L. H. Miller,

Burglar-Proof Safe.

No. 25,906. Patented Oct. 25, 1859.

Fig. 1

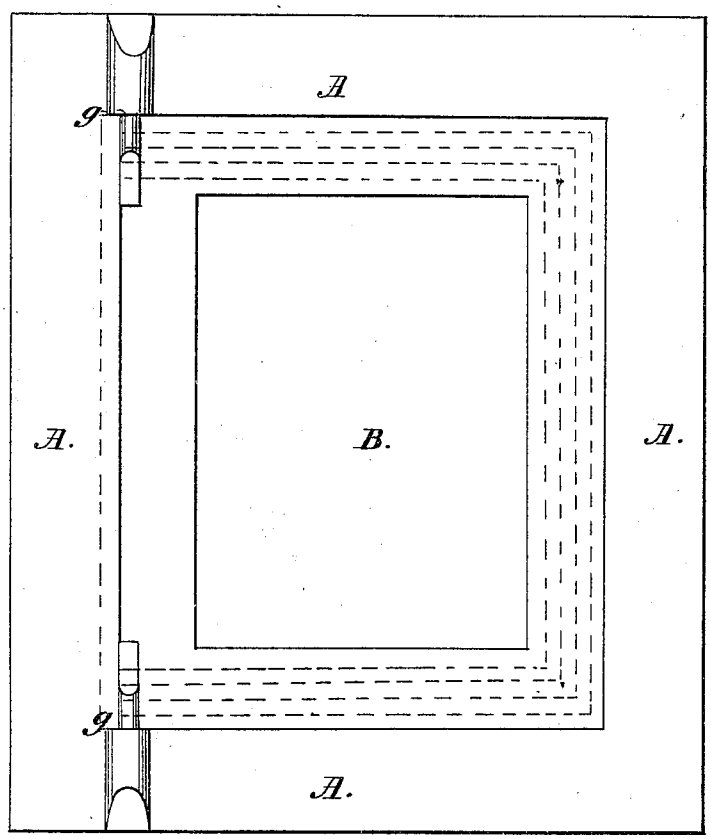


Fig. 2.

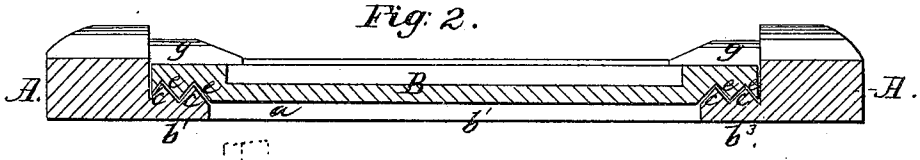
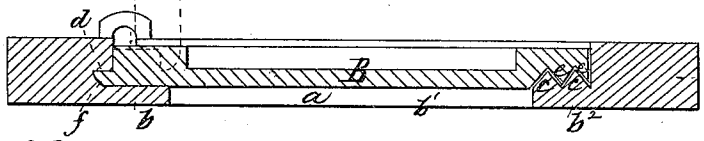


Fig. 3



Witnesses

Goodwin & Wheeler

W. Y. Wheeler

Inventor:

L. H. Miller

AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

L. H. MILLER, OF BALTIMORE, MARYLAND.

DOOR FOR IRON SAFES.

Specification of Letters Patent No. 25,906, dated October 25, 1859.

To all whom it may concern:

Be it known that I, L. H. MILLER, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Doors for Iron Safes and Bank-Vaults; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1, is a front view showing the manner of arranging the door on a safe. Fig. 2, a vertical section, and Fig. 3, a transverse section of the same.

Similar letters of reference, in each of the several figures indicate corresponding parts.

In the construction of iron safes and bank vaults, it is very important to have the joints or crevices between the door and the sides, top and bottom of the opening in the front plate, water, dust, steam, fire, smoke and powder proof, but up to the present time, much difficulty has been experienced in effecting this object, without subjecting the merchant or the banker to much inconvenience in opening the door, owing to the necessity of having the door made with bevel edges and fitted so tight that it binds on all sides, when shut, to such an extent, that considerable force must be expended to open and close it.

My invention is designed to render the joint or crevices between the sides, top and bottom of the door, water, dust steam, fire, smoke and powder proof as far as practicable without the use of packing, and at the same time avoid the inconveniences from bind between the sides, top and bottom of the door and the front plate, as hereinafter described.

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

A, represents the front plate of an iron safe. In this plate an opening *a*, is provided for the reception of the door. This opening is bound all around nearest its inner face with a thin flange *b*, b^1, b^2, b^3, which decreases its size at the point where it leads into the chamber of the safe considerably. The top and bottom and front portions b^1, b^2, b^3 of the flange have one or more V-shaped moldings *c*, *c*, formed on their outer faces, said moldings extending from top to bottom and from side to side of the opening, as shown in red lines in Fig. 1, the back portion *b*, of the flange being made plain on its outer face as shown in Fig. 3. This portion is made wider than the other portion by reason of a groove *d*, being formed in the back edge of the plate inclosing the opening *a*, as shown.

B, is the door, it is made with its edges square so as to fit easily in the opening *a*. On the inner face of the door, near the top, bottom and front edges, one or more V-shaped grooves *e*, *e*, are formed. At the back edge, nearest the inner face, a tongue or bead *f*, is formed. The door thus constructed is hinged to the front plate of the safe, as shown at *g*, *g*, in Fig. 1.

From the above description, it will be seen that when the door of the safe is closed, the tongue or bead *f*, will enter the groove *d*, and the V shaped grooves *e*, *e*, will receive the V shaped moldings *c*, *c*, of the flanges as represented in Figs. 2 and 3, and thus the joint or crevices between the door and the inner edges of the front plate will be effectually closed up. The indirect course that the dust, water, powder, smoke, fire or steam are compelled to take, before they enter the safe, will, to a very great extent, save the contents of the safe from their destructive influence.

It will be evident that water and dust will lodge in their course in the V grooves, in the flange and door, and between the tongue and groove *d*, *f*. It will also be evident that it will be almost impossible to introduce grains of powder into the safe, as the same will lodge in the V grooves in its passage to the opening *a*. The same obstruction will be offered to fire, smoke or steam.

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

The combination of the tongue *f*, groove *d*, flanges *b*, b^1 b^2 b^3, V shaped moldings *c*, *c*, and V shaped grooves *e*, *e*, in the construction of a fire proof safe or bank vault, substantially in the manner and for the purpose herein described.

The above specification of my impt. in doors for safes, vaults, &c. signed by me this 27th day of September 1859.

L. H. MILLER.

Witnesses:
GOODWIN Y. AT LEE,
R. W. FENWICK.