

No. 641,364.

Patented Jan. 16, 1900.

A. BOWERS.
SURFACE DECORATION.

(Application filed Apr. 11, 1898.)

(No Model.)

Fig. 1,

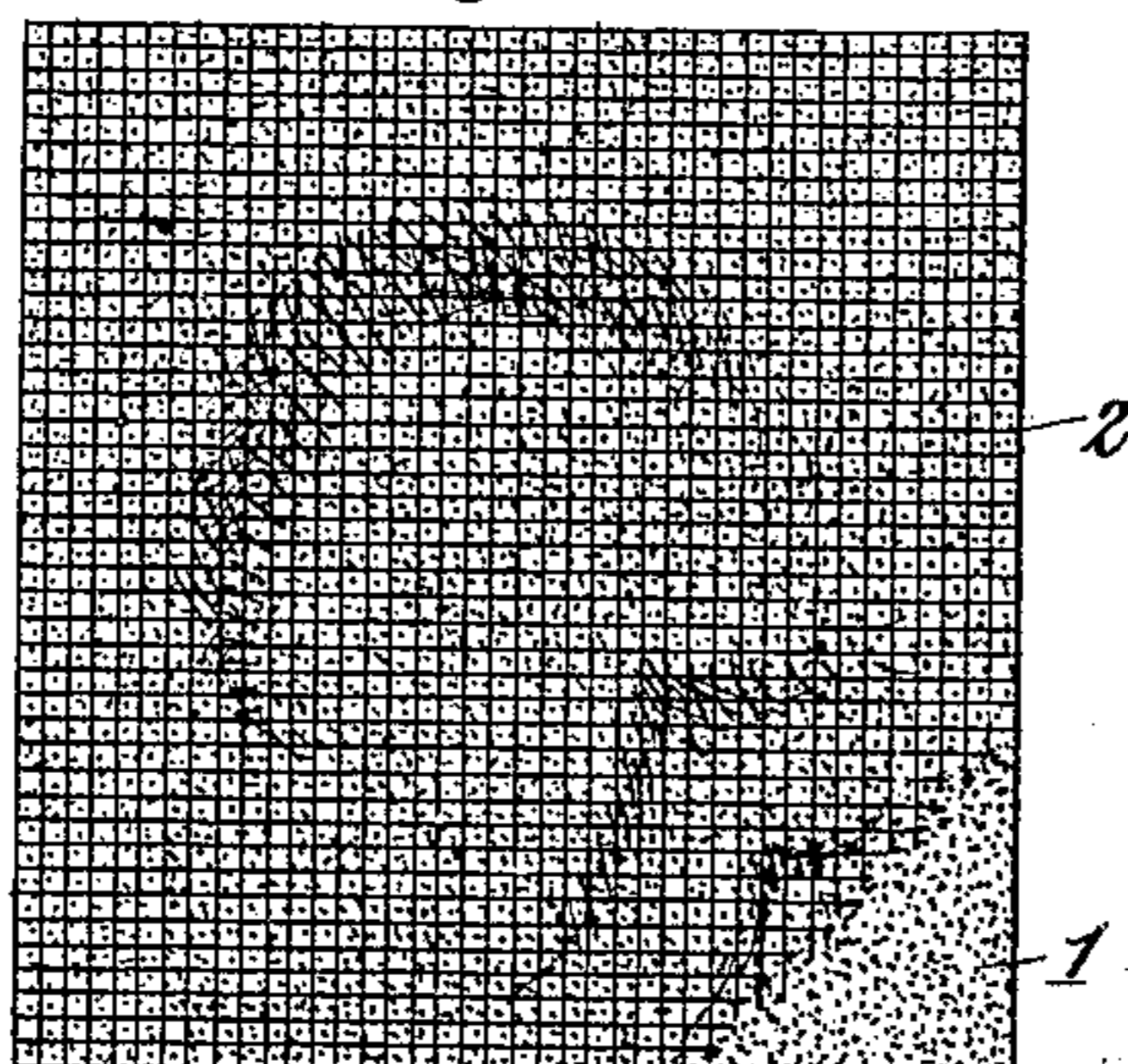


Fig. 2,



Fig. 3,

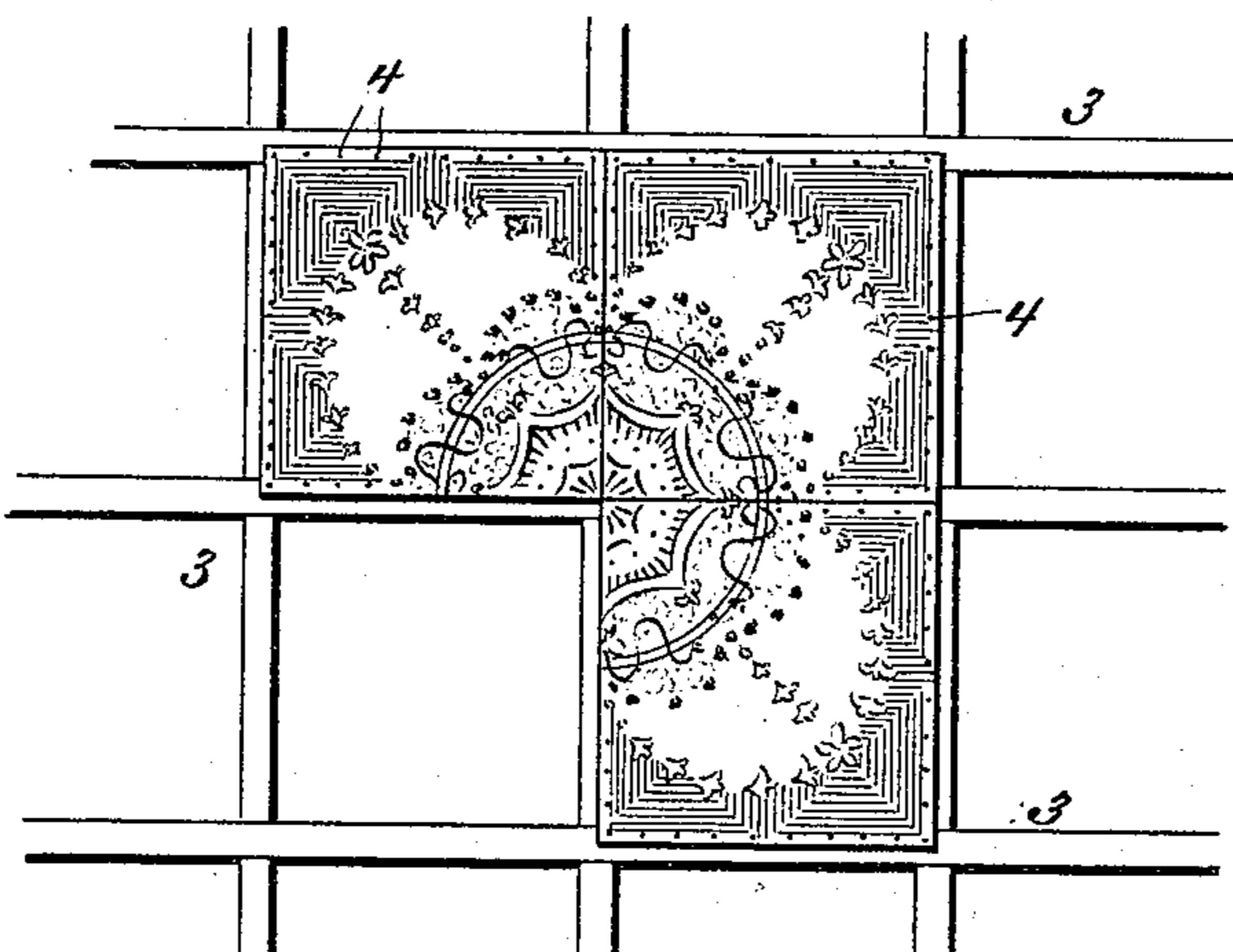
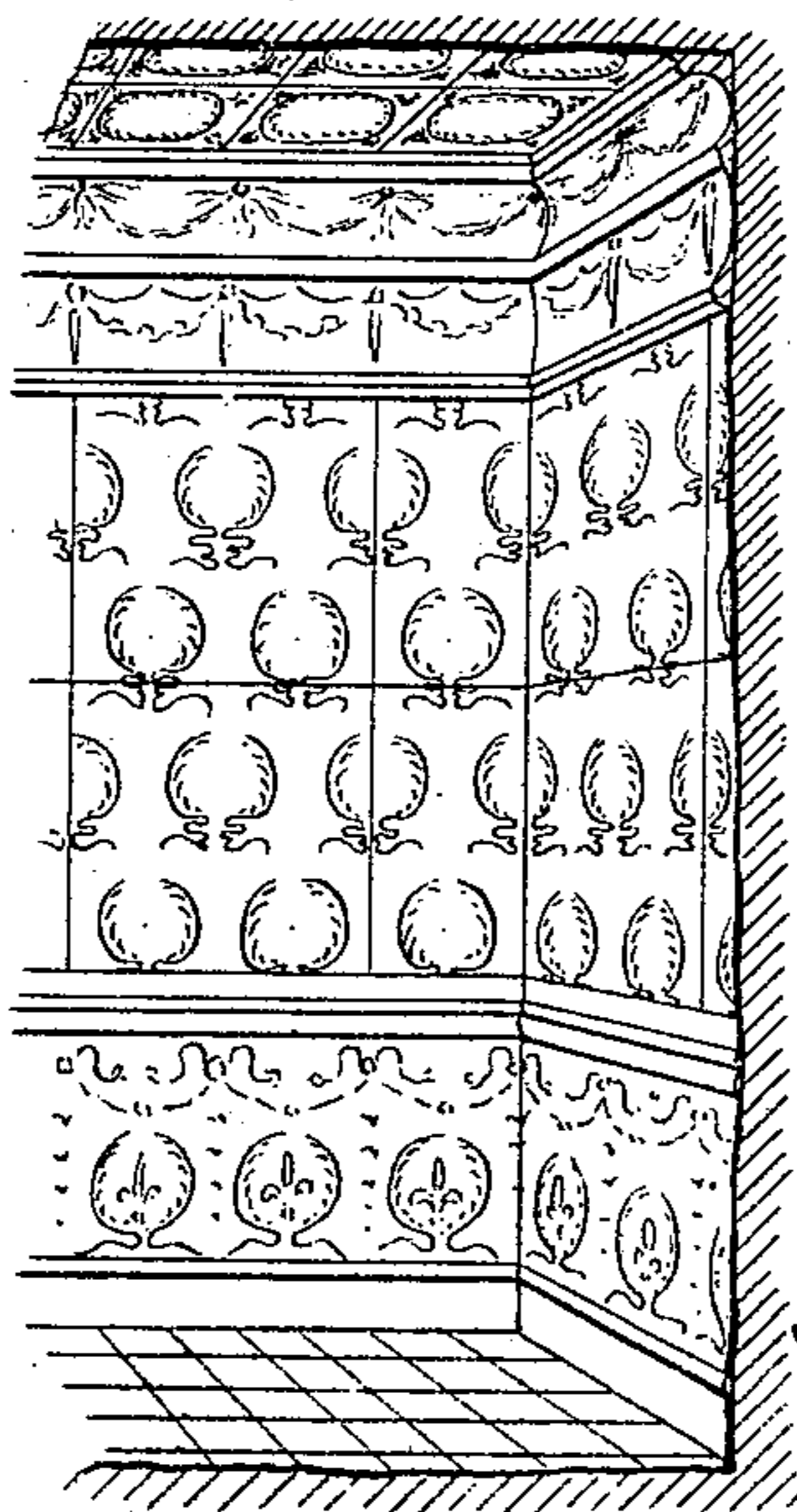


Fig. 4,



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ALFRED BOWERS, OF NEW YORK, N. Y., ASSIGNOR TO FRANK K. BOWERS,
OF SAME PLACE.

SURFACE DECORATION.

SPECIFICATION forming part of Letters Patent No. 641,364, dated January 16, 1900.

Application filed April 11, 1898. Serial No. 677,132. (No model.)

To all whom it may concern:

Be it known that I, ALFRED BOWERS, a citizen of the United States, and a resident of New York, borough of Brooklyn, county of Kings, and 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.

My invention relates to surface decorations, and has for its object the production of a surface decoration which shall have substantially the same appearance as expensive modeled plaster-work, but which shall be inexpensive and easily applied and less friable than plaster.

According to my invention a facing of thick paper is united by moisture and pressure to a backing of woven-wire cloth, and by such pressure the combined sheet or plate is embossed with an ornamental design in relief, the pressure being applied by suitable embossing devices and impressing the combined sheet or plate, so that the face and back are substantially parallel—that is to say, so that the wire-cloth backing follows the undulations and protuberances of the face of the decoration, so as to reinforce the paper throughout the entire decoration. The combined sheets or plates may be subjected to further treatment and applied to the surfaces to be decorated in the manner hereinafter particularly described with reference to the accompanying drawings, which illustrate decorations made in accordance with my invention.

Figure 1 is a rear view of a sheet or plate with the backing of wire-cloth partly broken away. Fig. 2 is a cross-section of the same. Fig. 3 is a plan view looking upward, showing three sheets or plates attached to a ceiling and the furring-strips arranged for attachment of other plates. Fig. 4 is a sectional perspective view showing a complete decoration including ceiling-plates, wall-plates, cornices, &c.

The facing 1 is made of thick paper—that is to say, of thick sheets of fibrous material made in substantially the same manner as paper, and my purpose is to employ for this facing a material composed largely or wholly of asbestos fiber and known as “asbestos” or “asbestos paper.” The backing 2 is made of

woven-wire cloth. The facing and backing are united by moisture and pressure, and the facing is brought to a soft and somewhat pliable condition by moistening it before applying the pressure. The pressure is applied by embossing devices, such as rollers or dies, whereby an ornamental design is produced in relief upon the face, and the back is shaped so as to be substantially parallel to the face, and thus the wire-cloth follows the undulations and projections of the face and reinforces all projecting and curved parts as well as all flat parts. The wire-cloth is stretched and made especially tight and stiff in the upwardly or inwardly pressed portions thereof back of the corresponding projecting parts of the face of the decoration, and thus the decoration is especially strong at these salient parts, as is desirable. The pressure of the rollers or dies causes the wire-cloth backing to be partially embedded in the back of the facing 1, so that the facing and backing are firmly united; but the wire-cloth being at the back will not be pressed through the paper by the stamping operation, and there is no danger of its appearing on the surface of the decoration or marring the appearance of the face of the decoration. After this procedure of embossing and uniting, the sheets or plates are dried, preferably by artificial heat and in an oven, and then both sides of the sheets or plates may be painted with a waterproof and fireproof paint, and after this coating has become dry and hard are ready for application to a surface to be decorated.

The sheets or plates as shown in Figs. 1, 2, and 3 are adapted for application to a wall or ceiling. They may be stamped in other than flat forms—as, for example, for cornices and mouldings, as shown in Fig. 4, they would be formed into the usual shapes of such parts of a decoration. They may be applied directly to a surface of plaster, brick, stone, or iron, uniting them thereto by a suitable cement, or they may be nailed to a wood backing or sheathing or to furring-strips suitably secured to the surface to be decorated. Fig. 3 shows a backing of furring-strips 3 3, which may be nailed or otherwise secured to a ceiling, and the plates are shown as secured to the furring-strips by nails 4 4, which may

be sunk below the surface and concealed or
faced by putty or otherwise. When applied
to a surface, the sheets or plates are placed
side by side with their edges abutting, and
5 after they have been secured in position the
joints may be filled or pointed up with a putty
of lead or plaster or other composition, and
thus a continuous and perfectly tight cover-
ing obtained. The surface may be finished
10 in oil or water colors, as may be desired, and
highly ornamental and pleasing decorations
obtained.

As the surface decoration made in accord-
ance with my invention makes a perfectly
15 air-tight covering and may be made in any
thickness desired, it may be applied in new
buildings without the necessity of plastering
the walls or ceilings. Although the surface
is perfectly tight and continuous, there is am-
20 ple provision in the curved and protruding
parts of the plates to take up expansion and
contraction, and there is therefore no liability
to opening of joints or straining or bulging
from this cause.

25 When the sheets or plates are secured to
the backing by nails, the nails will readily
penetrate the wire-cloth, and the nails will be
firmly held by the combined paper and wire-
cloth. These nails will not be drawn out by
30 the expansion and contraction of the sheets
or plates, since this expansion and contrac-
tion will be taken up in each sheet or plate
by the embossed portions. The wire-cloth

will hold the sheets or plates to the shape in
which they are embossed, so that they will 35
not be injured by any ordinary usage and will
not lose their shape by reason of moisture or
dampness should such moisture or dampness
penetrate the paper facing. The decoration
is perfectly fireproof when made of asbestos 40
and wire cloth and can stand a high degree
of heat without injury of any character.

The stamped designs may be in low or high
relief, as the material is quite pliable when
subjected to the action of the embossing de- 45
vices and may be stretched to a considerable
extent. The embossing devices also act to
tightly compress the material, especially at
the points of protrusion and recession.

Having now described my invention, what 50
I claim, and desire to secure by Letters Pat-
ent, is—

The process of making surface decorations
which consists in uniting a sheet of paper and
a sheet of woven-wire cloth and simultane- 55
ously impressing an ornamental design in re-
lief thereon with substantially parallel face
and back surfaces, by moistening the paper
and compressing and embossing the paper
and wire-cloth, substantially as set forth. 60

This specification signed this 4th day of
April, 1898.

ALFRED BOWERS.

Witnesses:

HENRY D. WILLIAMS,
HERBERT H. GIBBS.