No. 777,656. PATENTED DEC. 20, 1904.

B. BANNING.

MEANS FOR SECURING ENAMELED PLATES IN POSITION.

APPLICATION FILED DEC. 21, 1903.

NO MODEL.

Fig. 1

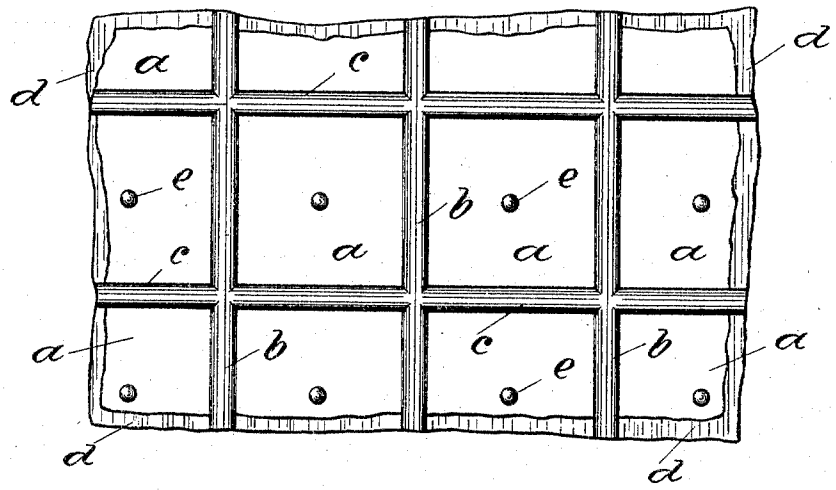


Fig. 2

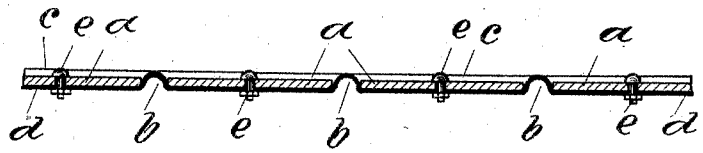
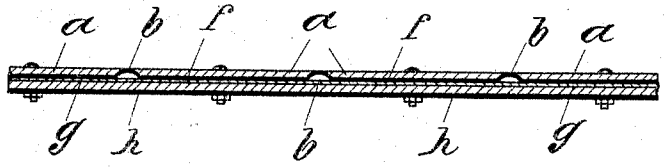


Fig. 3



Witnesses:
Harold Kirk
J. M. Wynkoop.

Inventor:
Bernhard Banning
By Knight Bros
Attorneys

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UNITED STATES PATENT OFFICE.

BERNHARD BANNING, OF LENGERICH, GERMANY.

MEANS FOR SECURING ENAMELED PLATES IN POSITION.

SPECIFICATION forming part of Letters Patent No. 777,656, dated December 20, 1904.

Application filed December 21, 1903. Serial No. 186,089.

To all whom it may concern:

Be it known that I, BERNHARD BANNING, a citizen of Germany, residing at Lengerich, Westphalia, Germany, have invented certain new and useful Improvements in Means for Securing Enameled Plates to Walls, Outsides of Stoves, Ranges, &c., of which the following is a specification.

My invention relates to a lining of suitable sheet metal by which to secure coverings of ornamental and other enameled metal plates to walls, the outside of stoves and ranges, &c.; and its objects are, first, the substitution of the expensive majolica tiles as ornament to the outside of stoves or to any other vertical surfaces by enameled metal plates; second, to remove certain difficulties by which former endeavors to substitute majolica by metal plates failed.

I attain my objects by the arrangement illustrated by the drawings herewith, in which—

Figure 1 is a face view of a side covering of enameled plates. Fig. 2 is a vertical section of such a coating; and Fig. 3, a similar coating with an additional layer of another material, such as asbestos.

The substitution of the expensive majolica tiles for the aforementioned purpose by enameled metal plates has hitherto proved impracticable, because the edges of adjoining plates could never be brought accurately in one plane, and consequently the cleaning of the thus-coated surface was much impeded and the joints were always dirty. Another disadvantage was that the enamel of the plates was too much exposed to injury by the adjoining plates colliding on an accidental unturning of the screw-bolts. I overcome these difficulties by providing a lining *d*, of any suitable sheet metal, to be attached to the outside of the range or stove or whatever wall or surface is to be ornamented with enameled plates and divide the said lining into squares or polygons or houses of any other shape. These houses I mark by pressing or stamping into the sheet or otherwise providing prominent ribs *b c*, which are so arranged that they form square, polygonal, or other frames of such size and form that the enameled plates fit accurately within those frames. The said sheet-lining may be made of any material—such as nickel, brass, or other metal—but preferably of sheet-iron, which may be coated on one side with such other metal, and it will be good to cover the ribs with such a coating to make them stronger and more enduring.

As shown by Fig. 2 of the drawings, the whole sheathing consists of the ribbed sheet-lining *d* and the enameled plates *a*, attached to the former by means of screw-bolts *e*; but, as Fig. 3 shows, there may be an additional layer of asbestos or other material between the said sheet *d* and the surface to be covered if, for instance, it is desired to secure a more effective isolation of the heat within a cooking-stove. In this case the screw-bolts may go through the plates, the sheet, the asbestos lining, and the side of the stove to be covered with the said sheathing.

I am aware that wall or stove coverings of enameled plates showing a division into squares by means of ribs have been already made; but with these coverings the ribs are stamped or pressed out, forming the edges or borders of the said plates, the edges or borders of the adjoining plates being laid upon each other, it being impossible, however, to avoid a slight protraction of the plates when they are manufactured, and, particularly when undergoing the enameling process, a tight fitting of the ribs lying upon each other can never be accomplished, and the manufacture and proper enameling of the plates is rendered difficult by the profile of the plates.

What I claim as my invention, and desire to protect by Letters Patent of the United States, is—

1. In a sheathing, the combination with a sheet-metal plate having a plurality of pockets pressed therein to form ribs between the pockets, of a plurality of plates shaped conforming to the shape of the pockets to rest snugly therein and means for securing the plates in the pockets, said means being adjustable to permit of the plates being removed from the pockets.

2. In a sheathing, the combination with a sheet-metal plate having a plurality of pockets pressed therein to form ribs between the pock-

ets, each of said pockets having an opening therein, of plates shaped conforming to the shape of the pockets to rest snugly therein, each of said plates having an opening registering with the pocket-opening and a series of bolts passing through said pocket-openings and plate-openings for securing the plates in the pockets.

3. In a sheathing, the combination with a sheet-metal plate having a plurality of pockets pressed therein to form ribs between the pockets, each of said pockets having an opening therein, of a plurality of enameled metal plates shaped conforming to the shape of the pockets to rest snugly therein, each of said plates having an opening registering with the pocket-opening and a series of bolts passing through said pocket-openings and plate-openings for securing the plates in the pockets.

4. In a sheathing, the combination with a sheet-metal plate having a plurality of pockets pressed therein to form ribs between the pockets, of a plurality of plates shaped conforming to the shape of the pockets to rest snugly therein, a backing-plate, a layer of insulating material between said sheet-metal plate and said backing-plate, and means for securing said plates in their pockets and for securing said backing-plate to said sheet-metal plate.

5. In a sheathing, the combination with a sheet-metal plate having a plurality of pockets pressed therein to form ribs between the pockets, of a plurality of enameled metal plates shaped conforming to the shape of the pockets to rest snugly therein, a backing-plate, a layer of heat-insulating material between said sheet-metal plate and said backing-plate, and a series of screw-bolts passing through openings in said enameled plates, said sheet-metal plate and said backing-plate for securing the said parts together.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

BERNHARD BANNING.

Witnesses:
PETER LIEBER,
EMMA HERBER.