

(No Model.)

2 Sheets—Sheet 1.

J. H. NOLAN.
FIRE PROOF SAFE.

No. 268,818.

Patented Dec. 12, 1882.

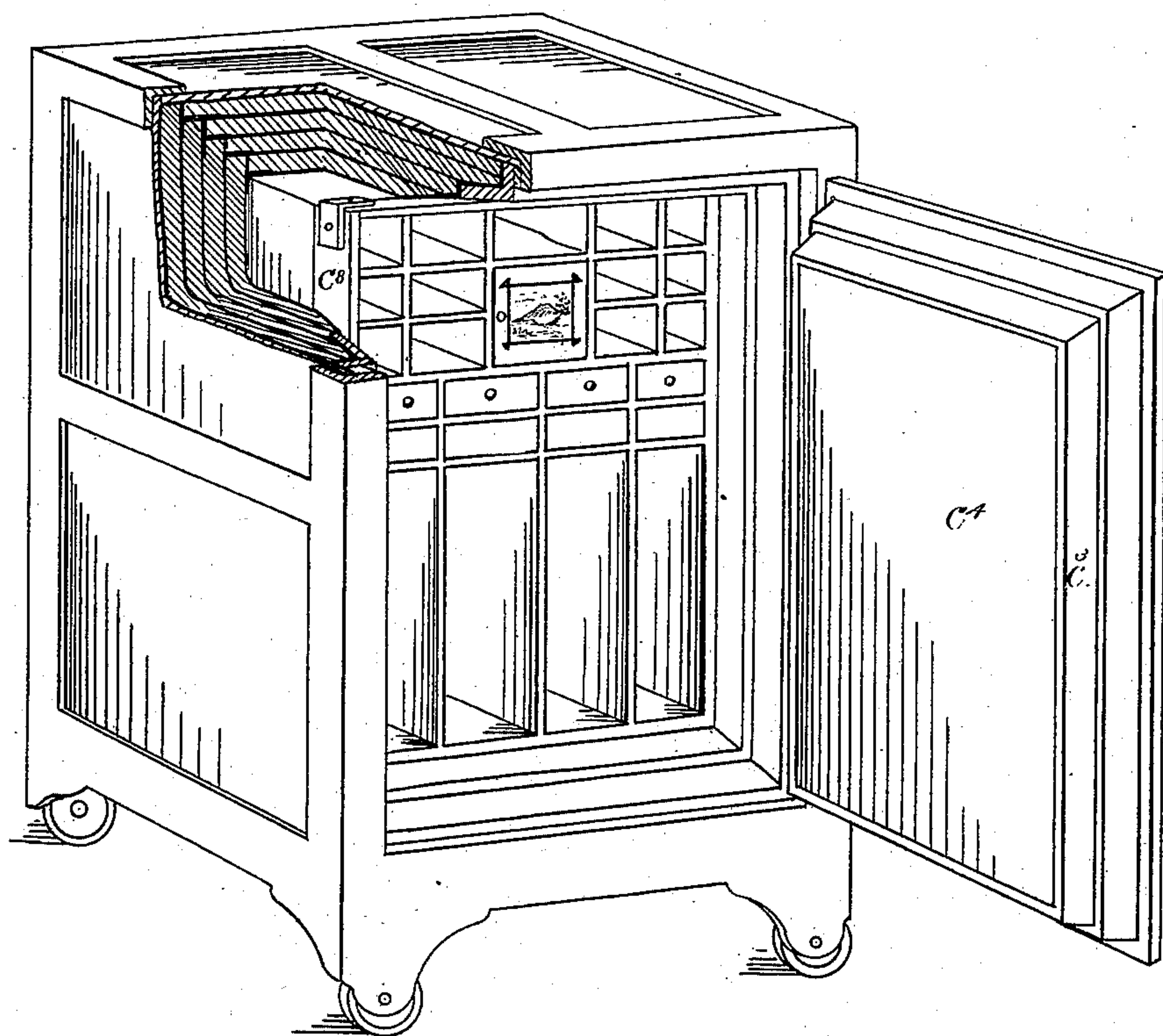


Fig. 1.

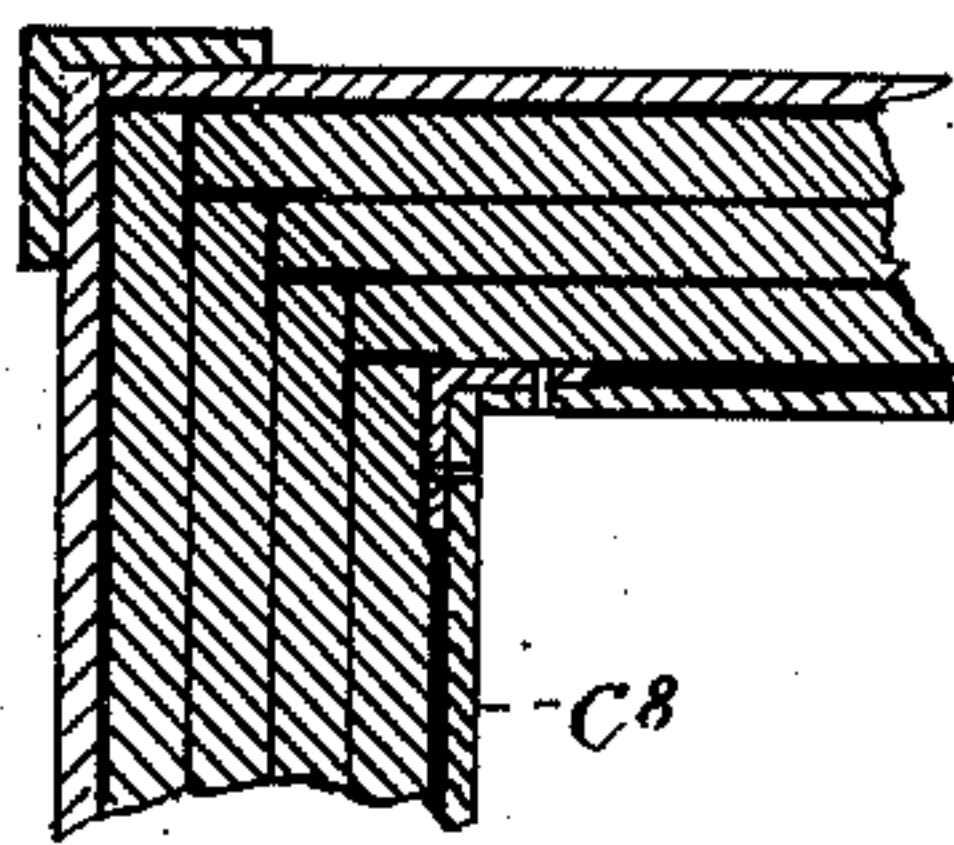


Fig. 2.

WITNESSES

A. H. Raymond & Co.
Willard L. Fogg

INVENTOR

John H. Nolan

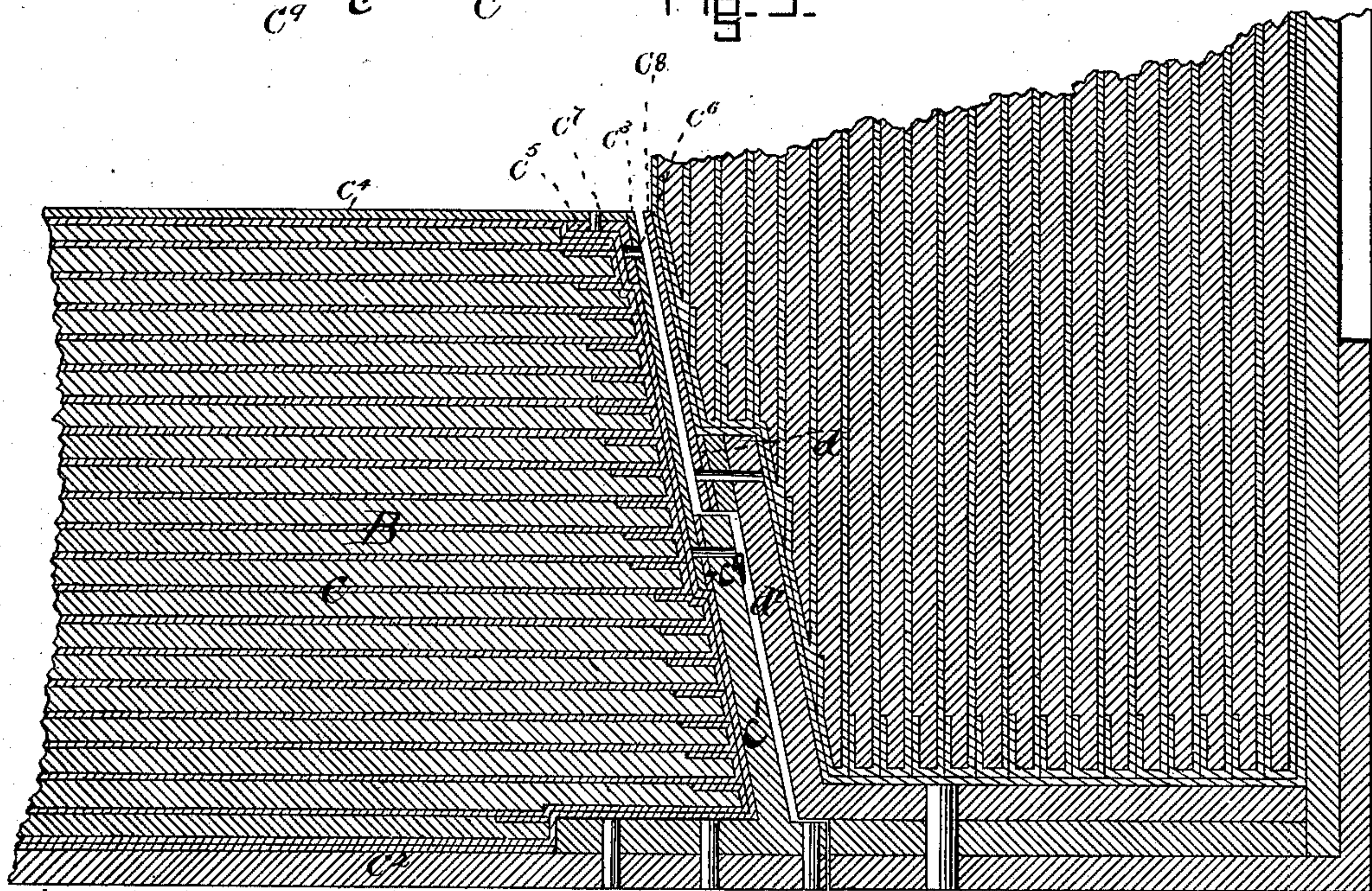
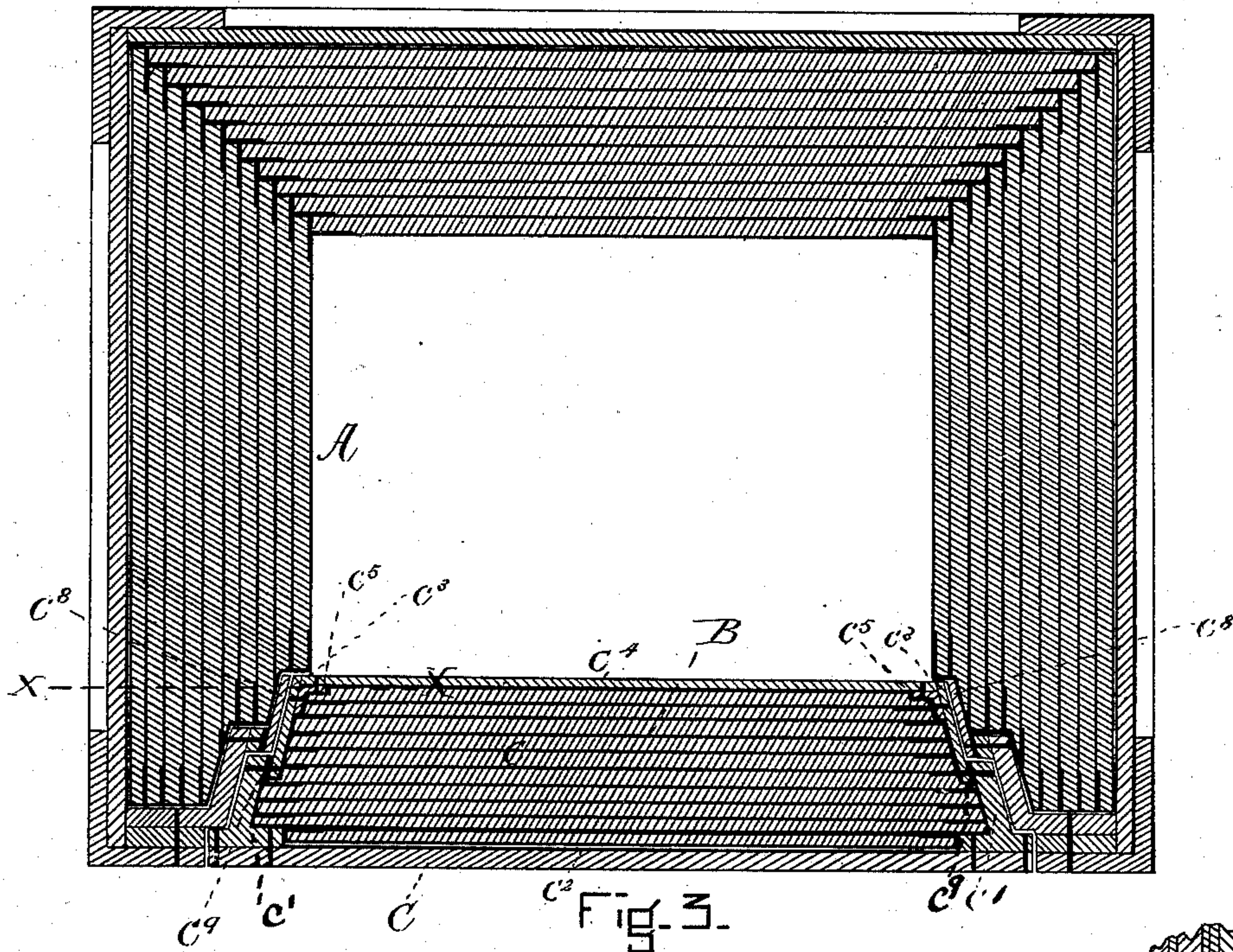
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Fig. 4.

INVENTOR

John H. Nolan

UNITED STATES PATENT OFFICE.

JOHN H. NOLAN, OF BOSTON, MASS., ASSIGNOR, BY MESNE ASSIGNMENTS,
TO THE MAGNESO CALCITE FIRE-PROOF COMPANY, OF SAME PLACE.

FIRE-PROOF SAFE.

SPECIFICATION forming part of Letters Patent No. 268,818, dated December 12, 1882.

Application filed February 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. NOLAN, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States,
5 have invented a certain new and useful Improvement in Fire-Proof Safes, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature, in which—

Figure 1 is a perspective of a safe containing my invention with the door open. Fig. 2 is a vertical section of a portion of the framework of the safe about the door, at the corner.
15 Fig. 3 is a horizontal section of the safe; and Fig. 4 is an enlarged view of a part of the door and casing adjacent thereto, further illustrating the construction.

This invention relates especially to the construction of the safe-door and the parts about it, whereby the space which it is necessary to have about the door when closed to enable it to be swung out and in easily and to provide for the contraction and expansion of the metal,
20 may be sealed or closed by the swelling action of the fire-proof material under the action of high temperature.

In the drawings, A represents the body of the safe. B is the door. It is hinged in any
30 desirable way to the body of the safe, and it is made up of the metal casing C and the fire-proof filling or material c.

The plates c' c^2 of the door may be united in any desirable way, and the plates c' have
35 extending inwardly a thin plate, c^3 , to which the thin inner plate, c^4 , is fastened by means of the angle-irons c^5 and rivets c^6 c^7 , which rivets, or either series thereof, are made of a metal which fuses at a comparatively low temperature. This construction allows the expansion of the fire-proof material under heat to force outwardly the plates c^3 against the plates c^8 , thereby sealing effectually the joint between the door and the body of the safe.

45 Fire-proof material c^9 , like that described in one of my applications for Letters Patent of even date with this, or of a kindred nature, may be interposed between the plates c' c^3 .

Various equivalents to attain the object of this invention may be mentioned, among which
50 are the following: Instead of using fusible rivets for uniting the plates c^4 and c^3 , the said plate c^4 , or the angle-iron, or both, may have slots, through which the rivet extends, whereby upon the expansion of the material the said
55 plates c^3 may be moved in relation to said plates c^4 ; or the plates c^8 of the body of the safe, which surround the door, may be made thin and so fastened to the body of the door by fusible plugs or in any other equivalent way as to yield or
60 give outwardly toward the door on the expansion of the fire-proof material. As with the door, I interpose, to prevent metallic contact, the fire-proof material d between the plate c^8 and the plate d' . This insulation of the inner
65 plates I deem of considerable importance, as it is very desirable that the heat be not transmitted to the interior of the safe even in so minor a degree as that which would occur by conduction if the parts of the door and door-
70 frame were not separated from each other in this manner.

I am aware that soapstone has been used to prevent the heat from entering between the door and casing; also, that a strip of mica,
75 either alone or in connection with a strip of fusible metal, has been used for the same purpose in safes lined or stuffed with cement. I do not claim such, as my invention differs materially therefrom. My devices used are
80 different, and are more particularly designed for safes lined and protected by a fire-proof material similar to that described in my application for Letters Patent of the United States filed February 23, 1882.

85 Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a fire-proof safe, the combination of the door-plates c' c^3 with the opposite and adjacent frame-plates, c^8 , adapted to be closed upon each other by the expansible fire-proof filling c under heat, all substantially as and for the purposes described.

2. In a safe or other fire-proof receptacle
95 lined or filled between the outer and inner

plates with expansible fire-proof material, the plates $c' c^3$, resting upon and separated by and in combination with the expansible fire-proof material $c c^9$, all arranged substantially as and
5 for the purposes set forth.

3. In a safe or fire-proof receptacle, the door B, having the plates $c' c^2$, in combination with

the plates $c^3 c^4$ and the angle-irons c^5 , adapted to be secured by fusible rivets $c^6 c^7$, all substantially as and for the purposes set forth.

JOHN H. NOLAN.

Witnesses:

F. F. RAYMOND, 2d,

W. C. FOGG.