A. O. KITTREDGE.

SHEET METAL DOORS.

No. 183,940. Patented Oct. 31, 1876.

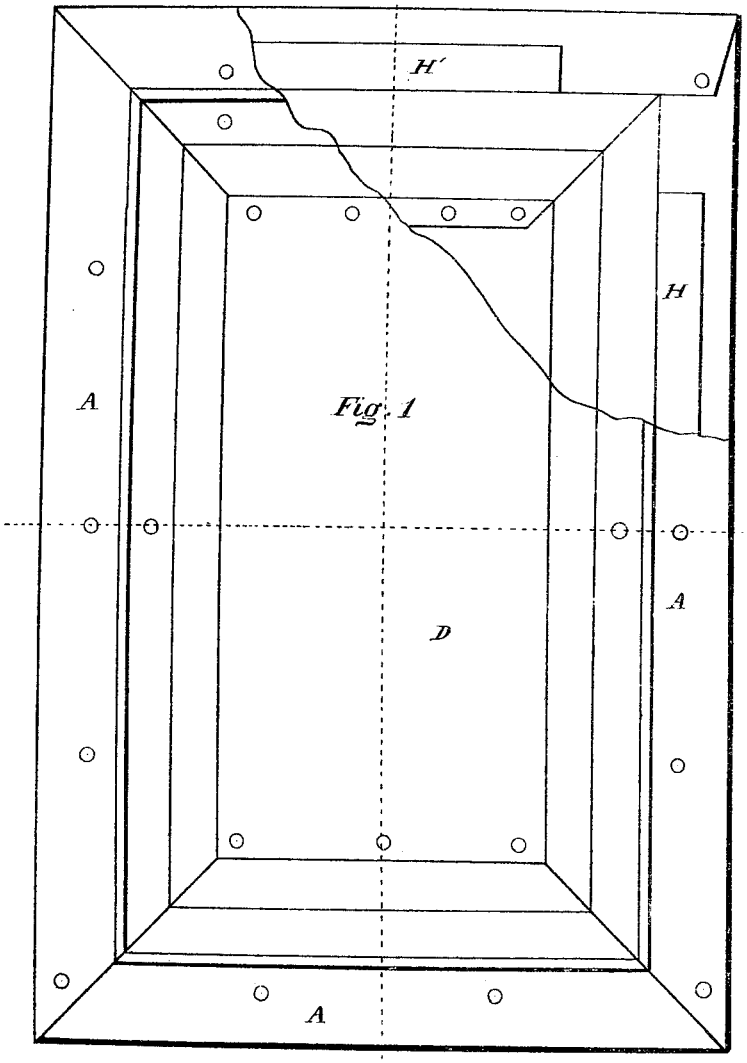


Fig. 1

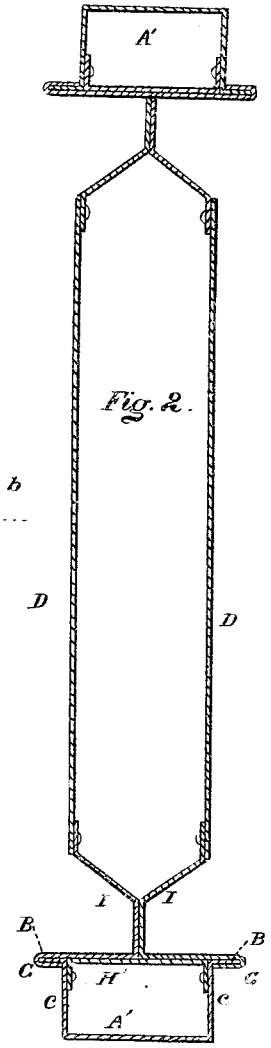
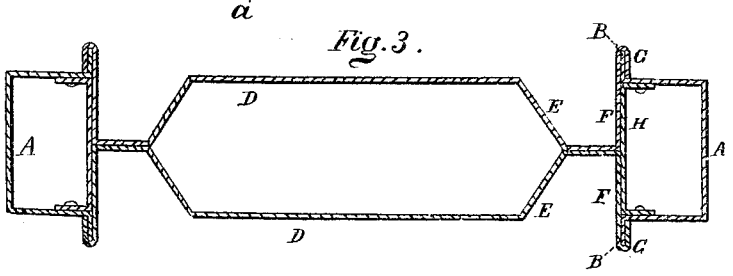


Fig. 2.

Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

ANSON O. KITTREDGE, OF SALEM, OHIO, ASSIGNOR TO KITTREDGE CORNICE AND ORNAMENT COMPANY, OF SAME PLACE.

IMPROVEMENT IN SHEET-METAL DOORS.

Specification forming part of Letters Patent No. **183,940**, dated October 31, 1876; application filed April 15, 1876.

To all whom it may concern:

Be it known that I, ANSON O. KITTREDGE, of Salem, in the county of Columbiana and State of Ohio, have invented a certain new and Improved Sheet-Metal Door; and I do hereby declare that the following is a full, clear, and complete description thereof, reference being had to the accompanying drawings, making a part of the same.

Figure 1 is a side view of the door. Fig. 2 is a longitudinal section. Fig. 3 is a transverse section.

Like letters of reference refer to like parts in the several views.

This invention consists of a sheet-metal door, the construction of which is as follows: Each side and end of the door-frame consists of a single piece of sheet metal, bent at right angles to form the thickness of the frame, as will be seen at A, Figs. 2 and 3, which represents transverse and longitudinal sections, indicated by the lines *a* and *b*. The two sides *c* of the frame are turned outward at right angles, forming flanges B, whereby the panels are secured to the sides of the frame by having the sheet of metal forming the panel wide enough to admit of being depressed at E, Fig. 3, to form the emboss of the panel, and extend to the edge of the frame, at which point it is turned at right angles to form the flanges F, the extreme edges of which are turned back upon themselves, making a return bend or lock, G, in which is received the flanges B of the door-frame. as will be seen in Fig. 3, representing a transverse section of the door in direction of the line *b*. To strengthen the connection of the sides of the door-frame and the panel, a channel-iron, H, is fitted between the sides of the frame and riveted thereto, as shown in said Fig. 3. The ends of the panel do not reach to the frame, but are connected thereto by fillets I I, Fig. 2. Said fillets correspond in shape and position to the depressed sides E of the panel to form the emboss center thereof. The inner edges of the fillets are riveted to the edge of the raised part or boss of the panel, whereas the outer edge is bent in the same manner as the external sides of the panel above described, and which in the same way forms a return bend, G, in which the flanges B are received and secured, as above described, and shown in the drawings. To further strengthen the connection of the fillet with the frame is the purpose of the channel-iron H′, which has the same relation to the ends of the frame of the door and the panel as the channel-iron H above referred to.

A door constructed of sheet metal, as above described, has all the appearance of a heavy massive door, and at the same time possesses lightness, strength, and durability.

What I claim as my invention, and desire to secure by Letters Patent, is—

A sheet-metal door constructed substantially as herein described, viz., consisting of the frame A, panels D, fillets I, and channel-irons H H′, for the purpose specified.

ANSON O. KITTREDGE.

Witnesses:

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