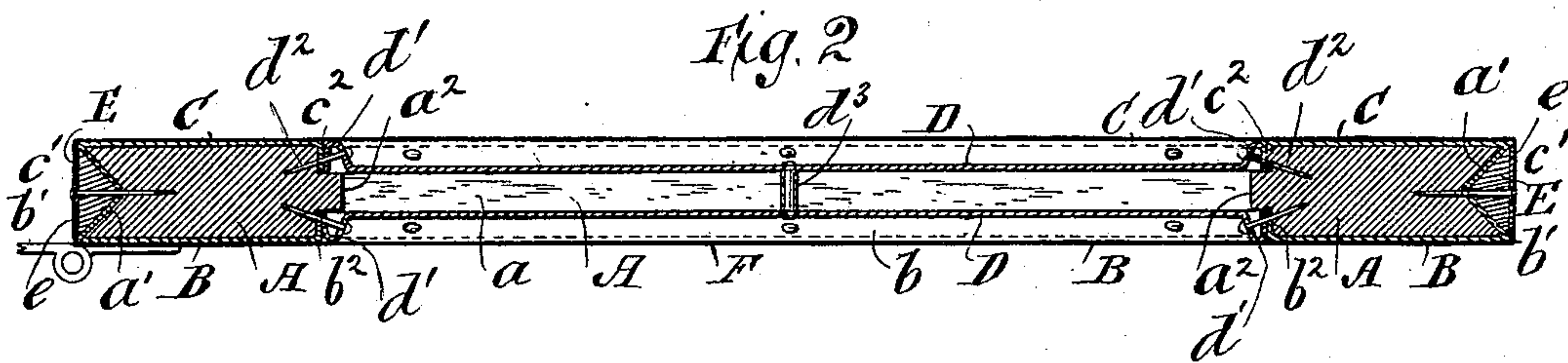
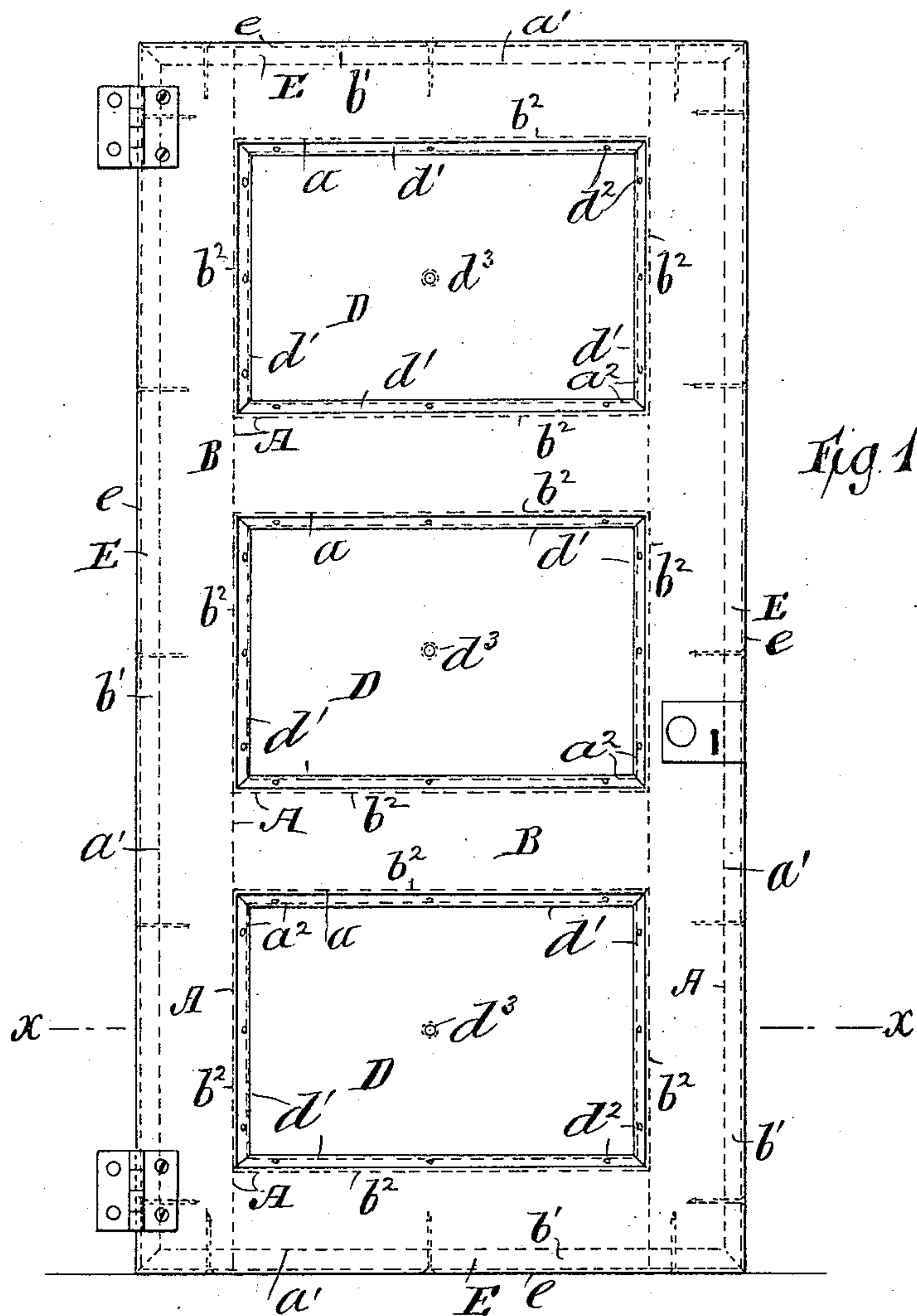


(No Model.)

J. W. RAPP.
DOOR.

No. 557,148.

Patented Mar. 31, 1896.



Witnesses,
Geo. Wadman.
Piercy L. Wells.

Inventor,
John W. Rapp,
by his attorney,
Edwin H. Brown

UNITED STATES PATENT OFFICE.

JOHN W. RAPP, OF NEW YORK, N. Y.

DOOR.

SPECIFICATION forming part of Letters Patent No. 557,148, dated March 31, 1896.

Application filed June 6, 1895. Serial No. 551,922. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. RAPP, of the city, county, and State of New York, have invented a certain new and useful Improvement in Doors, of which the following is a specification.

My invention is especially adapted to be used in connection with doors which are subjected to hard usage or exposed to high temperatures, which would tend to injure or destroy the ordinary form of wooden door; but it may also with advantage be employed in other instances where the same or similar conditions exist.

I will first describe a door embodying my invention, and will then point out the novel features in the claims.

The drawings represent such a door, of which Figure 1 is a front view, and Fig. 2 an enlarged cross-sectional view on the line xx of Fig. 1.

The door consists of an interior body portion or framework A, covered with sheet metal, the material and mode of construction of the body portion not being essential. The body in the drawings is shown as made up of two upright pieces joined together by horizontal tie-pieces, spaced so as to leave openings a adapted to receive panels. The edges of the body of the door are in the form of recesses a' , into which the sheet metal extends, as will hereinafter be described. These recesses are shown in the drawings as being V-shaped, but this is not essential.

B is a continuous sheet of metal covering the front of the body A and bent around at its outer edges, as shown at b' , Fig. 2, so as to extend into the V-shaped recesses a' and to approximately cover one side of the same. The metal sheet B is provided with openings b , arranged to coincide with the openings a , and is bent into projections b^2 , so as to fit over the edges of the openings a . It will thus be seen that the sheet of metal B will be held securely in place upon the surface of the door without attaching it thereto by means of nails or screws, although such mode of fastening may also be employed. Another sheet C of metal covers the back of the door and is shaped similarly at c' and c^2 to the sheet B, so as to fit into the opposite sides of the V-shaped recesses a' and the openings a . The

edges of the door are made square by means of four strips E, one for each edge, preferably covered with metal sheathing e and fitting closely into the V-shaped recesses a' , as shown in Fig. 2. These strips, as shown, are secured by nails properly spaced throughout their length and penetrating the body A at the vertex of the V-shaped recesses a' ; but other suitable methods of attachment may be adopted.

In order to panel the openings a , the following construction (shown in the drawings) may with advantage be employed: Tongues a^2 attached to the body A of the door and extending between the projections b^2 and c^2 project into the openings a and serve as supports for metal plates D, which fit closely in the openings, there being two plates fitted into each opening a , one from each side of the door. The plates D may be formed so as to represent a flat panel surrounded by molding-strips d' , as here represented, or may be of any suitable pattern. Nails d^2 are shown as passing through the molding-strips d' into the body A of the door to hold the panels in place; but other suitable modes of attachment may be used. These nails d^2 may with advantage pass through the projections b^2 and c^2 of the metal plates B and C, and thus more effectually secure the same in place. A hollow stud d^3 , through which passes a rivet, is shown as interposed between the plates D of Fig. 2 in order to strengthen them sufficiently to allow of the use of thin material in their construction.

A door constructed as above described will resemble in some respects an ordinary door, but will be much strengthened by the metallic covering, and will, among other advantages, resist high temperatures and severe usage. It will be evident from the foregoing that no seams will be visible on the door.

A facing or veneering F of paper, wood, or other desirable material may be applied to the face of the door.

Having now described an article embodying my invention, and without limiting myself to this special application or construction of the same, what I claim as new, and desire to secure by Letters Patent, is—

1. A door comprising an interior framework or body portion, a facing or sheathing

of sheet metal applied to the surfaces of the interior framework and provided with openings corresponding to the door-panels and independent panel-like pieces fitting into and
5 secured in said openings, substantially as specified.

2. A door comprising an interior framework or body portion provided with recessed edges, a facing or sheathing of sheet metal
10 applied to the surfaces of the interior framework and provided with flanges extending into said recesses, the facing or sheathing having openings corresponding to the door-panels, strips fitting into and conforming to
15 said recesses, and independent panel-like pieces secured in the openings in the facing or sheathing, substantially as specified.

3. The combination with the framework or body portion of a door provided with openings corresponding with the door-panels and
20 having tongues extending into these openings, of a facing or sheathing of sheet metal applied to the surfaces of the door and having openings corresponding with those of the framework, and independent panel-like
25 pieces fitting into and secured in said openings, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. RAPP.

Witnesses:

PIERSON L. WELLS,
CAROLINE E. DAVIDSON.