(No Model.)

L. L. SAGENDORPH.

METALLIC CEILING PLATE.

No. 489,236. Patented Jan. 3, 1893.

FIG. 2.

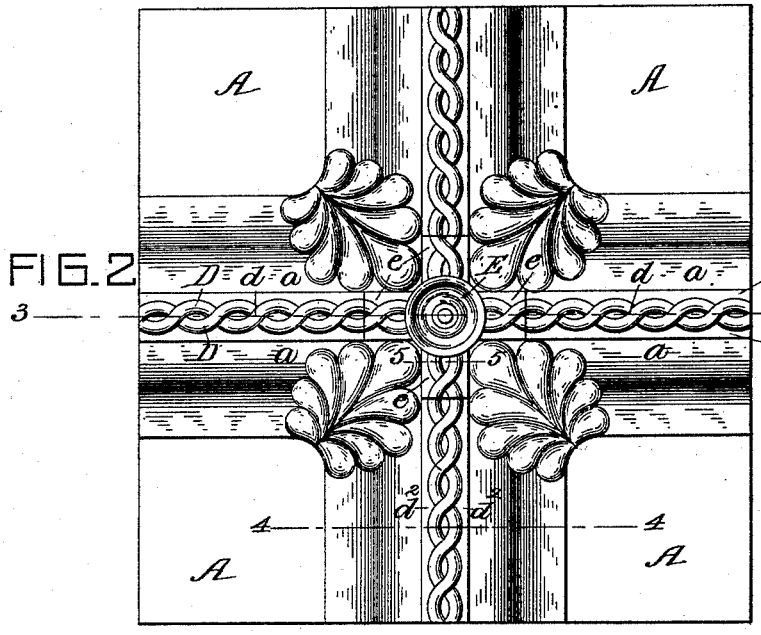


FIG. 3.

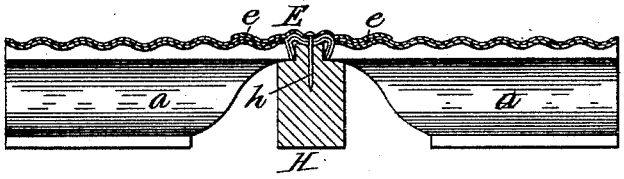


FIG. 4.

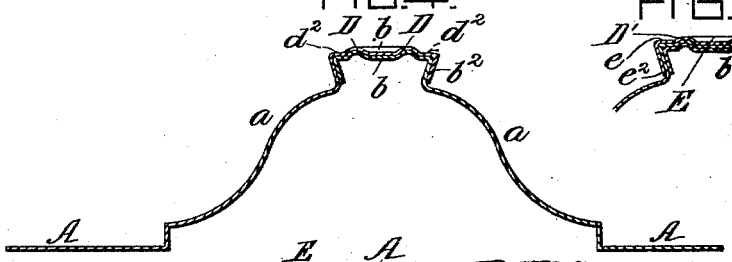


FIG. 5.

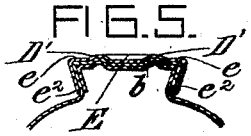
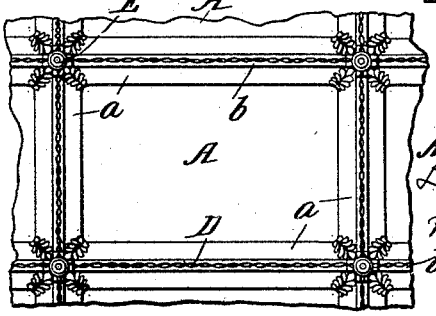


FIG. 1.



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UNITED STATES PATENT OFFICE.

LONGLEY LEWIS SAGENDORPH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHARLES N. HARDER, OF PHILMONT, NEW YORK.

METALLIC CEILING-PLATE.

SPECIFICATION forming part of Letters Patent No. 489,236, dated January 3, 1893.

Application filed September 7, 1892. Serial No. 445,240. (No model.)

To all whom it may concern:

Be it known that I, LONGLEY LEWIS SAGENDORPH, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented certain new and useful Improvements in Metallic Ceiling-Plates, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention, and advantages arising therefrom, will be apparent from the detailed description hereinafter given.

In the accompanying drawings:—Figure 1, is a plan view of a section of ceiling, showing one of my improved plates in position. Fig. 2, is a similar view, on an enlarged scale, taken at the juncture of four ceiling plates embodying my invention. Fig. 3, is a longitudinal section taken on the dotted line 3, 3, of Fig. 2. Fig. 4, is a transverse section taken on dotted line 4, 4, of Fig. 2, on a still enlarged scale. Fig. 5, is a section on dotted line 5, 5, Fig. 2.

My invention consists of a metallic plate A, (embossed or plain) having a marginal raised molding *a*, which preferably extends continuously around said plate in an unbroken line, said molding terminating in an interlocking flange *b*; that is, the flange on one side of the plate is designed to interlock with a corresponding flange on the adjacent plate, in the manner and for the purposes hereinafter set forth.

The primary objects of my present invention are, first: to provide a flange for each side of a plate, such as above described, which will fit into or engage with the flange on an adjacent plate, in such a manner as to render the seam or stile thus formed, dust-proof; second, to so interlock said flanges as that they will engage and mutually assist to support each other, and provide for expansion and contraction; and third, to so unite said flanges as that all rough edges shall be hidden from view, and thus add to the beautifying effect of the entire ceiling. With these objects in in view, I preferably form the flanges *b* dovetailed in cross-section, as shown, the outer and downwardly projecting portion b^2, of the top flange resting along its edge at the point of juncture between the base of the underlying flange and its molding *a*, as more clearly shown in Fig. 4. This construction accomplishes a two-fold object, viz: to securely lock the plates together, and at the same time hide the terminal edge of lap b^2, from view, as shown in Fig. 2.

In the top of each flange *b*, is formed two continuous ribs or beads D, which are preferably of a serpentine outline, as shown, the one bead intersecting with the other bead at the points *d*. These beads are formed in the top face of said flanges inward from their offset, leaving the blank shoulders d^2, at each side thereof, as shown.

With a seam or stile formed in the manner just described, it is impossible for any dust or dirt to work through between the flanges, as the two beads D will effectually clog and stop the same. These beads also add to the rigidity of the seam; and, in connection with the flat shoulders d^2, on a plane with the base of said beads, also assist to prevent warping.

In the formation of my improved plate, it is preferred that the downwardly projecting portion b^2, on the flange at one side and end of each plate, be not bent inward until after the said flanges are placed over the dovetailed flanges of the adjacent plates, at which time said portion b^2 is bent inward with a suitable former or tongs, thus securely and firmly locking the plates together,—the beads D in top flange engaging over the corresponding beads in the lower flange.

At the point where the corners of four plates meet, I employ a metallic rosette E, having radiating arms *e*, the latter being provided with beads D′, corresponding to the beads D on that portion of the flanges which said arms overlap. The arms *e* are preferably provided with the downwardly projecting flanges e^2, which latter are compressed over and around the dovetailed flanges of the underlying plates, as shown in Fig. 5. By this means the ragged edges of the plates, at the meeting corners thereof, are completely hidden from view; and, the arms of the rosette, being of the same outline configuration as the flanges on the plates, are not readily distinguished therefrom, especially after having been properly painted and decorated. The rosettes at the corners of the plates are retained to place by means of a

nail or screw *h* secured to a block H, the latter being securely fastened to the joist or ceiling strips.

It will be seen that by reason of the dove-tailed interlocking flanges on the plates, I am enabled to dispense with the continuous furring strips now commonly used in putting up metallic ceilings, and only need employ the blocks H at the overlapping corners of said plates. I also avoid the necessity of nailing through the flanges. The rosettes are so embossed as that the heads of the nails passed therethrough are hardly perceptible, especially after decoration.

The various advantages arising from my invention have been partially set forth, and need not be re-enumerated.

The various features of my invention are designed to cheapen the cost of constructing the ceiling by a saving of time and material. The plates can be readily taken down and used in another room or building, without damage to said plates. The construction is such as to completely hide all broken or ragged edges of material, thus producing an artistic, symmetrical and pleasing effect to the eye. All the fire-proof qualities found in any metallic ceiling are attained by my invention, with the additional quality of its being dust-proof.

I am aware that it is not new, broadly, to emboss a metallic plate with a continuous raised molding, as that feature is old and well known in bird-cage bottoms, waiters and various other articles; but,

What I claim as new and desire to secure by Letters Patent is:—

1. A metallic ceiling plate having a continuous raised molding terminating in flanges of a dove-tailed configuration in cross-section, substantially as set forth.

2. A metallic ceiling plate having side interlocking flanges, the latter having raised beads D of a serpentine outline intersecting and crossing each other as shown, said beads on one plate being adapted to overlap corresponding beads on an adjacent plate, substantially as set forth.

3. A metallic ceiling plate having a continuous raised molding terminating in interlocking flanges, b b^2, the top face of portion b being provided with raised beads, substantially as specified.

4. A metallic ceiling consisting of plates having a continuous raised molding terminating in interlocking flanges, the flange at one side of a plate interlocking with the flange on the side of the adjacent plate, the corners of said plates being covered with rosettes having arms e and interlocking flanges e^2, substantially as set forth.

5. A metallic celling plate having interlocking flanges b with beads D formed thereon, in combination with a metallic rosette having arms e adapted to engage with said flanges, said arms having beads D′ on their top face corresponding in outline with beads D, substantially as set forth.

6. A metallic ceiling plate having a continuous raised molding a terminating in flanges b, the latter having on their top face the beads D, and a continuous flat portion or shoulder d^2 at each side of said beads, the flange thus formed being adapted to overlap a correspondingly formed flange on an adjacent plate, substantially as set forth.

7. A metallic ceiling made up of plates A, each plate having a continuous raised molding terminating in a flange interlocking with a like flange on the adjacent plate, with a single block H beneath the corners thereof, and a rosette over the corners of the plates, the latter being connected to said block, substantially as set forth.

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