

L. Eidlitz,
Burglar-Proof Safe.

N^o 18,962.

Patented Dec. 29, 1857.

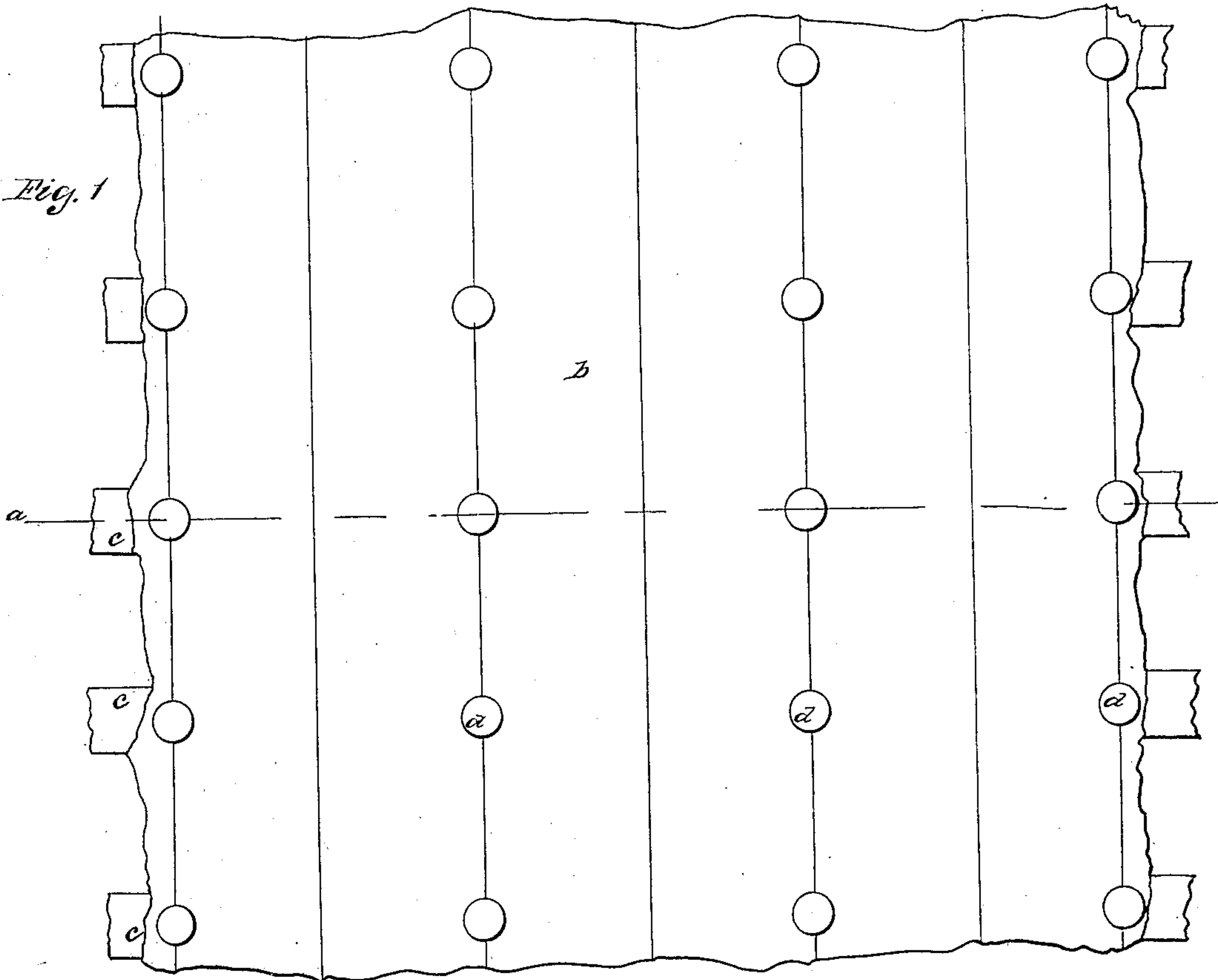
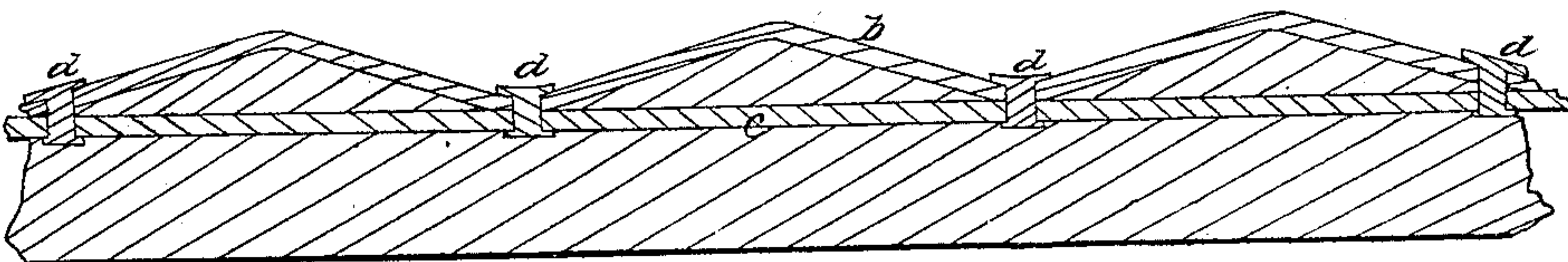


Fig. 2



UNITED STATES PATENT OFFICE.

LEOPOLD EIDLITZ, OF NEW YORK, N. Y.

IMPROVEMENT IN BURGLAR-PROOF SAFES.

Specification forming part of Letters Patent No. **18,962**, dated December 29, 1857.

To all whom it may concern :

Be it known that I, LEOPOLD EIDLITZ, of the city, county, and State of New York, have invented a new and Improved Method of Manufacturing Burglar-Proof Metallic Plates Suitable for the Doors and External Casings of Safes; 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.

Figure 1 is an inside view of a section of one of my improved burglar-proof plates, and Fig. 2 is a section in the line *a a* of Fig. 1.

The first step in the process of forming one of my improved burglar-proof plates is to take a sheet, *b*, of boiler-iron and bend it into a series of parallel elevations and depressions of substantially the shape represented in Fig. 2. When thus shaped, I combine with one side of the said sheet of boiler-iron a series of parallel wrought iron ribs, *c c*, which pass transversely across the ridges of said sheet at short intervals, and which are combined with said ridges by means of rivets *d d*, substantially as represented in the drawings. The sheet *b*, when thus prepared, is placed in a mold in such a position that its ribbed surface will be opposite to and at a proper distance from the inner surface of a chill-plate of suitable thickness, so that when the melted iron is poured into said mold it will embrace the series of ribs *c c* and solidly fill up the series of depressions between said ribs and the inner surface of the sheet *b*. The chill-hardened surface of the plate thus formed is

the one which, for obvious reasons, must be exposed when the said plate forms the door or the outer casing of a safe, this surface being impenetrable by the hardest drill; and should a burglar succeed in producing a fracture in the chilled surface of said plate the adhesion of the cast portion of the plate to the series of ribs *c c* would prevent the removal of any of the fractured portions thereof from the plate. The unequal surface of the sheet *b*, which forms the series of cavities between the series of ribs *c c* and the inner surface of said sheet serves the purpose of distributing the strain among said cavities, and thereby produces such counteracting effects as to relieve the chilled surface of the plate of most, if not all, the strain that would otherwise be exerted upon it by the gradual cooling of the said opposite side of the plate.

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

Forming an improved burglar-proof plate (or its equivalent) by the union of an outwardly chill-hardened layer of molten iron with the ribbed surface of a zigzag sheet of iron substantially as herein set forth.

The above specification of my improved method of constructing burglar-proof metallic plates suitable for the doors and exterior surfaces of safes signed and witnessed this 23d day of November, 1857.

LEOPOLD EIDLITZ.

Witnesses:

JOHN F. MILLER,
RUSSELL STURGIS, Jr.