

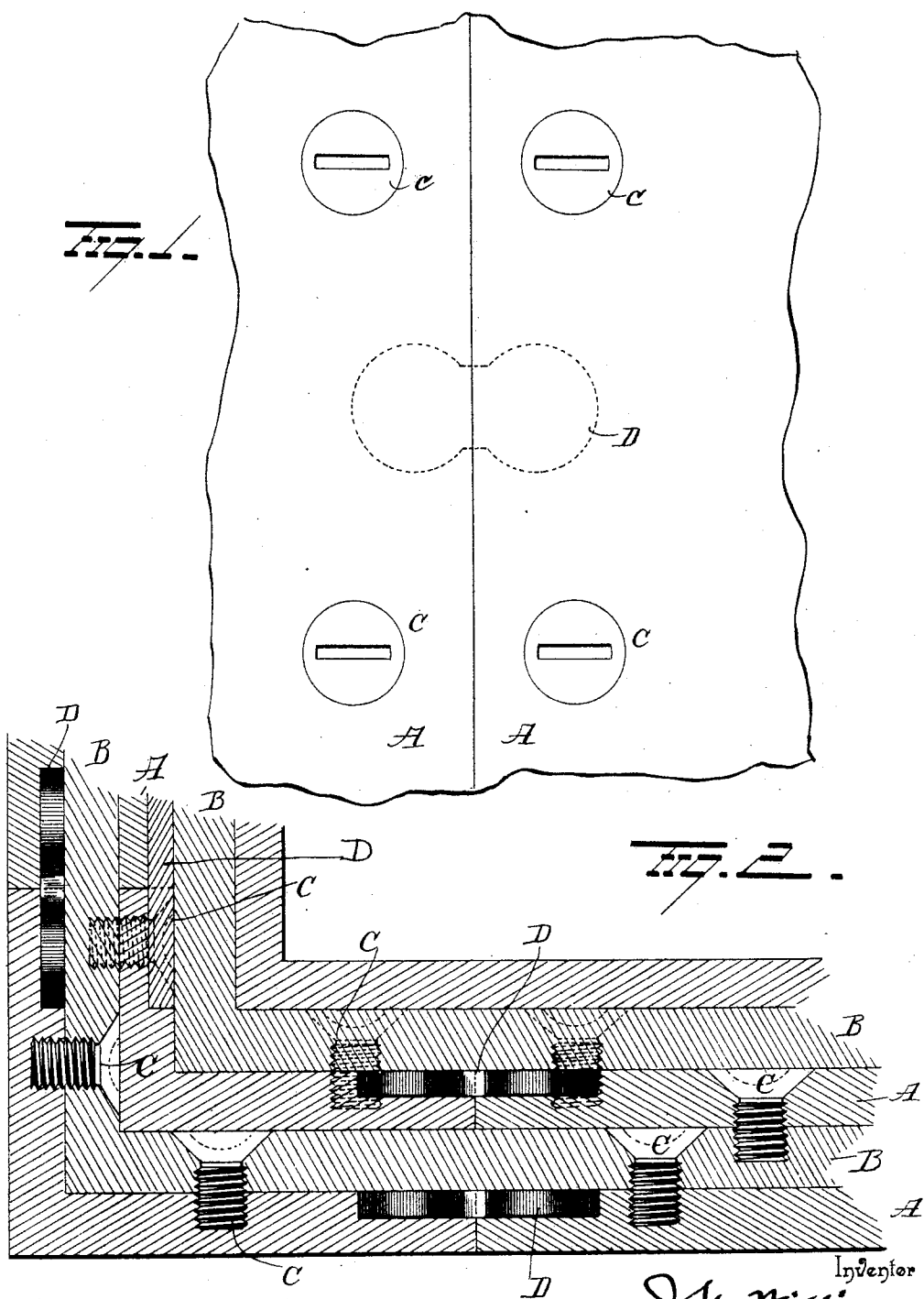
(No Model.)

2 Sheets—Sheet 1.

J. H. WILLIAMS.
KEY STRAP FOR SAFES.

No. 581,320.

Patented Apr. 27, 1897.



Witnesses
E. J. Nottingham
G. F. Downing

J. H. Williams Inventor
By H. A. Seymour Attorney

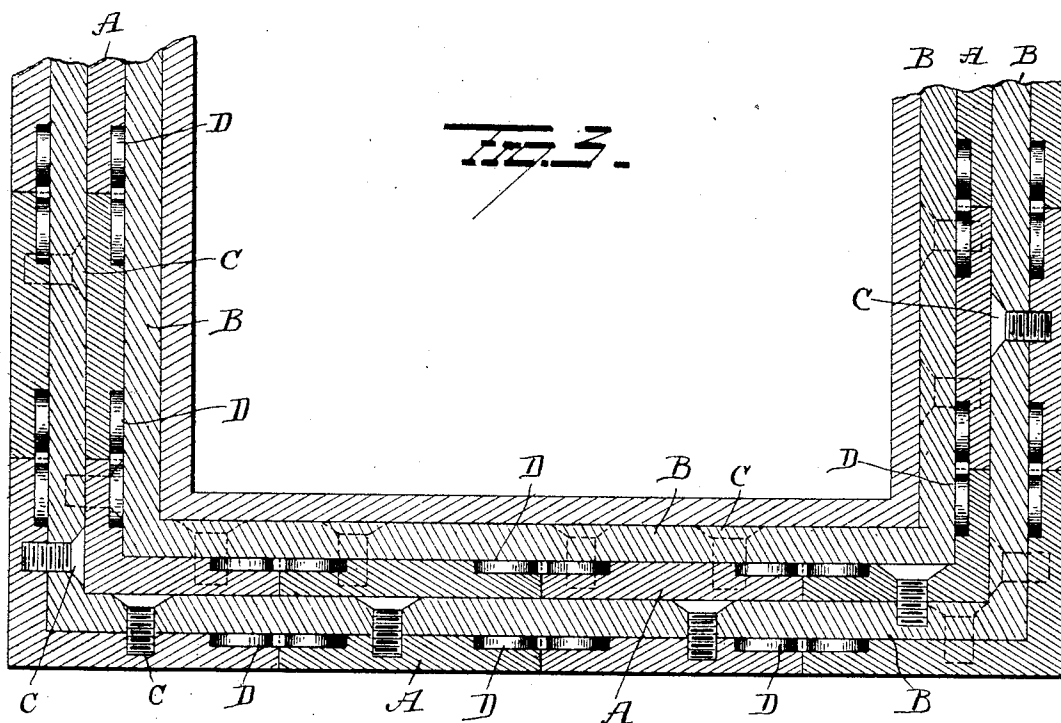
(No Model.)

2 Sheets—Sheet 2.

J. H. WILLIAMS.
KEY STRAP FOR SAFES.

No. 581,320.

Patented Apr. 27, 1897.



Witnesses
E. A. Nottingham,
G. F. Downing.

Inventor
J. H. Williams
By H. A. Seymour
Attorney

UNITED STATES PATENT OFFICE.

JAMES HENRY WILLIAMS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
THE REMINGTON & SHERMAN COMPANY, OF SAME PLACE.

KEY-STRAP FOR SAFES.

SPECIFICATION forming part of Letters Patent No. 581,320, dated April 27, 1897.

Application filed October 6, 1896. Serial No. 608,059. (No model.)

To all whom it may concern:

Be it known that I, JAMES HENRY WILLIAMS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Key-Straps; 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 appertains to make and use the same.

My invention relates to an improvement in key-straps for securing together the adjoining edges of the plates and angles forming the walls of a vault or safe; and it consists in certain novel features of construction and combinations of parts which will be hereinafter described, and pointed out in the claim.

In the accompanying drawings, Figure 1 is a view in side elevation of a portion of two plates for forming the walls of a vault, showing in dotted lines one of the key-straps in position. Fig. 2 is a view in horizontal section, showing several plates secured together; and Fig. 3 is a similar view, on a smaller scale, showing more of the plates.

In the building of vault or safe walls it is customary to first construct the outside layer of the wall and then fill in the layers or strata constituting the wall, laying one stratum vertically and the next horizontally, and so on until the desired thickness is attained. It has been customary to secure one layer or stratum to the next one by means of screws, rivets, or bolts, but the edges of adjacent plates and angles have not hitherto been connected together. The result is that in "cracking" a safe, as it is termed by the profession, each plate in a layer or stratum is removed independently of the next adjacent one, the entire hold being between two plates of two different layers or strata and not between the adjacent edges of two plates in one layer or stratum.

The object of the present invention is to provide a fastening for adjacent edges of these plates and angles, so that each layer becomes in effect a continuous stratum, and in consequence the operation of stripping the layers from the vault-wall is rendered more difficult.

A A represent two adjacent vertical plates, 50 and B B are the horizontal plates forming the next layer or stratum. These layers are secured together in any approved manner—as, for instance, by means of screws C C, as shown, or rivets or bolts or equivalent securing devices might be employed in lieu thereof. 55

D D indicate my improved key-straps. These might be variously shaped, just so their ends are wider or thicker than their necks. In the form illustrated there are two end lobes 60 and a narrow connecting-neck. These key-straps are fitted or sunk tightly into correspondingly-shaped openings or recesses in the inside faces of the plates, so that they are always concealed from the outside, just as the heads of screws C C are. In this manner a very much stronger sheathing and wall is formed than heretofore without materially increasing the expense of construction, without adding in the slightest degree to the weight, 70 and, in short, without any disadvantages whatsoever, but with the decided advantage of greater and more perfect immunity from successful attack and plunder.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is— 75

The combination with two plates constructed to lie with their adjacent edges in contact with each other, these plates having recesses 80 sunk into their inside surfaces and located at or near the said edges so that they open into each other, the shape of these recesses being such that their inner ends are larger than their outer ends, of a key fitted to and adapted to be placed in the recesses, a plate back 85 of the key and means for holding the keyed plates and the backing-plate together whereby the parts are all rigidly connected together, substantially as set forth. 90

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

JAMES HENRY WILLIAMS.

Witnesses:

WALLACE SCOTT,
E. CORLEY.