(No Model.)

J. R. GROVE.

SAFE.

No. 299,381. Patented May 27, 1884.

Fig. 1.

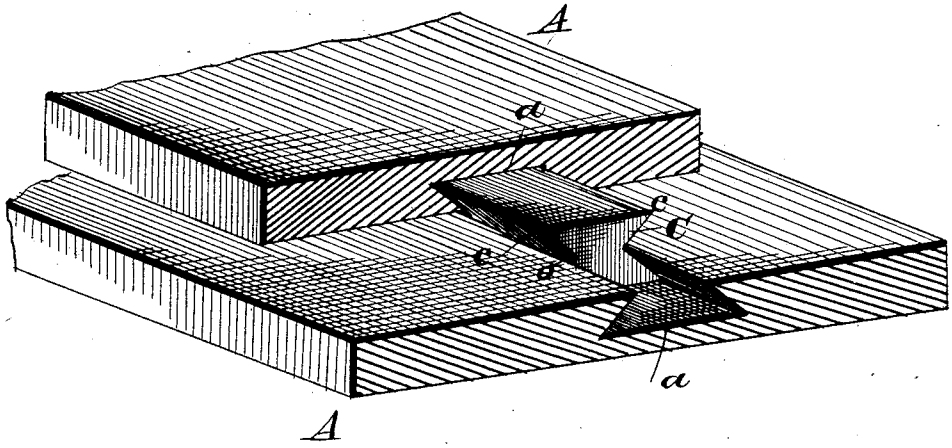


Fig. 2.

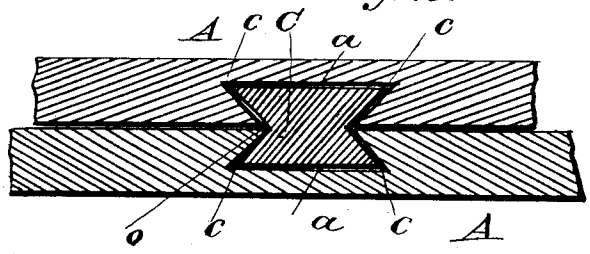
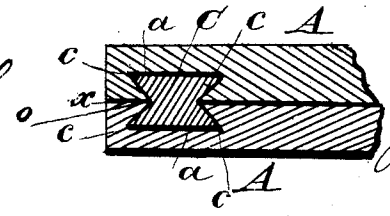


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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SPECIFICATION forming part of Letters Patent No. 299,381, dated May 27, 1884.

Application filed March 1, 1884. (No model.)

To all whom it may concern:

Be it known that I, J. ROSS GROVE, of York, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Safes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

My invention relates to the construction of safes, vaults, and analogous secure structures, the object being to secure the plates of the safe together at their inner meeting surfaces, thus avoiding the exposure of rivet or bolt heads on the outside of the structure, and consequently affording increased protection against burglary.

The invention consists in the combination, with two adjacent plates, each formed with a dovetail recess, of a wedge-bar or key, of the form hereinafter described, adapted to enter the recesses of the plates to draw the latter together and firmly secure them.

In the drawings, Figure 1 represents a perspective view of parts of two plates, together with the wedge-bar or key; and Figs. 2 and 3 are transverse sections of the same.

A A indicate the safe-plates, each formed with a dovetail recess, *a*. These recesses, as shown in the drawings, are arranged opposite to each other.

C represents a wedge-bar or key of double dovetail form, adapted to enter the recess *a a*. The sides or edges *c c* of this wedge-bar are beveled at a slightly less angle than the adjacent inclined sides of the recesses, using the point *o* as the center of the angle, so that when the bar is driven into the recesses it will tend to draw the plates together, and when fully driven in will securely hold the plates.

It will be apparent from this description that the connecting and securing devices for the plates will be entirely concealed within the structure, and, further, that even the location of said devices cannot be discovered from without after the safe is completed.

In Fig. 3 I have shown my invention applied to two plates whose outer edges are visible. In this instance the wedge-bar is arranged parallel to said outer edges, so that in case it is attempted to separate the plates by inserting an implement of any sort between them at the point *x* the wedge-bar will prevent the insertion of the implement to such an extent as to render the prying apart of the plates possible. The wedge-bar I prefer to construct of steel.

By the use of my improvement all boring of the plates for the reception of fastening devices is avoided, and greater strength and additional security are thus obtained.

I am aware that heretofore wedge-bars have been employed to secure together the meeting edges or corners of a safe; but my improvement comprehends the securing of the layers or plates of a safe.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with two metallic parallel plates, each formed with a dovetail recess, of a wedge-bar driven into said recesses to draw said plates together and secure them, substantially as set forth.

2. The combination, with two metallic plates, each formed with a dovetail recess, of a wedge-bar of double dovetail form, the beveled edges of said bar being at a less angle than the inclined walls of the recesses, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

J. ROSS GROVE.

Witnesses:
F. O. MCCLEARY,
W. P. SMITH.