

(No Model.)

2 Sheets—Sheet 1.

A. BOWERS & G. PETTIT, Jr.
SURFACE DECORATION.

No. 420,263.

Patented Jan. 28, 1890.

Fig. 1.

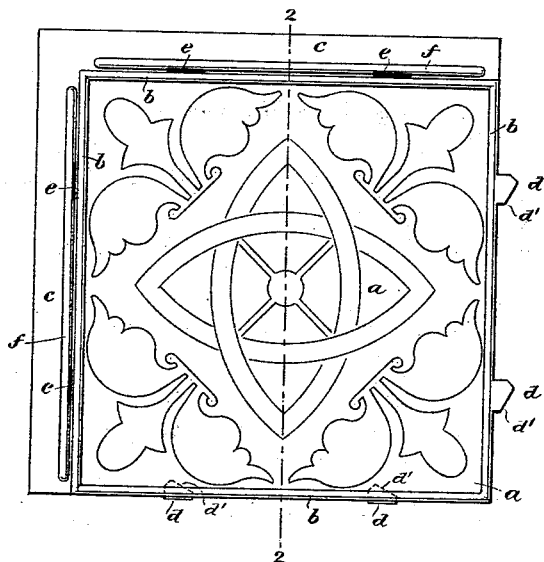
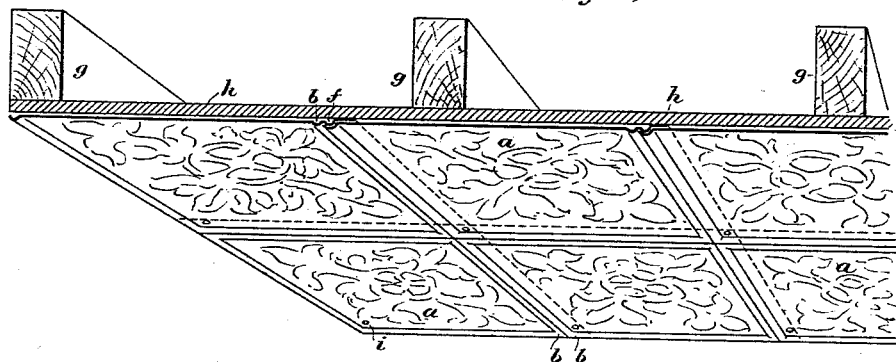


Fig. 2.



Fig. 3.



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(No Model.)

2 Sheets—Sheet 2.

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Fig. 4.

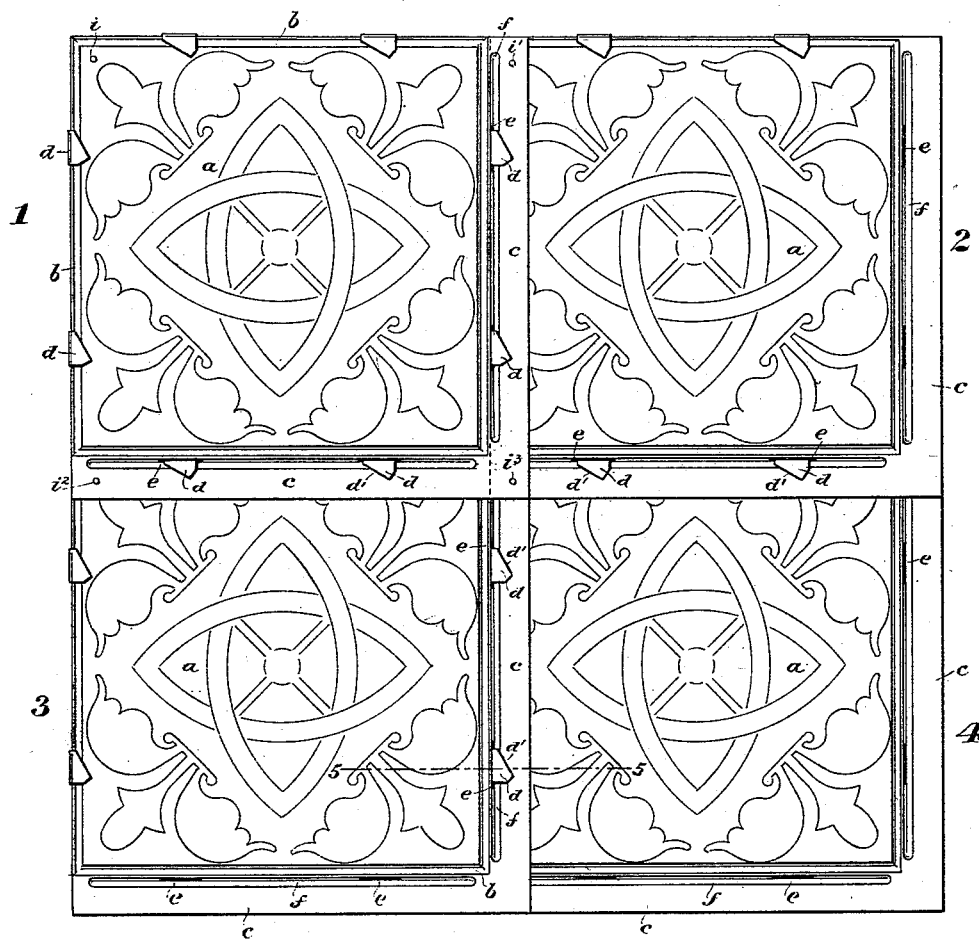


Fig. 5.



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UNITED STATES PATENT OFFICE.

ALFRED BOWERS AND GEORGE PETTIT, JR., OF BROOKLYN, NEW YORK.

SURFACE DECORATION.

SPECIFICATION forming part of Letters Patent No. 420,263, dated January 28, 1890.

Application filed March 1, 1889. Serial No. 301,662. (No model.)

To all whom it may concern:

Be it known that we, ALFRED BOWERS and GEORGE PETTIT, Jr., citizens of the United States, and residents of Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Surface Decorations, of which the following is a specification, reference being had to the accompanying drawings, forming part hereof.

This invention relates to decorations for surfaces; and it consists of an improved construction of the separate plates making up such a decoration. These improvements consist, essentially, in providing the separate plates with hooks and slots for joining them together, and with registering beads in combination therewith to insure their location in proper position.

In the accompanying drawings, Figure 1 is a front face view of a plate for surface decoration constructed according to our invention, and Fig. 2 is a section of the same on the line 2 2. Fig. 3 is a perspective view in section, showing a portion of a ceiling provided with our improved plates. Fig. 4 is a back face view of several of our plates joined together; and Fig. 5 is an enlarged section of a portion of the same on the line 5 5, Fig. 4.

The plates are composed of any suitable metal that can be made in plates sufficiently thin and strong. We have found tin-plate well adapted for the purpose, and the preferred form of ornamentation is by a suitable design in relief, as shown.

We will first describe the construction of the separate plates.

Each plate *a* is provided with a marginal registering bead *b*, extending entirely around it, and with flanges *c c*, extending beyond the registering bead *b* around half of the margin of the plate. Where the plate is rectangular, as shown, these flanges *c c* are provided at two adjacent sides of the plate. The remainder of the margin of the plate or the remaining two sides in the plate shown terminate at the registering bead *b*. The hooks *d d*, preferably made in one piece with the plate *a*, project from those sides trimmed close to the registering bead *b*. The hooks *d* are shown flat on the right-hand side of the plate in Fig. 1 as they are originally formed or cut out,

while those on the lower side of the plate are shown in both Figs. 1 and 2 bent under the plate in operative position. Each hook *d* is obliquely cut away or beveled on one side *d'*, the object of which will be hereinafter described. The counterparts of the hooks *d* are slots *e e*, formed in the plates near the edges at those sides provided with flanges *c c*. The slots *e* are of such size and shape as to receive hooks *d* of adjacent plates. The number of hooks and slots will depend upon the size of the plates *a* and other conditions. Two are shown at each side of plates *a*. A second bead *f* is shown on each of the sides, having slots *e* formed just outside of the bead *b*. These beads do not extend to the corners of the plates and are somewhat smaller than the beads *b*, so as to fit within the same and be concealed thereby when secured in place on the surface to be decorated, and the slots *e* are so located in the plates as to be formed in the inner inclined portions of the beads *b*, as clearly shown in Fig. 5. Thus the portion of the plate containing the slots *e* is inclined at a considerable angle to the ends of the hooks *d*, and a ready engagement of the hooks and slots thereby secured.

We will now describe the method of attaching the plates *a* to the surface to be decorated. This surface, if not suitable for the direct application of the plates, is prepared therefor by covering it with strips or boards, thus forming a wood sheathing or foundation. This sheathing can be secured directly to the beams of the building, as shown in Fig. 3, in which *g g* are the beams, and *h* is the wood sheathing. The plates *a* are then secured directly to this sheathing and at the same time joined together.

Fig. 4 shows a back face view of four plates *a*, joined together as in the finished ceiling or decorated surface. The plate numbered 1 is first applied to the sheathing and can be secured at one corner—the upper left-hand one in the drawings—by driving a nail *i* through the plate and into the sheathing. Other holding-nails may be inserted along the flanges *c*, if desired, as they will be concealed by adjacent plates. The next plate 2 can then be joined to the right-hand side of plate 1 by inserting its hooks *d* into slots *e* of plate

1 along this side. The bead *b* of plate 2 will then fit over the bead *f* of plate 1 and conceal the slots *e*, bead *f*, and flange *c*, and thus only two beads of uniform size and appearance will be exposed to view at each joint, as shown in Figs. 3 and 5. Moreover the fitting of the edge of the plate 2 against the bead *b* of plate 1 and of the hooks within the slots insures proper placing or registering of the plate 2 in relation to plate 1. A nail *i'*, inserted at the upper left-hand corner, will pass through both plates and the sheathing. The next plate 3 can then be joined to the lower side of plate 1 by inserting its hooks *d* into slots *e* of plate 1 along this side, and the nail *i'*, inserted through both plates, will hold plate 3 to the sheathing. In interlocking the fastenings of plates 1 and 2 the hooks at the left-hand side of 2 were inserted into the slots at the right-hand side of 1, and the hooks at the upper side of 3 into the slots at the lower side of 1; but it is evident that the hooks *d* of the next plate 4 must be inserted in the slots *e* at the lower side of 2, and also in the slots *e* at the right-hand side of 3. This is provided for by shaping one side *d'* of each hook *d* obliquely, as before described, which permits the hooks to enter the slots in an oblique direction. The hooks *d* of the plate 4 are inserted within the slots *e* of the plates 2 and 3 by moving the plate 4 in about the direction of a line bisecting the angle between the lower side of 2 and the right-hand side of 3. Thus the fastenings on both sides are simultaneously interlocked. This plate 4 at the upper left-hand corner overlaps the corners of the three other plates, so that a single nail *i'* in that portion will penetrate and hold all four plates.

The method of attaching the next two plates below 3 and 4 to 3 and 4, respectively, and to each other will be the same as that of attaching 3 and 4 to 1 and 2, respectively, and to each other. It is evident that this or a similar method can be followed in covering surfaces of any desired extent. In the surface covering thus produced the registering beads *b* of the plates will be side by side along each joint, the plates *a* will overlap at each joint, the flange *c* of each plate being concealed by the adjacent plate, and the plates will be joined together along their meeting sides or edges by the fastening-hooks *d*, engaged in slots *e*, and a single nail at each corner will be amply sufficient to hold the largest plates. The hooks *d* need not be bent around close to the plate, but may be comparatively open, so that they will readily enter the slots *e*. Then, after the plates have been secured together and to the sheathing or foundation, the hooks *d* may be tightly clinched, so as to firmly grip the plates by striking blows with a hammer upon the plates just over the hooks. A suitable tool shaped to fit over the beads may be interposed between the hammer and plates to prevent abrasion or injury to the plates.

Our interlocking fastenings and marginal registering beads provide a simple and efficient means for securing the plates to the sheathing or foundation in perfect alignment. The plates are held together during the process of applying adjacent plates, thus simplifying the work of attaching these plates to ceilings. The plates when applied are firmly united together, more thoroughly than in any other construction heretofore used.

In previous constructions it has been necessary to nail the plates along their edges, and this has required considerable labor in nailing, while the nail-heads have detracted from the appearance of the decoration. This has been especially objectionable in large plates; but by our invention a single nail at each corner is sufficient even with the largest plates, as the number of fastening-hooks *d* and eyelets *e* along each edge can be increased at pleasure without affecting the operation of the same in interlocking; hence the appearance is vastly increased, and a considerable saving of labor in nailing is effected by our improvements.

Having now described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A surface decoration composed of plates provided with fastening devices consisting of hooks and slots along their margins, the hook or hooks being attached to one plate and the slot or slots provided in the adjacent plate along adjoining edges, and such fastening devices extending entirely about the margins of the plates, substantially as shown and described.

2. A surface decoration composed of plates, in each of which plates half of the margin is provided with fastening-hooks for entering slots in adjacent plates, and the other half of the margin with slots for receiving the hooks of adjacent plates, substantially as shown and described.

3. A surface decoration composed of plates provided with registering beads about their margins and with a flange of one plate beneath the adjoining edge of the adjacent plate along each joint, a slot or slots in the flange, and a fastening hook or hooks along the edge of the adjacent plate engaged in said slots, substantially as shown and described.

4. A surface decoration composed of plates, each of which plates is provided with a registering bead about its margin, half of its margin terminating at the registering bead and being provided with fastening-hooks for entering slots in adjacent plates, and the other half having a flange extending beyond the bead and provided with slots for receiving the hooks of adjacent plates, substantially as shown and described.

5. A surface decoration composed of plates provided with registering beads about their margins and with a flange of one plate beneath the adjoining edge of the adjacent plate

along each joint, and another registering bead on the flange having a slot or slots formed in its inner inclined portions, and a fastening hook or hooks along the edge of the adjacent plate, substantially as shown and described.

6. A surface decoration composed of plates, each of which plates is provided with a registering bead about its margin, half of its margin terminating at the registering bead and being provided with fastening-hooks for entering slots in adjacent plates, and the other half having a flange extending beyond the registering bead and being provided with another registering bead or beads having slots formed in its or their inner inclined portions for receiving the hooks of adjacent plates, substantially as shown and described.

7. A surface decoration composed of plates, in each of which plates half the margin is provided with fastening-hooks for entering slots of adjacent plates, each hook being cut away or beveled at one side, and the other half of the margin with slots for receiving the hooks of adjacent plates, substantially as shown and described.

8. A plate for surface decorations, rectan-

gular in form, and provided on two adjacent edges with the fastening-hooks *d*, each cut away or beveled on the side *d'* and provided on the two other edges with the slots *e*, substantially as shown and described.

9. A plate for surface decorations, rectangular in form, provided with the marginal registering bead *b*, and having on two adjacent edges the fastening-hooks *d*, each cut away or beveled on the side *d'*, and on the two other edges the projecting flanges *c* and the slots *e*, substantially as shown and described.

10. A plate for surface decorations, rectangular in form, provided with the marginal registering bead *b*, and having on two adjacent edges the fastening-hooks *d*, each cut away or beveled on the side *d'*, and on the two other edges the projecting flanges *c* and the bead *f*, with slots *e*, formed in the inner inclined portions of bead *f*, substantially as shown and described.

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