

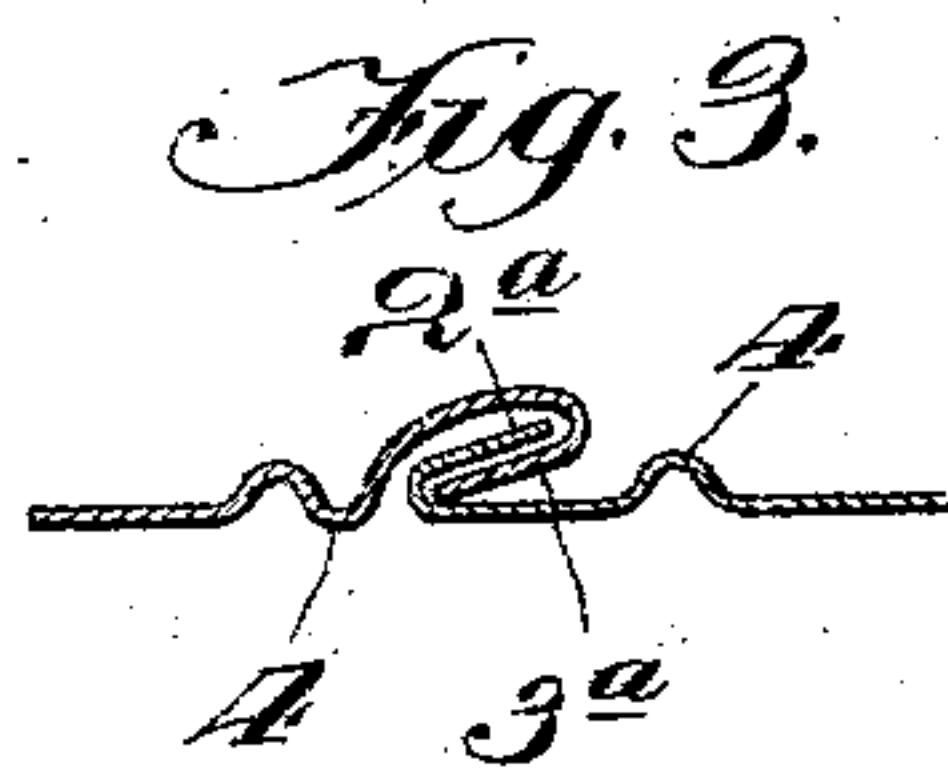
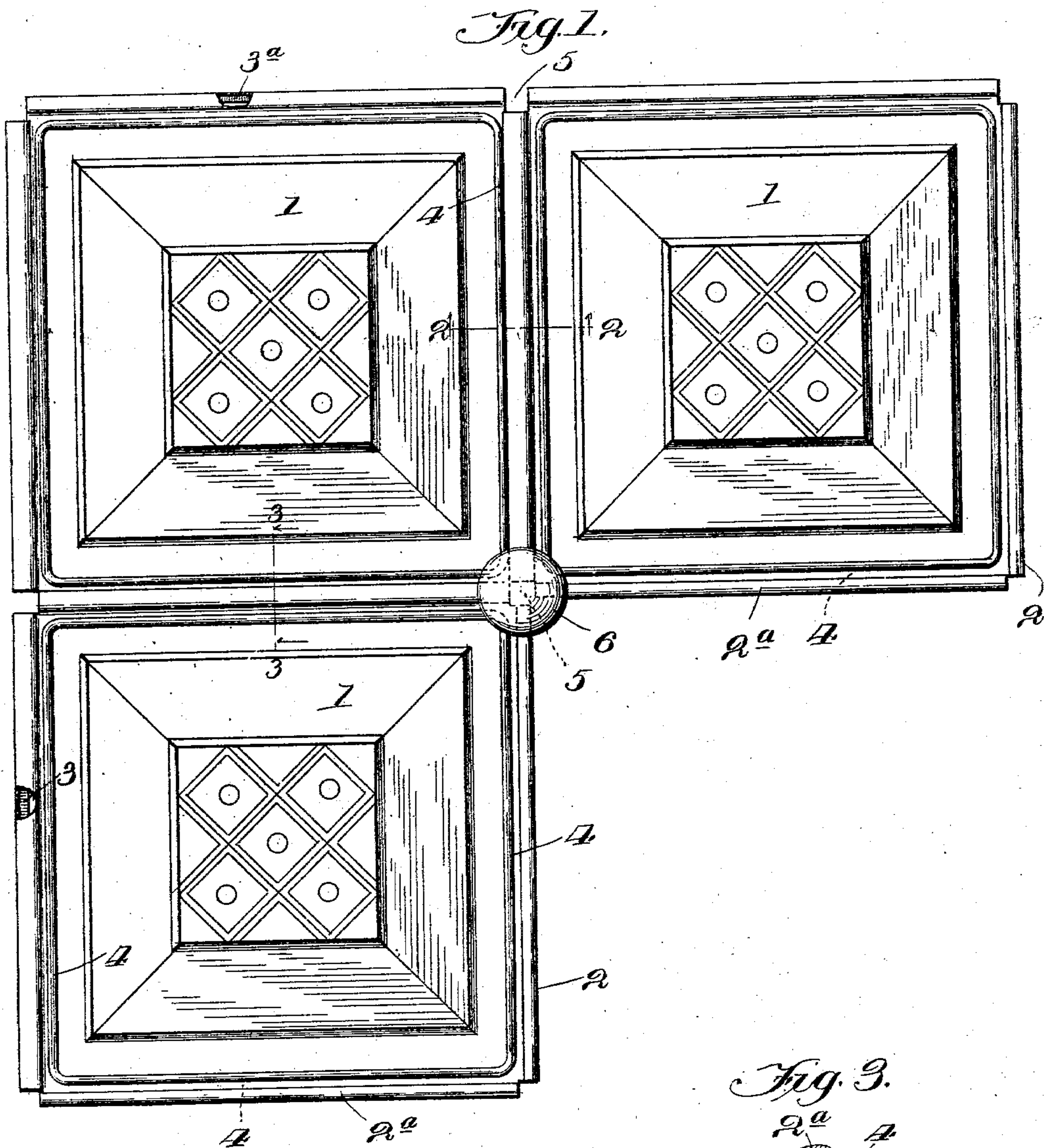
No. 740,843.

PATENTED OCT. 6, 1903.

A. FRIEDLEY.  
METAL CEILING.

APPLICATION FILED APR. 27, 1903.

NO MODEL.



*Witnesses:*  
*H. S. Gaither*  
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# UNITED STATES PATENT OFFICE.

ALBERT FRIEDLEY, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO  
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## METAL CEILING.

SPECIFICATION forming part of Letters Patent No. 740,843, dated October 6, 1903.

Application filed April 27, 1903. Serial No. 154,408. (No model.)

*To all whom it may concern:*

Be it known that I, ALBERT FRIEDLEY, a citizen of the United States, residing at No. 487 West Congress street, in the city of Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Metal Ceilings, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an improved metal ceiling composed of interlocking metal plates.

It consists of the features of construction set out in the claims.

In the drawings, Figure 1 is a plan view of a portion of a ceiling made of tiles embodying my invention. Fig. 2 is a section at the line 2 2 on Fig. 1. Fig. 3 is a section at the line 3 3 on Fig. 1.

I have shown my invention as applied to a ceiling made of rectangular metal plates 1 1, &c. Two edges about one corner of each plate are provided with flanges 2 and 2<sup>a</sup>, folded back over the outer surface of the plate, while the other two edges about the diagonally opposite corner are provided with flanges 3 and 3<sup>a</sup>, folded back over the inner surface of the plate. Two of the opposite edges 2 and 3 have their said flanges fully turned—that is, so that they extend parallel with the general plane of the plate at opposite sides thereof—and the other two opposite parallel edges have their flanges 2<sup>a</sup> and 3<sup>a</sup> only partly turned, so that they stand off obliquely from the opposite surfaces of the plate, overhanging the same. Immediately inward from the edges of the flanges on all four sides there is formed a bead 4, which presents a guard-shoulder toward the edge of the flange, so close thereto that when the flange 2, for example, is interlocked with the flange 3 said flanges can be disengaged only by a longitudinal or endwise-sliding movement of one plate upon the other, and said plates can therefore be engaged only by similar endwise entrance of one of the two flanges into the fold of the other. The plates are designed to be assembled by interlocking the corresponding flanges 2 and 3 of one row of plates by endwise engagement of one flange

within the other. The engagement of the plates of the next adjacent row with those of the first row is effected by the broadside entrance of flanges 2<sup>a</sup> with the folds of flanges 3<sup>a</sup>, which, it will be seen, can be effected in the concluding portion of the endwise-sliding movement by which each tile of the second row is engaged with the adjacent tile of the same row, and when the plates of the second row are thus engaged with each other by the sliding movement and with the plates of the first row by the broadside entrance of their respective flanges into each other, as described, the seams thus formed between the interlocked flanges 2<sup>a</sup> and 3<sup>a</sup> are completed by hammering down the flanges from their oblique to a flat or horizontal position, whereby the folded edge of the overlapped plate in whose fold the flange 3<sup>a</sup> of the next plate is engaged is sunken down behind the bead 4 of the other plate, which thus secures the seam thus formed in the same manner as the seams between the flanges 2 and 3 are secured at the edges, which are interlocked by the endwise movement described. Preferably for convenience in entering the plates of the second and subsequent rows into the flanges of the preceding plates of said rows, respectively, at the commencement of the endwise-sliding movement by which said plates are engaged, as described, the corners of each plate are cut out, leaving at each junction of four corners a small square aperture 5, and the plates may be secured to the ceiling by means of broad-headed and preferably ornamental nails 8, driven into the ceiling through these apertures, the heads of such nails overlapping all four plates thus meeting at the corner and sustaining them all. Additional nails may be employed at other points along the edges of the plates, if desired.

I claim—

1. A metal ceiling comprising rectangular plates, each having the two edges meeting at one corner provided with flanges folded back over the outer surface of the plate, and the two edges meeting at the diagonally opposite corner provided with flanges folded back over the inner surface of the plate, each plate having an upstanding bead extending along the edges having the outwardly-turned flanges



forming a guard to retain the inwardly-turned flanges in engagement.

2. A metal ceiling comprising metal tiles or plates having at two edges meeting at one  
5 corner flanges turned upon one surface of the plate, and at the edges meeting at the diagonally opposite corner flanges turned upon the outer surface, whereby the oppositely-situated flanges of each two consecutive plates  
10 are adapted to interlock, said plates having beads struck up on the faces over which the flanges are turned respectively, forming

guards over against the edges of the flanges, retaining the plates with their said flanges interlocked.

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In testimony whereof I have hereunto set my hand, in the presence of two witnesses, at Chicago, Illinois, this 22d day of April, A. D. 1903.

ALBERT FRIEDLEY.

In presence of—

CHAS. S. BURTON,  
FREDK. G. FISCHER.