

R. S. Sanborn,
Fire-Proof Safe.

N^o 56,452.

Patented July 17, 1866.

Fig. 2.

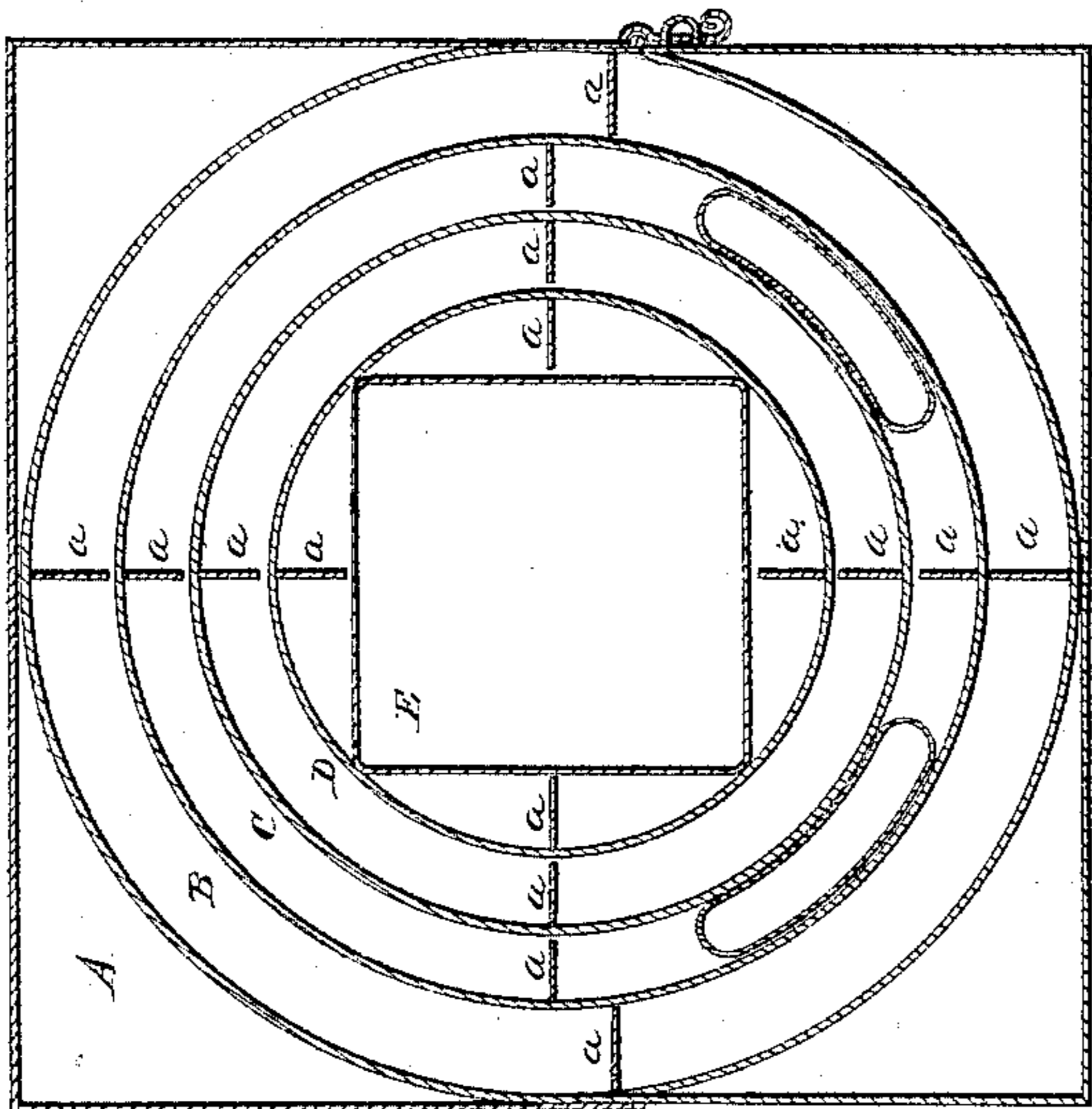
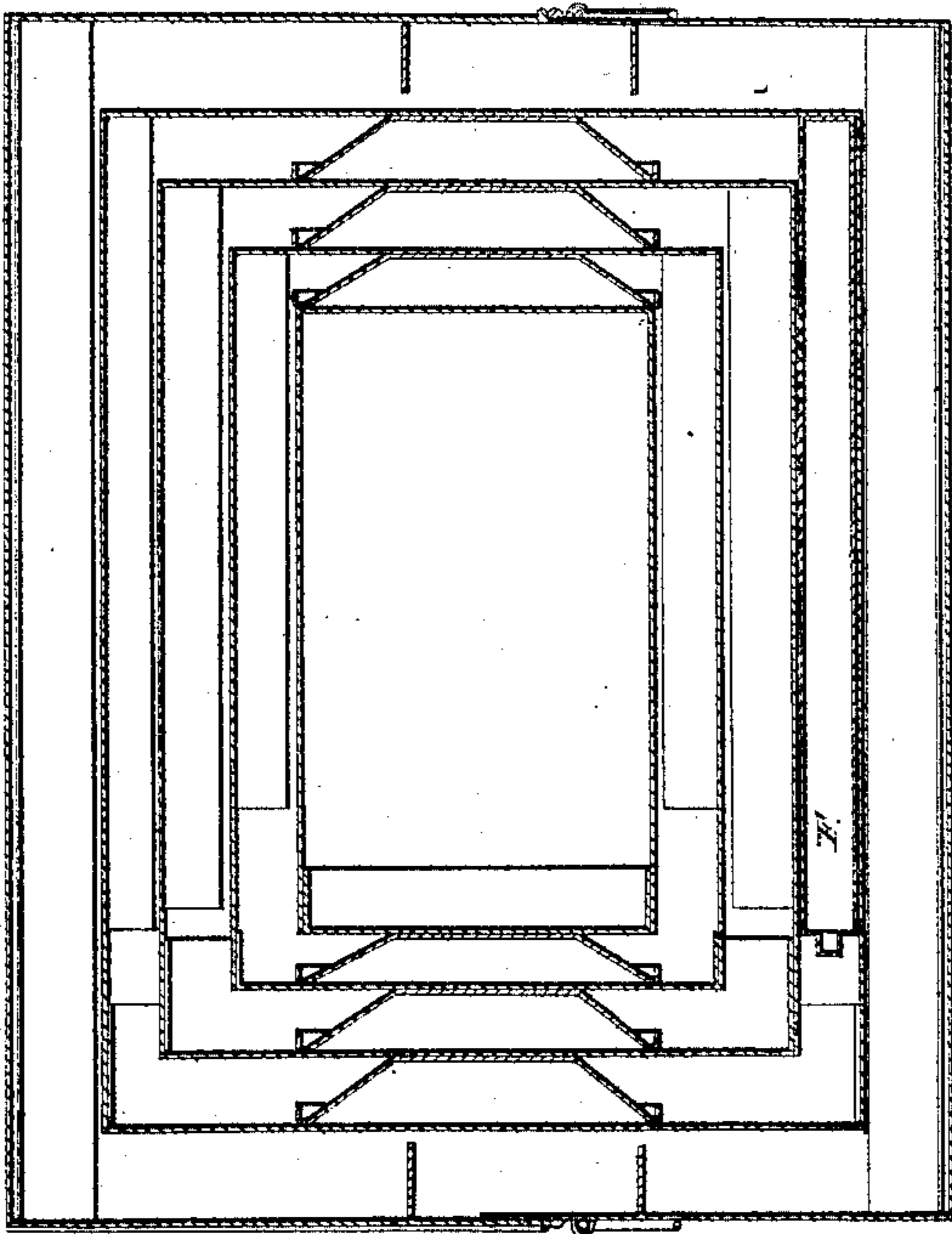


Fig. 1.



Witnesses.
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UNITED STATES PATENT OFFICE.

RUFUS S. SANBORN, OF RIPON, WISCONSIN.

IMPROVEMENT IN SAFES.

Specification forming part of Letters Patent No. 56,452, dated July 17, 1866.

To all whom it may concern:

Be it known that I, RUFUS S. SANBORN, of Ripon, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Fire-Proof Safes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A represents a case or trunk made of iron, said case being of a square form on its outside and lined with metal on its inside, so as to make it cylindrical in form.

B, C, and D represent three concentric cylinders, which are made of metal, and which are placed within the case A, as shown in the figures. These cylinders are separated from each other and the outer one from the case by means of flanges or partitions *a a a*. These partitions are distributed on the four sides of the cylinders, as shown, in order to keep them centrally located.

E represents a square box, which is placed in the inner cylinder, D, as shown. It readily appears that there are thus formed a series of concentric air-chambers between the cylinders and the outer cylinder and the case A. The object of these air-chambers is to prevent the passage of heat from the external case to the box E.

In the air-space between the cylinders B and C are placed two or more metallic water-vessels, made concave on one side and convex on the other, so as to fit snugly in their places. These vessels are provided with an orifice, through which water is introduced into them, and these orifices, after the water has been placed in them, are closed by means of spring-valves, the springs to the valves being made so that when the water is converted into steam on any occasion they will allow the steam to escape and pass around the air-spaces of the cylinders.

In case of fire and these vessels becoming heated so as to generate steam, the steam, of course expanding many times the volume of water from which it is generated, fills the air-spaces in the safe and prevents the extending of the heat from fire.

It will be understood that this safe is not made sufficiently tight to exclude air, so that there will never be any danger of bursting from either the expansion of heated air or steam.

The case A is hinged at its center, so that in opening it the upper half lifts up, turning back upon its hinge.

The mouths of the cylinders are closed by suitable coverings provided for them, and so is the box E.

It may not be necessary to use a distinct covering for each cylinder, but only a door with raised covers upon it to fit the box E and each of the cylinders, so that when the door is opened the head of each cylinder and the box E is opened at the same time. This is intended as a portable safe for express-companies, paymasters, or such persons as wish to convey large amounts of money without danger from fire. The safe can, of course, be used for private parties wishing a small money-safe or safe for valuable papers.

I do not propose to confine myself to any precise number of cylinders. The outer case and two or three cylinders may be made of iron, or all of the cylinders except the outer one, B, may be made of tin or sheet-iron or equivalent metal.

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

1. The combination of the case A with the cylinders B C D, constructed and arranged substantially as and for the purpose herein specified.

2. The use of the vessels for holding water, when used in connection with the cylinders, as herein fully set forth.

3. The arrangement of the box E with the cylinders and outer case, A, substantially as and for the purpose herein set forth.

As evidence that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

RUFUS S. SANBORN.

Witnesses:

E. B. PRIDE,
A. C. NYE.