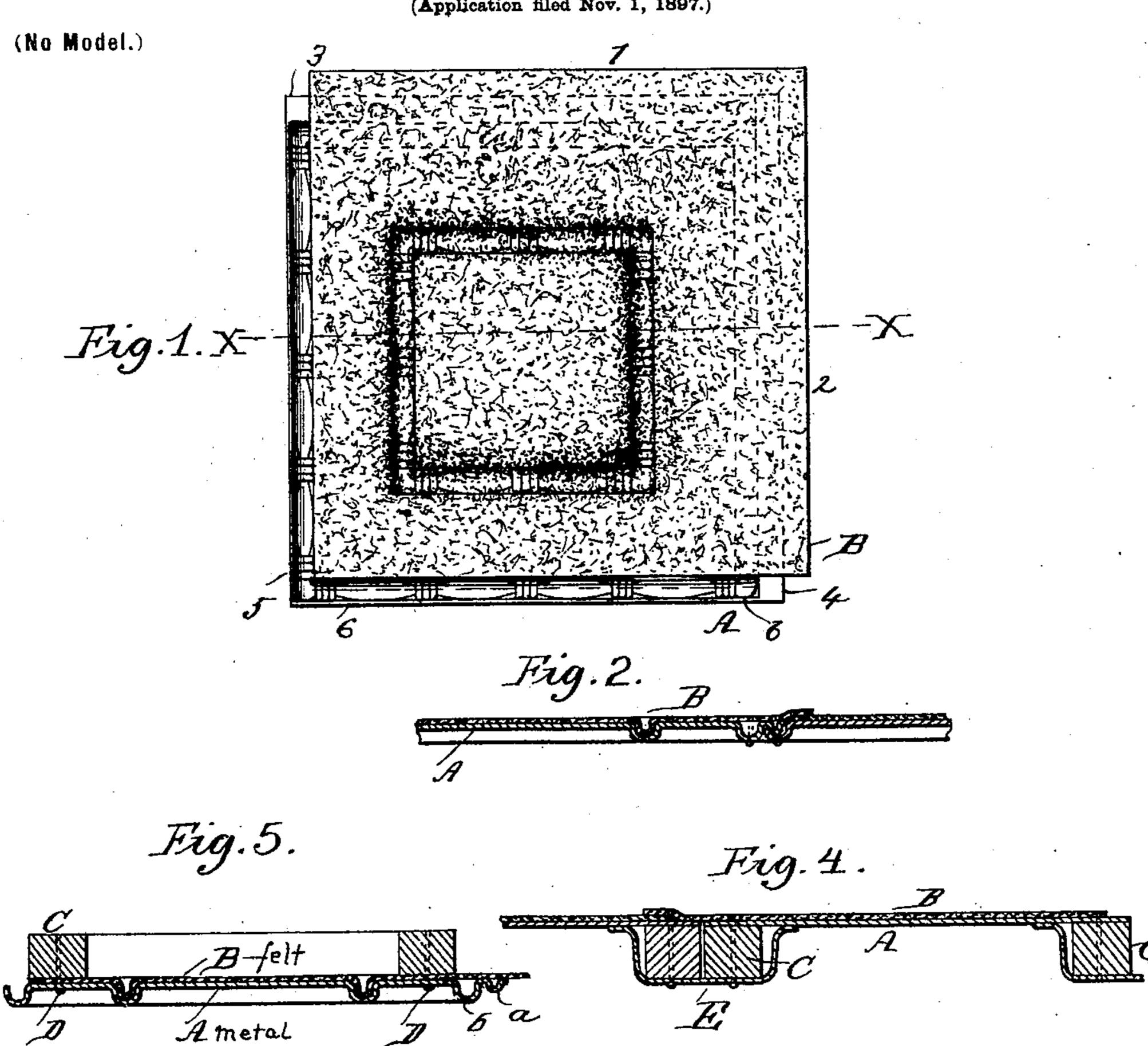
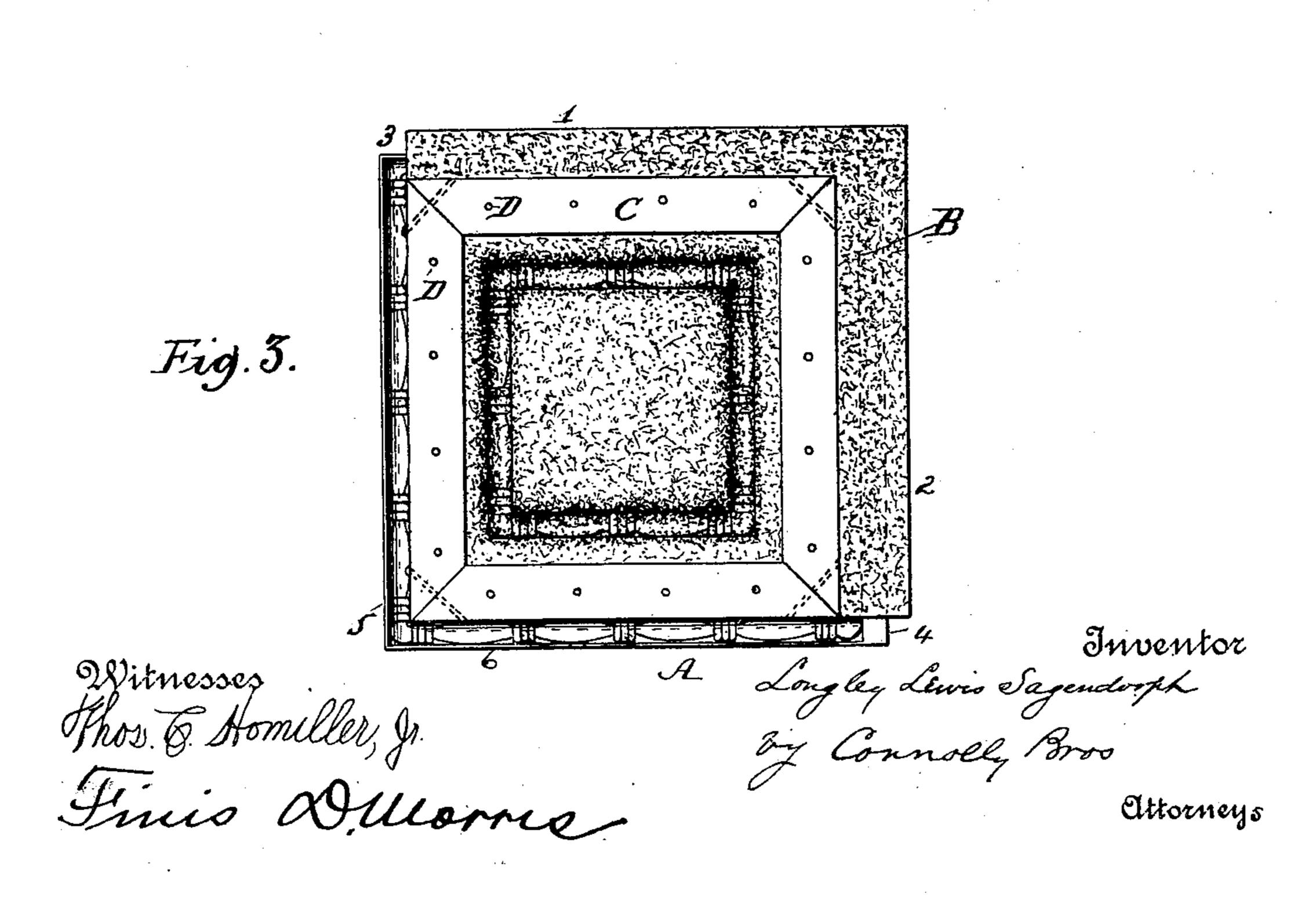
## L. L. SAGENDORPH.

## METALLIC CEILING OR WALL PLATE.

(Application filed Nov. 1, 1897.)





## United States Patent Office.

LONGLEY LEWIS SAGENDORPH, OF PHILADELPHIA, PENNSYLVANIA.

## METALLIC CEILING OR WALL PLATE.

SPECIFICATION forming part of Letters Patent No. 611,797, dated October 4, 1898.

Application filed November 1, 1897. Serial No. 657,088. (No model.)

To all whom it may concern:

Be it known that I, Longley Lewis Sagen-DORPH, a citizen of the United States, residing at Philadelphia, in the county of Phila-5 delphia and State of Pennsylvania, have invented certain new and useful Improvements in Metallic Ceiling or Wall Plates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such 10 as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to sectional metallic ceiling and side-wall plates employed for finishing and decorating purposes in lieu of plaster, stucco, paper, &c., and has for its object the provision of a backing or lining to the plates, whereby, among other advantages, the ceilings and walls to which they are applied are rendered non-conductors of heat and cold and of noise and disturbing vibrations and whereby the accumulation of moisture by condensation on the backs of the plates is prevented and all joints and seams rendered dust, water, and gas proof.

My invention consists in the application to or combination with the ceiling or wall plates having lapped or interlocked joints and so constructed as to form panels or sections which are fitted together in various ways, according to the conditions of use and architectural design, of sheets of felt or other non-conducting material, forming a lining or backing between the metallic shell and the surface covered thereby and having the characteristics above referred to and hereinafter more specifically described.

My invention further consists in the combination, with the metallic plates having the felt backing or lining, as above set forth, of wood edge-strips-suitably secured to the metallic plates, as hereinafter described.

In the accompanying drawings, Figure 1 is a plan view of an ornamental sheet or panel of metal constituting a section of a ceiling or side-wall covering and having applied there to a non-conducting backing or lining according to my invention. Fig. 2 is a sectional view of the same on the line X X of Fig. 1. Fig. 3 is a plan view of the plate shown in

Figs. 1 and 2, with the addition of wooden 50 edge-strips; and Figs. 4 and 5, sectional views showing the wood strips applied to opposite sides of the plate.

The metal plates or sections A are rectangular and of any desired ornamental configuration and of any proper mechanical structure as regards the marginal or joint parts, but are preferably of the type shown in the drawings, in which two adjacent sides have wide margins beaded, as at a, so as to form, 60 with the ornamental molding-beads b b of the two other sides, interlocking lap-joints.

It has been usual heretofore to attach the plates directly to the furring-strips without using any intermediate lining or filling. This 65 has been found objectionable, and particularly so when the ceilings or walls themselves are not perfect non-conductors of heat and cold or when they offer but little obstruction to noise or vibration. To overcome these 70 and other objections, I provide sheets of non-conducting material, such as roofing-felt, between the sheets of metal and the furring-strips and arrange such non-conducting sheets in various ways to the different requirements 75 or conditions of use.

As will be seen, the felt sheet B, which I employ for lining or backing purposes, while of approximately the same dimensions as the metal plate, is applied to the back of the lat- 80 ter, so as to project at its two edges 1 and 2 half an inch beyond the edges 3 and 4 of the metal plate, thus leaving uncovered about half an inch of metal on each of the two edges 5 and 6. The object of this arrangement is 85 to allow of a perfect contact and lapping of the sheets of felt with each other after the metal plates are lapped, while not interfering with the lapping of the metal on the metal. Thus when the plates are in position the 90 metal surface of one plate is in joint contact with the metal surface of the one it overlaps, while underneath or back of these plates the sheets of felt overlap each other.

The sheets of felt are preferably attached 95 by liquid cement to the sheets of metal before being put up, and when the plates are stamped so as to present surface configura-

tion the sheets of felt are pressed firmly into the recesses on the backs of the plates, so as to be in perfect contact with them and leave no open or air space between the felt and the

5 metal.

The felt sheets, instead of being pressed into the recesses of the metal sheets and cemented thereto, may be pressed so as to have the same configuration and then loosely apro plied to the plates—i. e., without cementing. I prefer, however, to securely fasten each sheet of felt to its metal plate before shipping it from the factory, the felt-lined metallic sheets thus constituting a new article of 15 manufacture ready for use and only requires to be put in place and nailed to the furring-

strips.

In some cases I find it advantageous to attach strips of wood to the separate plates, 20 such strips being arranged around the edges of the plates so as to form a border, such construction being shown in Figs. 3, 4, and 5 of the drawings. The strips are mitered at the corners and nailed together and to the metal 25 plates, and when the plates are put in position on the ceiling nails are driven through the metal plates, the felt backing, and the wooden strips and into the furring of the ceiling. In the sectional view Fig. 5 I have 30 shown these wooden strips C as applied to the back of the metal plates and on the outside of the felt backing B. When applied in this position, nails D are driven through the metal plates A, the felt backing B, and the wooden 35 strips C and into the furring-strips or other surface to which the plates are being secured when the plates are being put in position on the ceiling. The wooden strips are set back from the edge of the metal plates a sufficient 40 distance to permit of the edge of the plates

overlapping on two sides, as hereinbefore described.

In Fig. 4 of the drawings I have shown the wooden strips C as applied to the outer metallic side of the ceiling-plate, the strips be- 45 ing in such position that when two adjacent plates come together the edges of the wood strips of the adjacent plates abut, and when the plates are secured in position on the ceiling by nails passing through the wooden 50 strips and the plates I place a cap E over both strips and nail the cap in position by nails passing through the wood strips and into the furring-strips of the ceiling, and I then finish the corners with suitable rosettes.

Having thus described my invention, what

I claim as new is—

1. The combination with rectangular ceiling or wall plates of the character described, having their edges or margins shaped to form 60 lap edges or joints, of the non-conducting backing or lining sheets having their edges on two adjacent sides projecting or extending beyond the edges or margins of the plates and on the other two sides terminating back of, 65 or inside, the edges of the plate, substantially as shown and described.

2. The combination with an ornamental ceiling or wall plate composed of a sheet of metal having a felt or other non-conducting 70 backing of the wooden strips secured to the metal plate in proximity to the edges thereof,

substantially as described.

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

LONGLEY LEWIS SAGENDORPH.

Witnesses: GEORGE D. CODMAN, S. FRANK.