J. Farrel,

Burglar Proof Safe.

No. 107,021. Patented Sep. 6. 1870.

Fig. 1.

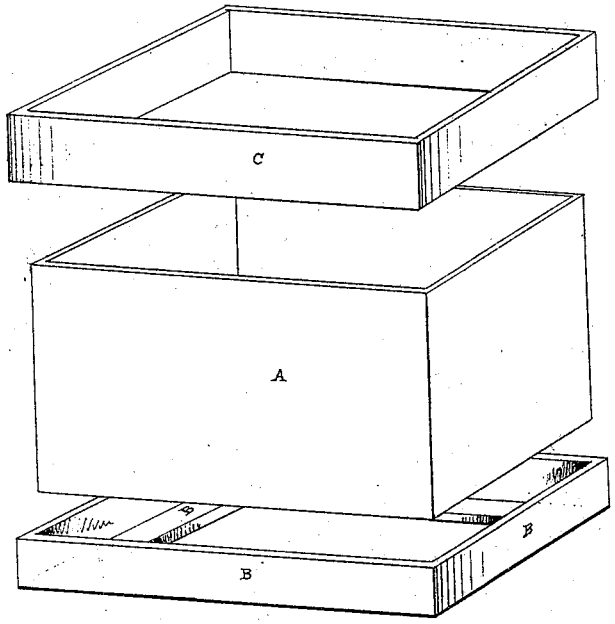
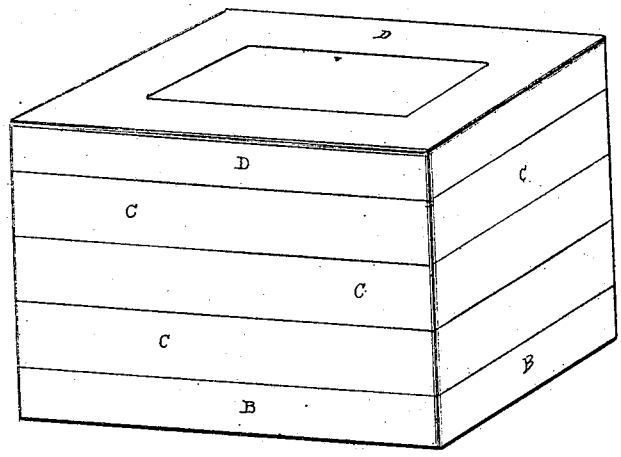


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN FARREL, OF NEW YORK, N. Y.

IMPROVEMENT IN BURGLAR-PROOF SAFES.

Specification forming part of Letters Patent No. **107,021**, dated September 6, 1870.

To all whom it may concern:

Be it known that I, JOHN FARREL, of the State, city, and county of New York, have invented an Improvement in the Construction of Burglar-Proof Safes, of which the following is a specification:

This invention relates to the construction of safes chiefly of wrought metal; and its object is to prevent the wedging apart of the plates or sections of metal of which the exterior is composed.

Heretofore it has been common to build the body of the safe of a suitable skeleton or shell of iron, and to finish the outside surface by adding on strips of metal to represent styles, of which the said shell formed the panel, the same being the greater portion of the visible exterior. Such mode of construction is open to the objection that joints or crevices are left exposed at the corners, running longitudinally therewith, and otherwise so situated as to admit of the entrance of the wedges therein, which wedges so entered, and exerting a force between the body of the safe and the aforesaid strips or bands, the latter would be easily forced off, thereby materially weakening the safe, and preparing it for further attacks in places less difficult of penetration.

My improved plan of construction contemplates such an arrangement of the plates constituting the outer wall or layer of metal as will obviate all seams at the corners of the safe, and so dispose all others as to render it impracticable to enter the safe by any process of wedging open the seams; and said invention consists, essentially, in the employment of a number of continuous bands of metal entirely surrounding the sides, top, and bottom of the safe, in combination with solid angle frames of iron or steel, or both, to protect such bands front and rear, cover the seams formed by their junction with the body of the safe, and from the remaining corners.

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

In the annexed drawing, Figure 1 represents separate parts of the safe as they appear before being put together. Fig. 2 shows the safe as it appears when completed and ready to receive the door, the back being downward.

I first construct a suitable shell or skeleton, A, and build therein with strong knee-pieces of welded wrought iron and steel, protecting all the corners. I then prepare a frame, B, for the back of the safe, of heavy angle iron or steel, having all the corners mitered and solidly welded. This frame is firmly secured to the skeleton or body A, and forms the corners and margin of the back of the safe. The central panel of the back is of Franklinite or similarly hard metal, likewise bolted first to the frame B. I next form solid bands C, of iron or steel, or both, by welding together the ends of wide bars of suitable thickness, or in any other manner, as shown in Fig. 1. These are slipped over the outside of the body A and shrunk thereon or driven down to the frame B. When the required number of bands is placed (I use the fewest number practicable, generally not more than two or three) I finish the front with a heavy frame, D, of angle-iron, corresponding to that used at the back B, with the exception of such modification as is required to fit it to receive the safe-door, so that these frames B and D completely cover and protect the seams formed at the junction of the bands C with the body of the safe. The result is that all seams ordinarily occurring at the corners, as well as those adjoining the edges of any plates or bands forming any part of the exterior, are entirely obviated, the only seams exposed being those between the edges of the endless bands C and the frames B and D, where the force exerted would have no effect.

In the above invention I do not confine myself to any particular construction of the body or skeleton on which the safe is built, but shall use such plans and modes as are best adapted to the carrying into effect of my invention.

What I claim as new is—

The application to the body of the safe of an exterior consisting of a series of continuous metal bands, occupying the top, bottom, and sides of the safe, in combination with the solid frames of angle iron or steel at the front and back, substantially as and for the purposes set forth.

JOHN FARREL.

Witnesses:

EARLE H. SMITH,

SAML. WILKINS.