

DECEMBER 20, 1864

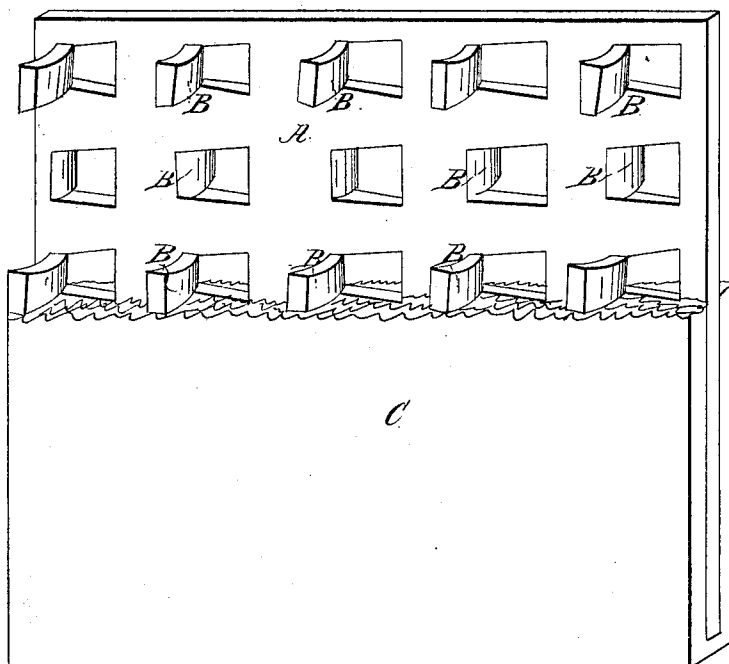
*Terwilliger & Fitzgerald,*

*Burglar-Proof Safe.*

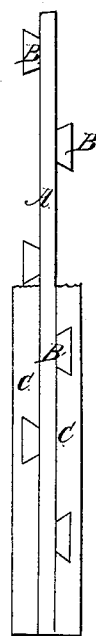
*N<sup>o</sup> 45,536.*

*Patented Dec. 20, 1864.*

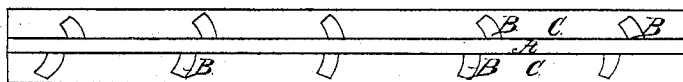
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

WILLIAM R. TERWILLIGER AND DANIEL FITZGERALD, OF NEW YORK, N. Y.

## IMPROVEMENT IN SAFES.

Specification forming part of Letters Patent No. 45,536, dated December 20, 1864; antedated April 26, 1864.

*To all whom it may concern:*

Be it known that we, WILLIAM R. TERWILLIGER and DANIEL FITZGERALD, of the city, county, and State of New York, have invented a new and useful Improvement in Safes, called the "Infrangible Safe;" and we hereby declare that the following is a full and exact description thereof.

To enable others skilled in the business to make and use our invention, we proceed to describe its construction and operation, reference being had to the drawings hereunto annexed, and making part of this specification.

Figure 1 is a perspective view of a piece of the safe constructed as hereinafter described. Fig. 2 is a section of the same in vertical line. Fig. 3 is a longitudinal section of the same.

In the drawings, A represents the wrought-iron plate; B, the tongues or dovetails turned or punched out; c, the cast-iron which is cast over it all.

The purpose of this invention is to make a safe that shall be proof against the tools of the burglar and be cheaply constructed, while it is susceptible of great embellishment. As it is cast entire, and may be cast in hot chills—that is, in heated metallic molds—its exterior surface may be ornamented in bas-relief, &c., with little cost, and the figures may be so designed as to give the greatest strength where it is needed.

We prepare the wrought-iron core of plate iron or boiler-iron of any desirable thickness. A quarter of an inch is proper for a large safe. Before boxing the core of the safe we punch it, cutting the iron on three sides of the hole, (See Fig. 1,) and turning out and back the iron punched out, B. The plate of iron punched is left strong enough—one-sixth or one-fourth of the surface being cut. The tongues or dovetails B, punched partially out, are of a shape to hold the iron cast upon them. They may be in dovetail shape, or they may be of parallel sides and turned back

so as to hold the iron. The shape of the tongue turned out is not essential, if it be made to hold the cast-iron.

When the plates have been punched, we make of them the safe intended, riveting the plates together at the corners, or otherwise. We then put it in the mold with a proper core, and cast it over with good tough cast-iron or hard iron or composition. Even brass would do—its important purpose being to give thickness and to give ornamental shape, and, moreover it would generally have a fire-proof lining. The iron may be cast over it on both sides of any thickness, but will generally be sufficient if it cover the tongue or dovetails B. The lugs for the casters are cast on. Handles may be cast, and sockets for hinges and for shooting the bolts of the lock. The door is constructed in the same way, being cast over a "semi-perforated core," as it may be called, of boiler-iron, and finished at one casting, except for inserting the lock. We also cast and prepare in this way the panels of a safe to be set in a solid wrought-iron frame.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. Making a safe, or the walls of a safe, proof against burglars' tools by casting hard iron over a core prepared by punching three sides of the holes and turning out the metal, in the manner described.

2. Making the tongues B, which are turned out by punching, of a dovetail form, so that they will hold the iron when cast upon it, in the manner described.

3. Turning out the dovetail tongues on opposite sides, for the more perfect holding the metal, in the manner described.

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DANIEL FITZGERALD.

Witnesses:

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J. D. STURTEVENT.