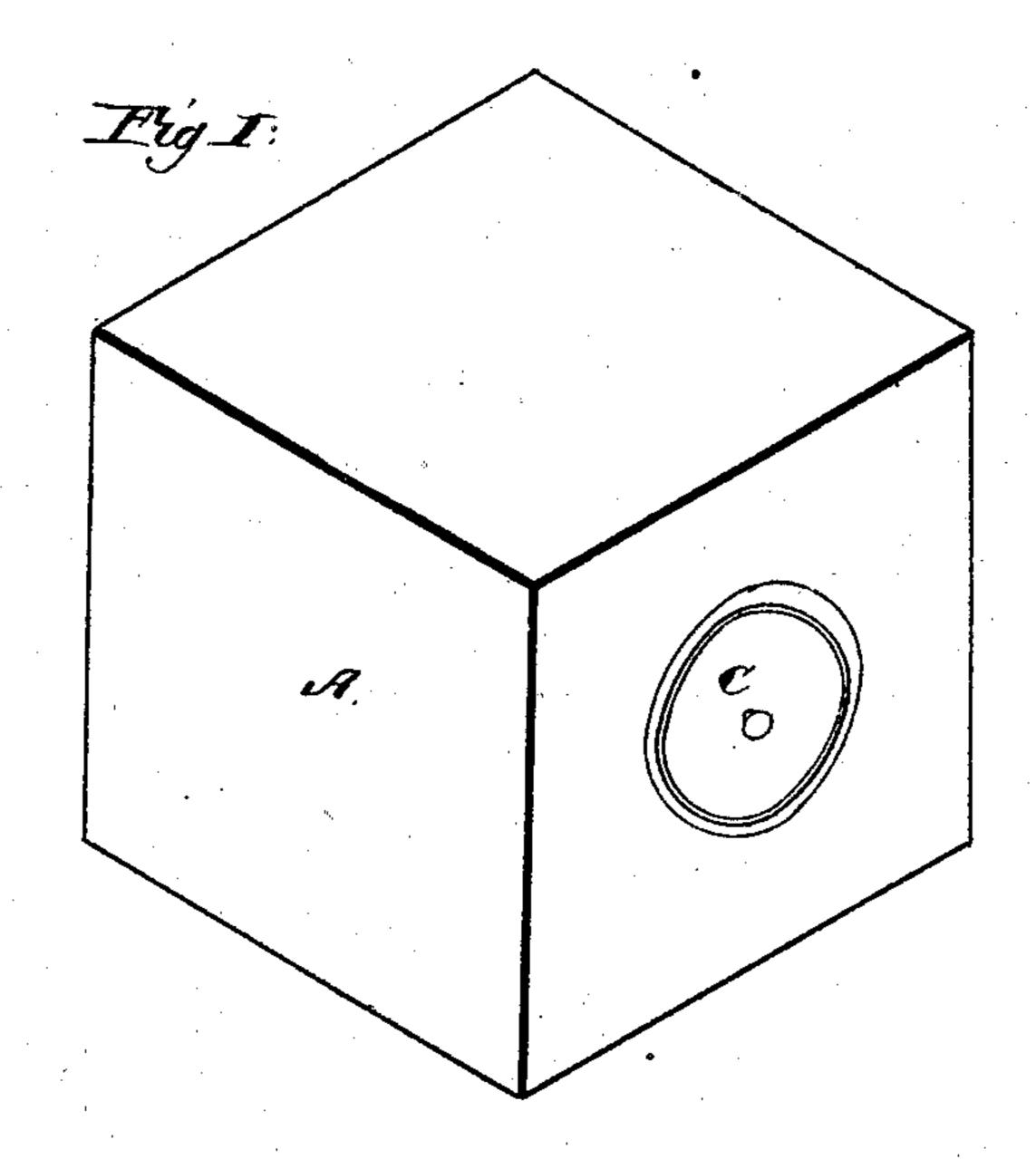
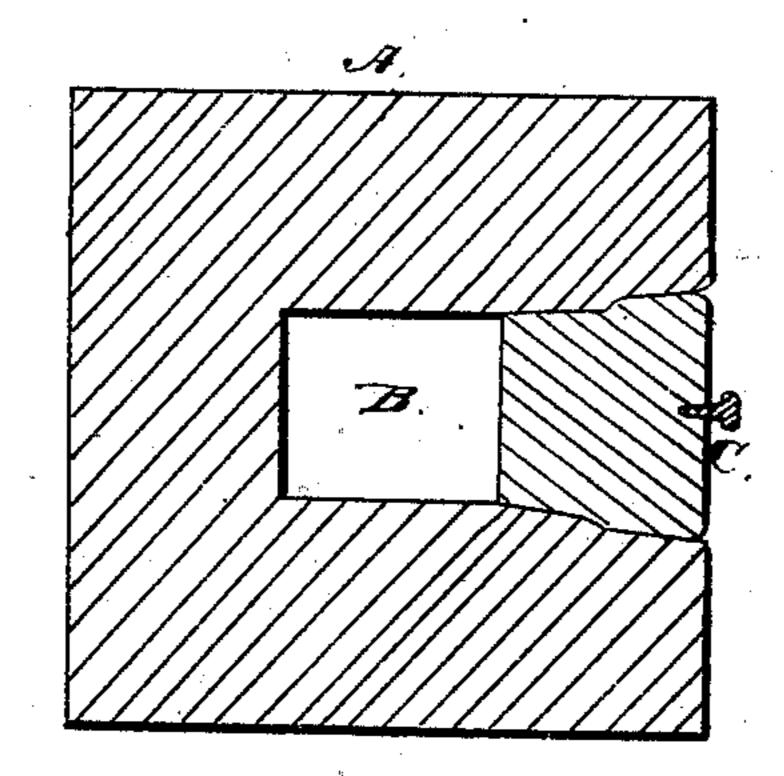
Stermond & Fitzgerald.

Construction of Safes. Nº 88,521. Fatented Mar. 30,1869.



Ing. 2.



Witnesses. Corneleus for Les percloves B. Sher wood Dits gerald Jun Hauder Wasen



BENJAMIN SHERWOOD AND DANIEL FITZGERALD, OF NEW YORK, N. Y.

Letters Patent No. 88,521, dated March 30, 1869.

IMPROVEMENT IN THE CONSTRUCTION OF 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 we, Benjamin Sherwood and Daniel Fitzgerald, of New York, in the county of New York, and State of New York, have invented certain new and useful Improvements in "Bank-Vaults and Safes;" and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of our invention consists in the construction of a safe, or bank-vault, of a solid block of metal, with an orifice in its centre, and so that the sides and front thereof may be of great thickness and strength, to prevent the entrance of the burglar's tool, and in such a manner that, when cast, it can be finished off on its exterior, without detracting from the strength of the metal.

In order to enable others skilled in the art to which our invention appertains, to make and use the same, we will now proceed to describe how the same is or may be constructed, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view; and Figure 2, a longitudinal vertical section.

In the usual mode of making safes, the sides are generally from one to two inches thick, seldom, if ever, over two inches, and it does not matter in what manner, or by what processes, safes of that thickness are made, they can easily be broken open by burglars. If the thickness of the sides were increased to a considerable extent, it would, of course, be absolutely impossible, in any manner, to break such a safe open, and the increased weight such a safe would obtain, by the thickness of its sides, would preclude any possibility of its being earried away.

To make such a safe, and one that shall be entirely impenetrable to the drill or chisel of a burglar, we cast a solid block of metal, by any suitable process, and of

any shape or dimensions desired.

A represents such a block, which is, on one side, provided with an opening, and a chamber, or cavity,

B, in its centre.

The block A, as well as its chamber B, may be of any size or shape desired, only so as to leave the sides of the safe of a great thickness, say, for instance, from one to two feet.

The opening in the side, which leads to the chamber B, is stopped by a plug, C, of the same thickness as the side of the safe, said plug being provided with any suitable combination or burglar-proof lock.

In the drawings, we have represented the block A as being square; but it will readily be seen that all its qualities would remain the same even, if, for instance, the corners were rounded or cut off. Hence, the shape, or form of the safe is immaterial, only so that its sides are of sufficient thickness to resist any force that may be brought to bear on the same.

Besides the advantages of being a perfectly burglarproof safe, it possesses still another quality, which, even if it were the only one, would recommend our safe to all. It is well known, that casting safes of the usual thickness will render them very liable to burst by the slightest irregularity in the casting; even the best-finished safes are liable to crack or burst open; but if the walls, or sides had been of great thickness, this would not have occurred.

A safe, cast in a solid block, with a depositing-cavity, as above, can be made in any shape desired; for instance, if made from a rectangular block, as shown in the drawings, the corners on all sides may be taken off, and the safe assume a spherical form, as heretofore patented by me, and while possessing all the advantages of the same, be perfect and have none of the imperfections of the cast spherical safe, the thickness of the safe is preserved, and the cracking of the exterior is prevented.

In casting a bulk of metal, such as a safe or large gun, the exterior will almost invariably crack or scale when cooling, and when casting a safe of the construction herein shown, unless extreme care is taken, the safe will be imperfect.

The imperfections may be removed, in a safe of great thickness, by cutting or otherwise finishing the same, so that any-shaped safe can be made. It may be cut in a spherical, semi-spherical, oval, or other form, or it may be left in the form as now presented.

Having thus fully described our invention,

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

A safe, constructed as described, of a block of metal, having an opening on one side, with a chamber, or cavity in the centre, leaving the walls, or sides of the safe of great thickness, so as to be able to resist any attempts to break the same open, substantially as herein set forth.

BENJAMIN SHERWOOD. DANIEL FITZGERALD.

Witnesses:

OWEN G. WARREN, J. D. STURTEVANT.