

J. L. Hall,

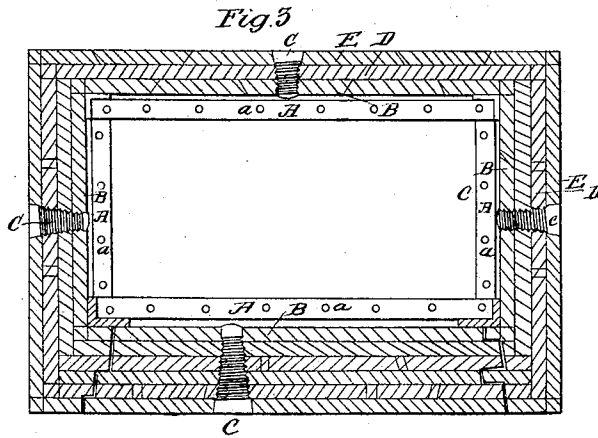
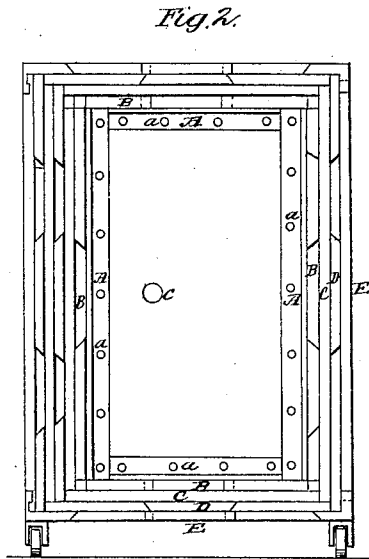
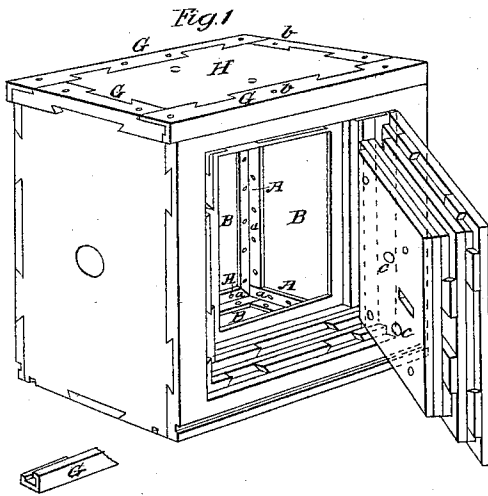
Burglar-Proof Safe.

N^o 70,202.

Patented Oct. 29, 1867.

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X80

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Witnesses

*Charles L. Fisher
William R. Conner*

Inventor

Joseph L. Hall

United States Patent Office.

JOSEPH L. HALL, OF CINCINNATI, OHIO.

Letters Patent No. 70,202, dated October 29, 1867.

IMPROVEMENT IN SAFES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOSEPH L. HALL, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a new and useful improvement in the mode of securing and connecting together, by means of angle-irons, dove-tails, grooves, and taper pieces, the plates of the body of safes and other secure receptacles, of which the following is a full and clear description, reference being had to the accompanying description, making part of this specification.

The nature of my invention consists in the manner of dove-tailing together the plates in each layer of plates composing the body of the safe, necessitating the removal of all of the plates composing each layer of plates in order to remove the inner plate of any one of the sides of the body of the safe, and of tenoning angle-irons in the angle-plates of one or all of the exterior corners of the safe in such a manner that they cannot be removed when their rivets are removed unless the corner angle-iron next adjoining is first removed.

Figure 1 is a perspective view of my improved safe, having the outer plates removed, except the top.

Figure 2 is an elevation of my improved safe, where the end plates are removed.

Figure 3 is a horizontal section of the safe.

A are angle-irons secured to the inner series of plates B by rivets or screws *a*. The angle-irons occupy all of the corners of the interior of the safe. The inner series of plates B, five in number, where the safe is square, are dove-tailed into each other, one or more dove-tails of one plate entered into dove-tailed mortises in the edges of the adjoining plate or plates. The next series of plates C is of steel, and abut against each other. The plates D are dove-tailed into each other. The next series, E, is of steel, or, where the number of thicknesses of plates is limited, iron plates are employed, dove-tailed together the same as is the series of plates C. The series of plates E are dove-tailed into each other. The dove-tailed or tenoned and grooved angle-iron G is then secured in place, entirely covering the joints made by the connection of the plates of the series E. The outer series of plates H is dove-tailed into the angle-irons G and secured by screws *b*. The series of plates H is further secured by conical arbors *c* to the inner plate. Said arbors are tapped through the entire series of plates from H, and are riveted, keyed, or otherwise secured on the interior of the safe, to prevent their forcible removal from the outside. The arbors *c* taper from the exterior to the interior of the safe, and are in number and location adapted by the builder to the safes in which they are used. It is necessary, also, that the doors of safes shall be provided with dove-tailed edges, which enter corresponding mortises in the body of the safes, to prevent the separation of the casings from the doors by means of wedges driven in between them. I have applied the system of dove-tailing to all parts of the safe in such a manner that an entrance cannot be effected by the removal or cutting off plate after plate forming the doors or bodies of safes, vaults, or other secure receptacles, thus effectually rendering them burglar-proof.

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

1. The joining together two or more metallic plates by means of dove-tails, grooves, and tenons, at their edges, or otherwise, as herein described, when the said plates are used in the construction of burglar-proof safes, vaults, and other secure receptacles.
2. The dove-tailed, grooved, and tenoned angle-irons G, when the same are used for securing together the corners of safes, vaults, or other secure receptacles, as herein described and for the purpose specified.
3. The dove-tailed plates B D, or their equivalents, in combination with the dove-tailed, grooved, and tenoned angle-irons G and the tapered arbors *c*, when the same are constructed and arranged for burglar-proof safes, vaults, and other secure receptacles, substantially as and for the purpose herein described and set forth.

JOSEPH L. HALL.

Witnesses:

CHARLES L. FISHER,
WILLIAM R. McCOMAS.