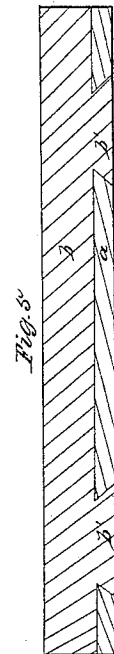
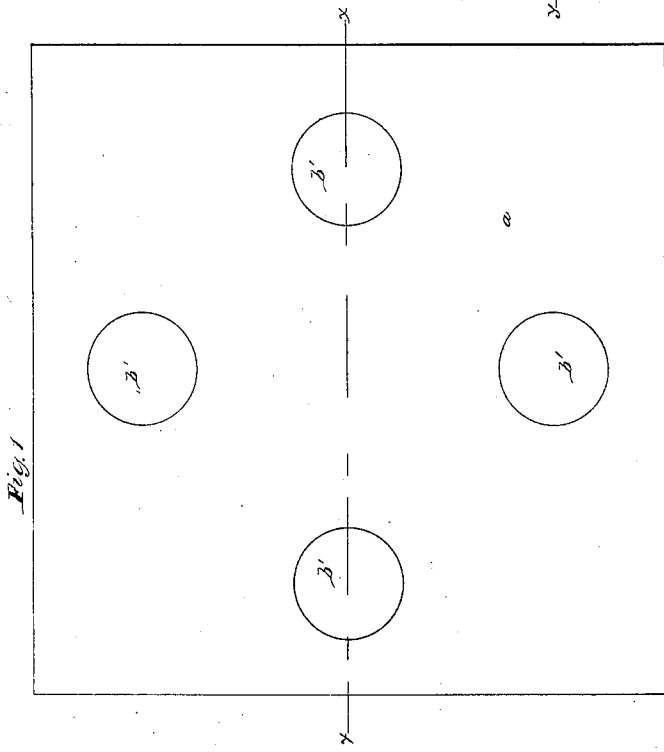
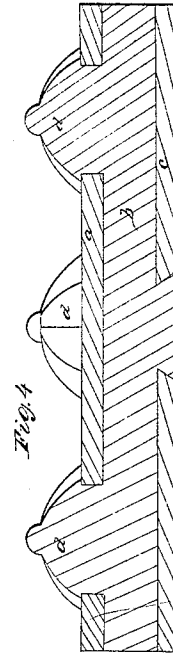
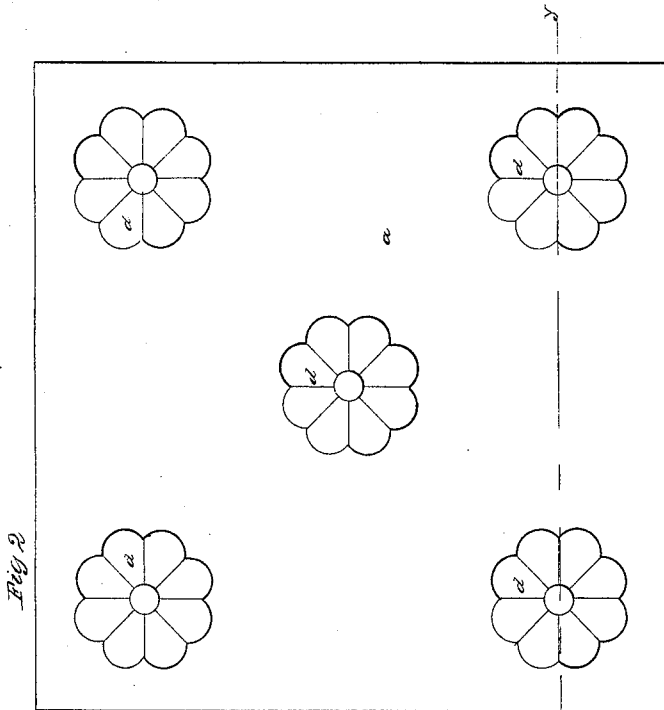


I. L. Cadiz,

Burglar-Proof Safe.

N^o 20,989.

Patented July 27, 1858.



Wrought-iron, and the metal filling cast between them.

UNITED STATES PATENT OFFICE.

I. L. CADY, OF NEW YORK, N. Y., ASSIGNOR TO J. B. AND W. W. CORNELL & CO.

PLATE FOR BURGLAR-PROOF SAFES.

Specification of Letters Patent No. 20,989, dated July 27, 1858.

To all whom it may concern:

Be it known that I, IRA L. CADY, of the city, county, and State of New York, have invented a new and improved method of combining a stratum of chilled molten iron with a face plate or plates of wrought-iron for the purpose of forming a burglar-proof plate to be used in the construction of safes, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figures 1 and 2 being side views of my improved burglar-proof plate; Fig. 3, a section in the line *x x* of Fig. 1; Fig. 4, a section in the line *y y* of Fig. 2; and Fig. 5 a section of a burglar-proof plate composed of a layer of molten iron combined with a single plate of wrought-iron.

The wrought iron plates *a c*, which I use either jointly or singly with a stratum of molten iron, in the formation of the said burglar-proof combination plate, I perforate with a suitable number of flaring apertures, and then I combine either one or both of said plates with a mold in such a manner that the enlarged sides of the apertures therein will be outward, and will be outwardly closed by metallic stoppers. When two of said plates are used in the formation of one of my improved burglar-proof combination plates, they must be placed at a suitable distance from each other in the mold, and the space between their extreme outer edges must be closed with a filling of either sand or metal. When but a single wrought iron plate is used in the process of forming one of my said burglar-proof combination plates, the said wrought iron plate must be combined with a mold in such a manner that the flaring sides of the apertures therein will be outward, and will be closed outwardly by suitable stoppers, while a sufficient amount of space is left between the inner side of said plate and the opposite side of the mold to

receive the required stratum of molten iron. It will therefore be perceived that the surface of the layer (*b*,) of molten iron which is in contact with the wrought iron plate, will be chill-hardened, and the conical shape of the portions *b'*, *b'*, of the said layer of molten iron which fill the apertures in the said wrought iron plate, will inseparably unite the said strata of molten and wrought iron into a single burglar-proof plate.

If deemed preferable, each aperture in either of the wrought iron plates may be outwardly closed by a metallic cap, instead of a flat stopper, when the said plate is combined with the mold for the reception of the layer of molten iron; the said caps may be of such a shape as to form ornamental studs, on the face of the said wrought iron plate, of the shape shown in Figs. 2, and 4, or any other desired shape.

When the melted metal is allowed to pass through one of the wrought iron plates and form studs upon the face thereof, the apertures in said plate should have parallel sides, as shown in Fig. 4, for the purpose of preventing the shanks of said studs from breaking at their innermost ends, in case a burglar should succeed in producing a fracture thereof by hammering upon said studs.

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

Forming a burglar-proof combination plate by the union of a stratum of molten iron with one or two perforated face plates of wrought iron substantially in the manner herein represented and described.

The above specification of my improvement in the sides, doors &c. of burglar-proof safes &c., signed and witnessed this 24th day of May 1858.

IRA L. CADY.

Witnesses:

WILLIAM H. MOTT,
THOS. CROCKER.