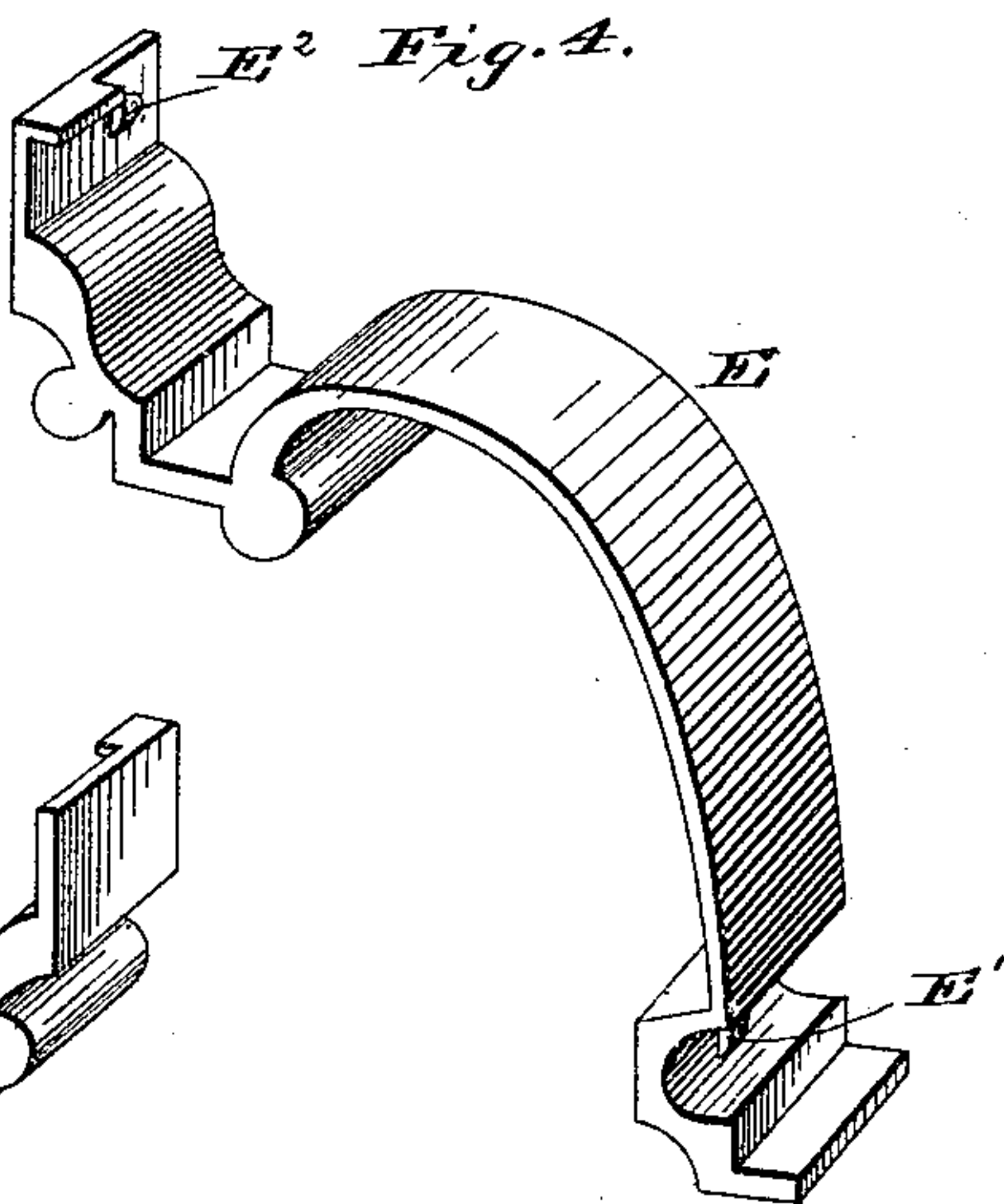


*Fig. 2.*

*Fig. 3.*



*Fig. 4.*



Witnesses.  
Chas. R. Burr.  
James M. Durant.

Inventor.  
William R. Kinnear.  
by *Musdock & Musdock*  
his Attorneys.



# UNITED STATES PATENT OFFICE.

WILLIAM R. KINNEAR, OF COLUMBUS, OHIO.

## METALLIC CEILING.

SPECIFICATION forming part of Letters Patent No. 388,286, dated August 21, 1888.

Application filed April 26, 1888. Serial No. 271,928. (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, in the county of Franklin and State of Ohio, have invented new and useful Improvements in Cornice-Brackets for Metallic Ceilings, of which the following is a full and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention has for its objects to provide forms to receive and maintain in shape the ends of the separate pieces composing the cornice; to provide means for suspending the said forms to the wall which are at once simple and efficient in their operation and render the work of suspending the forms more rapid and with greater certainty of adjustment; to provide a shield to cover the joint formed by the meeting ends of the pieces composing the cornice, and to provide a shield to conceal and support the meeting edges of the separate pieces composing the styling common to this class of ceilings.

To these ends the invention consists in providing a light skeleton bracket the face of which is shaped to the form of the cornice, and a "lookout" or shield, which may be affixed to the said skeleton, so as to conceal the junction of the pieces composing the cornice after they have been adjusted, and in providing cross-bars to support the meeting edges of the separate pieces composing the styling which extend across the width of the styling and are supported by the said brackets and the adjoining panels, and the edges of which are rolled so as to form grooves to retain the said edges of the styling-pieces.

In the drawings, Figure 1 is a front elevation of a section of the cornice where two of the separate pieces meet, with the invention applied. Fig. 2 is a side elevation of the invention. Fig. 3 is a perspective view of the parts of the invention separated. Fig. 4 is a detail view in perspective, looking at the rear of the lookout.

The letter A designates the grooved plate, which is secured to the wall before the bracket is suspended. It is provided with the perforations A<sup>2</sup>, for the introduction of screws or other fastenings, and has upon its face the raised groove A'. This groove is open at either end

for the introduction of the small flange on the lower end of the bracket as it is pressed up against the ceiling. In some forms of the invention I have two of these plates, and secure either the one to hold the top of the bracket to the wall first, or the other, as the case may be.

The skeleton bracket B, which is held in position by the plate A, is provided with the rib C, and in the form shown in the accompanying drawings with the stationary plate D, which is provided with perforations for the introduction, as in the plate A, of screws or other fastenings, or it may be secured by means of hooked fastenings driven by the side of and the hooks extending over the said plate. When these plates are both secured in position, the said skeleton bracket is suspended firmly without danger of displacement, as the grooved plate A secures it against any lateral movement and the plate D against falling.

The rib C acts as a brace for the bracket B to secure it against bending or breaking, according to the material used in the construction of the same. The edge of the rib, where it rests against the wall at the lower end, is provided with the flange C', which is constructed to fit in the raised groove A' closely. The rib is an integrant part with the bracket B, and may extend entirely across the stretch of the bracket or only a part of the way from both ends when it is desired to render the construction lighter.

The bracket B consists of a broad strip shaped to correspond to the form of the molding of the cornice, to receive the ends of the same and maintain their form at that point. I find that this style of bracket is further of advantage, because of the liability to damage to the ends of these cornice-pieces in shipping them, in which event they may be remedied of their defect by forcing the ends to the form of the brackets. The bracket is constructed broad enough to receive the meeting ends of the cornice-pieces, and allow for a little play between them for the expansion and contraction which are caused by the changes of temperature in the room. I do not, however, limit myself to this construction, as the same effect may be produced by leaving the edge of the rib C exposed and lapping the ends of the cornice-pieces. Under the plate D, at the upper end of the bracket, it is cut away upon



either side of the rib for the passage of a screw-driver or other tool for driving the fastenings by which the said plate is secured. This cut-away portion, by preference, occurs where a straight surface in the molding is presented, for the reason that the form of the metal when pressed to the said flange assumes a straight line between the ends of the broken flange and does not thereby contract the lines of the molding. The bracket is again broken near the lower end of the bracket and at the last bead of the cornice. At this point the rib C extends through the opening thus formed to provide the extension C<sup>2</sup>, which is provided with the shape of the bead at that point. The bracket is thus cut away to provide a stop in connection with the lookout and to aid in the adjustment of the same. The ends of the cornice-pieces are cut away at this point to allow the said extension to pass through and engage a lug on the lookout, as hereinafter described. In the form of cornice illustrated in the accompanying drawings there is a narrow fillet or drip at the lower edge. It is to preserve the form of this fillet that the foot C<sup>3</sup>, which is a continuation of the flange C<sup>3</sup>, is provided, and which extends to either side of the rib and is terminated in a square shoulder. When the skeleton bracket is suspended, as described, the cornice-pieces X are placed in position upon them, and the nails or other fastenings which secure the said pieces to the wall are driven through the depending edge X', as shown in Fig. 1 of the drawings, and the upper edge is secured in any manner desired. In this position the ends of the cornice-pieces lap the brackets, as stated, and as shown by dotted lines in Fig. 1 of the drawings. If we now secured the said ends directly to the bracket B, so as not to spring away from it by warping, which would be a very uncertain and difficult operation, the edges would show and present an unpleasing and, if not executed with extreme nicety, slovenly appearance. It is to avoid these objections that I have provided the lookout E, which, while obviating the objections noted, affords additional and varied opportunity for ornamentation. The under surface, or surface next to the cornice of the lookout E, corresponds to the shape of the cornice, so as to set closely to the same. The outer surface is shaped independently and may be of any form and have as much ornamentation as desired. It is broad enough to cover the bracket B and the ends of the cornice-pieces resting upon it. When the structure has reached the stage of completeness last described, where the ends of the cornice-pieces rest loosely upon the bracket B, the lookout E is applied by pressing it against the cornice to one side of the bracket and sliding it toward and over it until the lugs E' and E<sup>2</sup> are brought in contact with the extension C<sup>2</sup> and the rib C, where it extends above the bracket B, as shown in the drawings. In this position the two pieces are held together by the undercut portion of the bracket holding the corre-

sponding part on the lookout, as shown in the drawings, Fig. 2. In this position, if the lookout is not held rigidly in position by the jamming of the cornice-pieces between it and the bracket, it may be rendered so by driving small wedges between. In this position the parts may be decorated as desired, and where they are separated to expose a crack it may be concealed by the introduction of putty, as in wood-work, and painting over the same.

Between the cornice and side panels in this kind of ceiling is generally inserted a styling, Y, which like the cornice is composed of separate strips, the edges of which meet, as shown in Fig. 1 of the drawings. These edges become separated and expose ugly gaps in the work. It is to conceal and at the same time support these edges that I have provided the cross-bars F.

The cross-bars F are provided with the rolled edges F', under which the edges of the styling-pieces Y are adapted to extend. The ends of the cross-bar are provided with the extensions F<sup>2</sup>, over which the edges of the adjoining panels and the plates D of the bracket fit and secure it to the upper wall. In this arrangement of the parts the edges of the pieces composing the styling are concealed and supported by the cross-bars. These cross-bars may be of any shape desired to harmonize with the general design of the ceiling, and are not confined to that shown in the accompanying drawings. It may be further modified, and in some constructions I so use it by making it integral with the bracket.

What I claim is—

1. In a cornice such as described, the combination of the separate pieces composing the cornice, a skeleton for maintaining the shape of the meeting ends of the said pieces, a shield for concealing the junction, and suitable fastenings for connecting the skeleton and shield, substantially as described.

2. In a cornice such as described, the combination of the separate pieces composing the cornice, a skeleton for maintaining the shape of the meeting ends of the said pieces, being rigidly attached to the walls of the structure to which the cornice is applied and having an undercut portion, and a shield for concealing the junction of the said pieces, shaped to fit the undercut portion of the skeleton, for being retained in position thereby, substantially as described.

3. In a cornice such as described, the combination of the separate pieces composing the cornice, a skeleton for maintaining the shape of the meeting ends and being partly cut away to form stops, and a shield shaped to correspond to the form of the skeleton, for concealing the junction of the said pieces, and provided with lugs to engage the said stops on the skeleton, for adjustment of the parts, substantially as described.

4. In a ceiling such as described, provided with a styling, a cross-bar, the sides of which are adapted to receive the ends of the separate



pieces of which the styling is composed, provided with end extensions for suspending the same, and thereby supporting the ends of the said styling-pieces, substantially as described.

5 5. In a ceiling such as described, provided with a cornice and styling, a bracket for concealing the junction of the pieces composing the cornice and the styling, corresponding to the shape of the former and provided with an  
10 extension passing over the latter and under the edge of the adjoining panels, for concealing and supporting the ends of the separate pieces composing the said styling, substantially as described.

15 6. In a ceiling such as described, provided

with a cornice and styling, the combination of brackets for concealing the meeting ends of the pieces composing the cornice, and cross-bars extending across the styling for supporting the ends of the pieces composing the same, and provided with end extensions adapted to extend  
20 under the top of the said bracket and the edge of the adjoining panels, substantially as described.

In testimony whereof I have hereunto set my  
hand this 19th day of April, A. D. 1888.

WILLIAM R. KINNEAR.

Witnesses:

W. C. GAGER,

FRED ELLIS.