(No Model.)

C. C. MOORE.

METALLIC CEILING.

No. 500,595. Patented July 4, 1893.

Fig. 1.

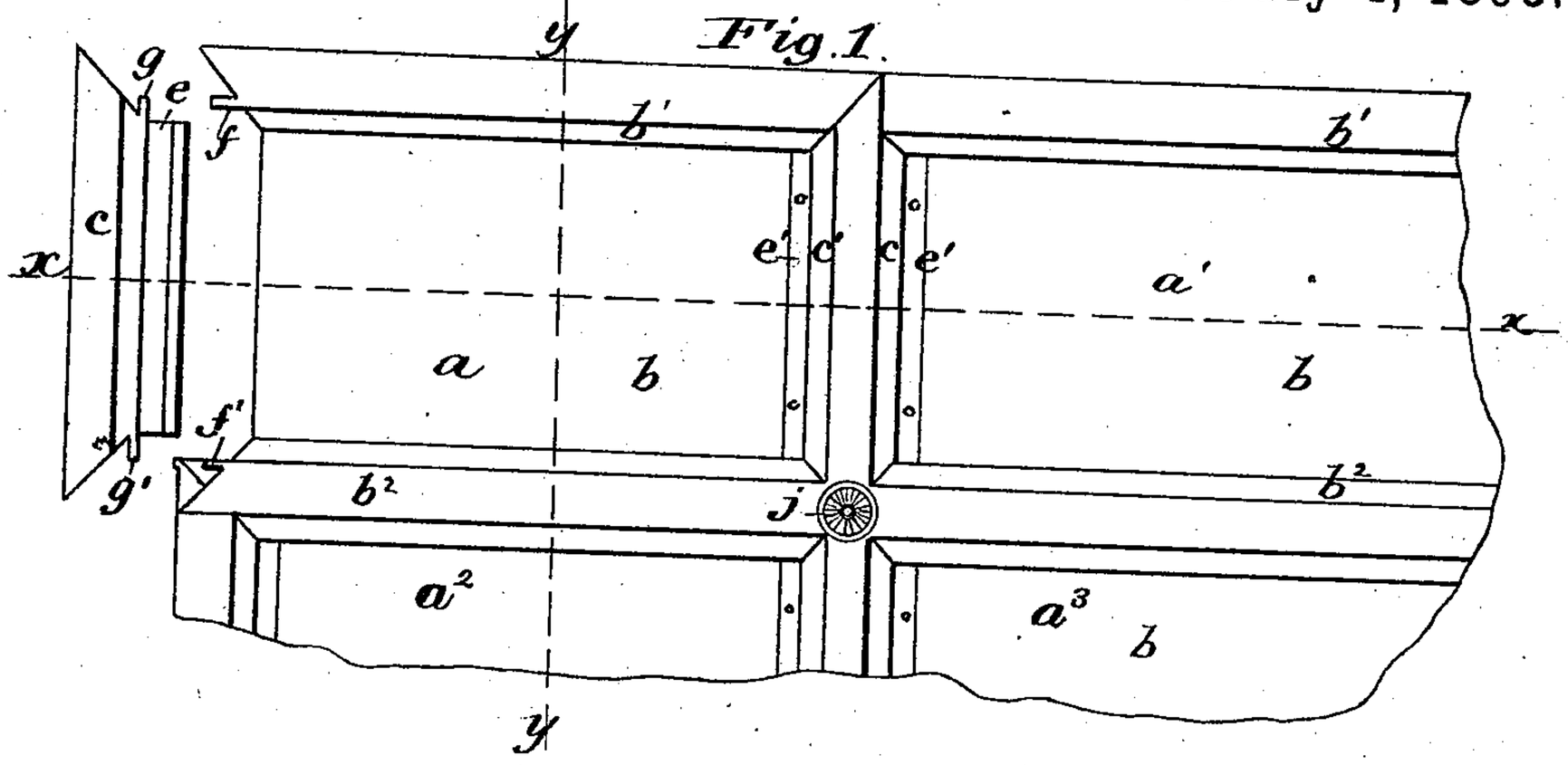


Fig. 2.

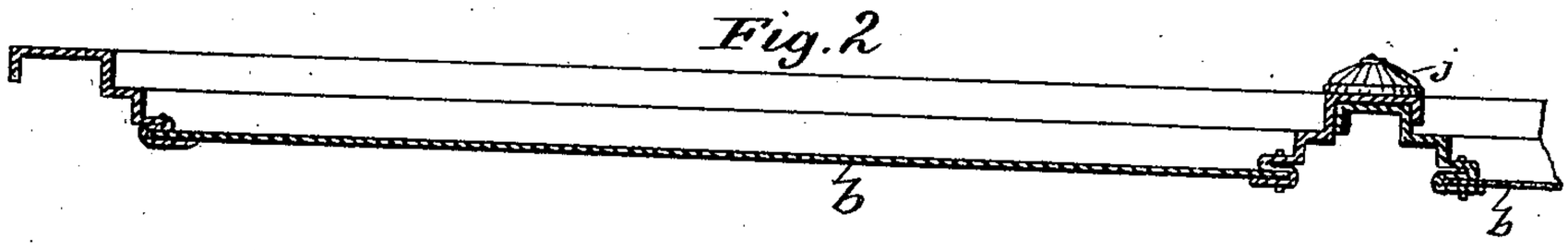


Fig. 3.

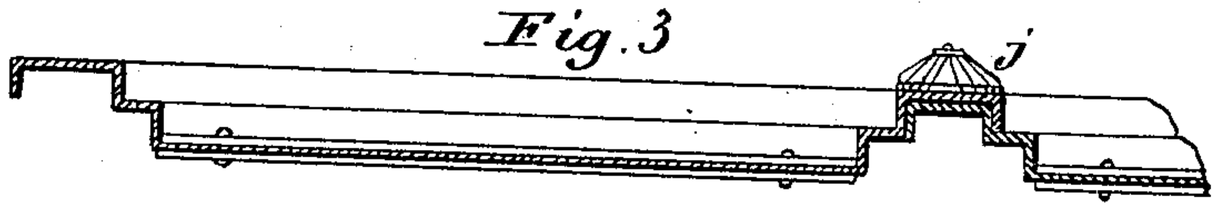


Fig. 4.

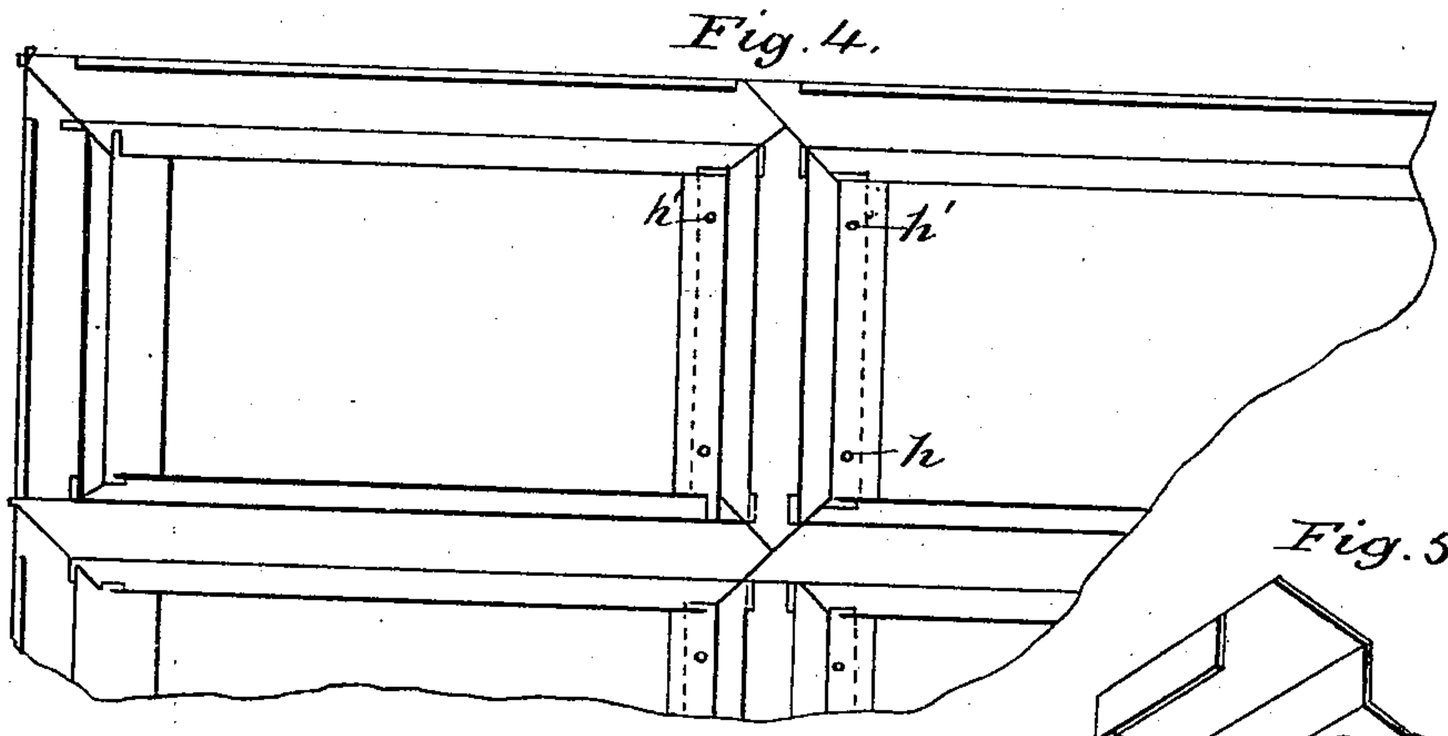


Fig. 5

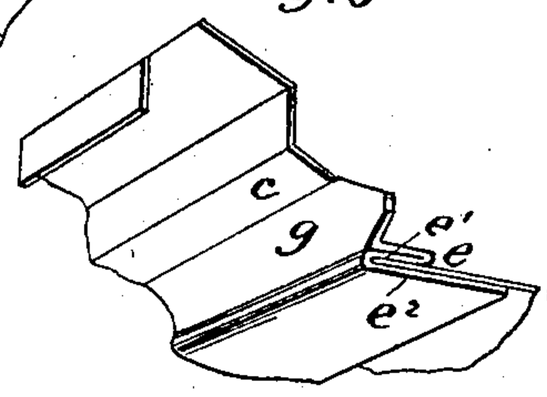


Fig. 6

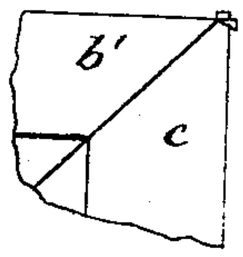
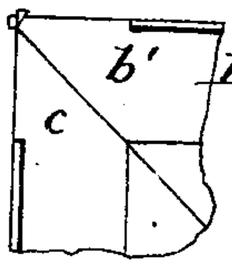


Fig. 7.



WITNESSES

L. D. Steinrichs

L. C. Hills.

INVENTOR

Charles C Moore,

by Staley & Shepherd, Attorneys

UNITED STATES PATENT OFFICE.

CHARLES C. MOORE, OF COLUMBUS, OHIO.

METALLIC CEILING.

SPECIFICATION forming part of Letters Patent No. 500,595, dated July 4, 1893.

Application filed February 10, 1893. Serial No. 461,834. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. MOORE, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented a certain new and useful Improvement in Metallic Ceilings, of which the following is a specification.

My invention relates to metal ceilings and it especially relates to the constructions of the respective panels which form the ceiling by which I am enabled to produce such panels without the aid of expensive dies heretofore employed, in the construction of ceilings of this character.

The object of my invention is to provide a ceiling formed of metal panels, which panels are adapted to be formed in parts in such manner that the respective parts may be bent or shaped without the aid of expensive machinery.

My invention consists in the constructions and combinations of parts hereinafter described and set forth in the claims.

In the accompanying drawings, Figure 1 is a plan view showing a portion of a ceiling and illustrating the method of joining the respective panels, a portion of one panel being shown detached to further illustrate the difference in form of the individual panels. Fig. 2 is a longitudinal section of the same on line $x\ x$ of Fig. 1 on an enlarged scale. Fig. 3 is a transverse sectional view of the same on line $y\ y$ of Fig. 1 on an enlarged scale. Fig. 4 is a bottom plan or back view of a portion of the same. Fig. 5 is a detail view partly in section illustrating the method of joining the parts of the respective panels and Figs. 6 and 7 are respectively views of opposite faces of a panel corner.

In the said drawings, a, a', a^2, and a^3 represent the panels of a metal ceiling. Each of these panels is formed with a central panel plate b having on each side thereof molding rails b', b^2 which are formed integral with said central panel plate b and bent in any desired shape to present a molding of any preferred pattern. The ends of the respective side or molding rails b' b^2 being mitered as shown, to join the end rails c c' which are joined to the central panel plate b and the side or molding rails thereof in the following manner:

The respective end rails or molding c and c' are formed at the bottom with a double fold as indicated in detail in Fig. 5 with a recess e between the respective leaves e' and e^2 of said fold into which recess the end of the center plate b is adapted to project. The vertical faces of the respective side molds are further provided with projecting ends or ears $f\ f'$ which are integral therewith, while the vertical faces of the end molds c and c' are provided with similar ears g and g' the respective ears on the different parts being in different horizontal planes, so that when the panels are joined together by slipping the end of the central panel plate into the recess e of the end molding or end rail, the projecting ears $f\ f'$, g and g' are bent at right-angles so as to engage the adjacent rails and thus hold the parts firmly together as clearly shown in Fig. 4. If desired, a rivet or rivets h h' may be employed which pass through the respective leaves e' e^2 and through the central panel plate b as a further safe-guard, though the fastenings first described are in this case deemed sufficient. The panels thus described are joined together by hooking the top or horizontal portion of the respective end and side rails over the corresponding portion of the adjacent panel as shown in Fig. 2, the overlapping parts thus formed being covered by a rosette j or other suitable form of ornamentation and secured in place by nails or other fastening devices for securing the ceiling in place.

From the above construction, it will be seen that by forming the central panel plate and the side plates integral, the parts may be readily bent to any desired form by the aid of simple machinery while the end rails may be joined thereto in the manner described and held firmly together so as to secure substantially a solid panel which at the same time can be very cheaply made.

In order to further connect the parts forming my improved panels I cause the pointed ends of the side and end rails to be folded over each other as shown more clearly in Figs. 6 and 7 of the drawings. By this means it will be seen that said panel parts are prevented from any tendency to work outward.

Having now fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A panel, the side rails and central panel plate of which are formed integral, said side rails having vertical faces in different horizontal planes, end rails corresponding to said side rails the ends of which are mitered to correspond with the mitered ends of said side rails, said end rails being formed at the bottom with a double fold as described, with a recess between the adjacent leaves adapted to receive the end of the central panel plate and projecting ears formed integral with the respective side and end rails, adapted to be bent over as described and to form connections between the respective parts, substantially as specified.

2. In a metal ceiling, a panel having a central panel plate and mitered side rails formed integral therewith, the central panel plate being depressed below said side rails, detached end rails corresponding to said side rails, each provided at the bottom with a double fold having an interposed recess adapted to receive the end of the panel plate, projecting lugs or ears on the respective end and side rails arranged in different horizontal planes and adapted to be bent at right-angles so as to engage the adjacent faces of the adjoining rails, substantially as specified.

3. In a metallic ceiling, the combination with two or more panels, each formed with a central panel plate and side rails formed integral and end rails adapted to be joined thereto, said side and end rails being formed with mitered ends as described and having top flanges adapted to engage with the adjacent rails of the next panels and a rosette for covering the adjoining ends of said rails, substantially as specified.

CHARLES C. MOORE.

In presence of—
C. C. SHEPHERD,
H. B. BRADSHAW.