

R. A. Ballou.

Fire Proof Safe.

N^o 75346

Patented Mar. 10, 1868

Fig. 1.

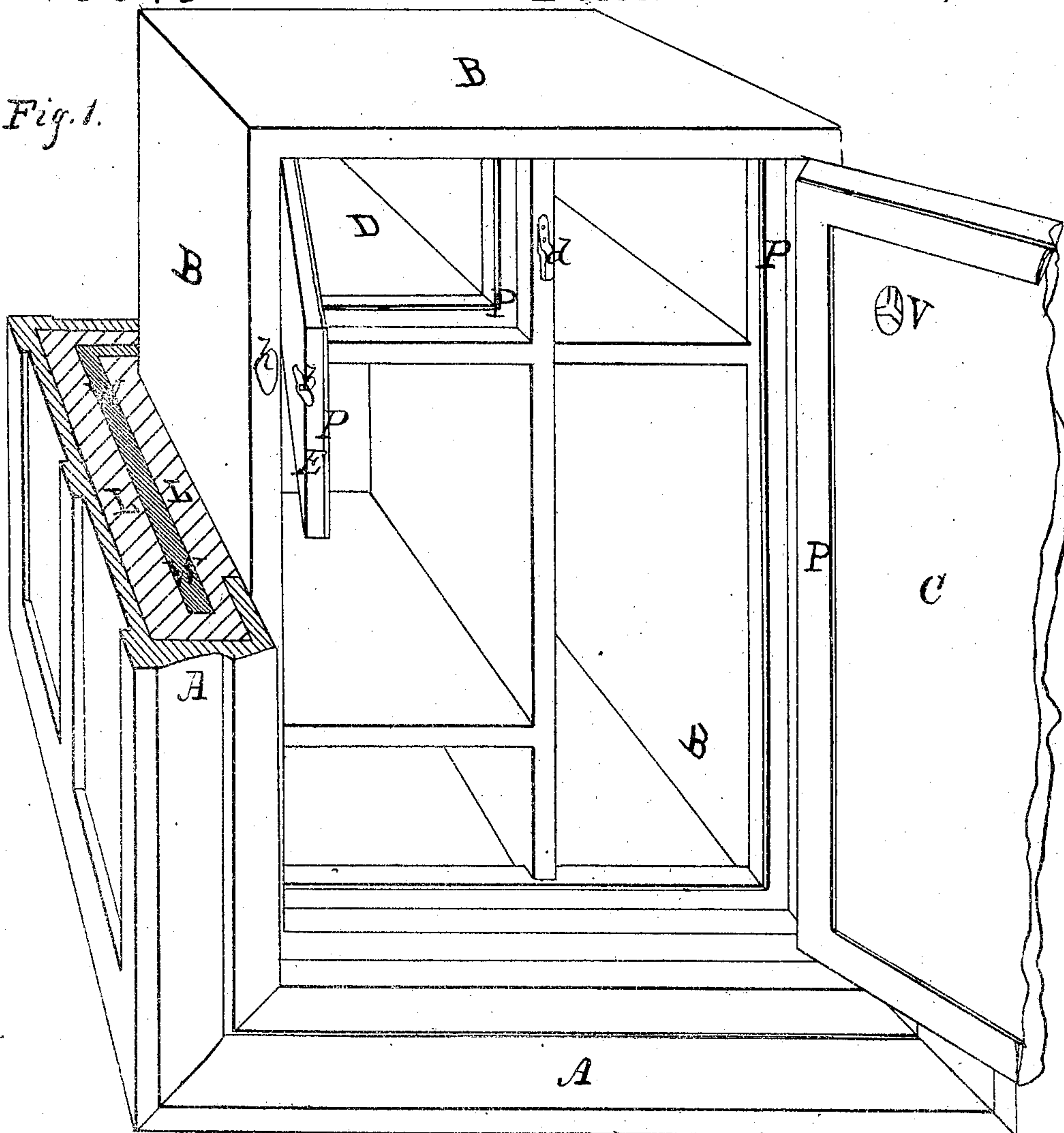
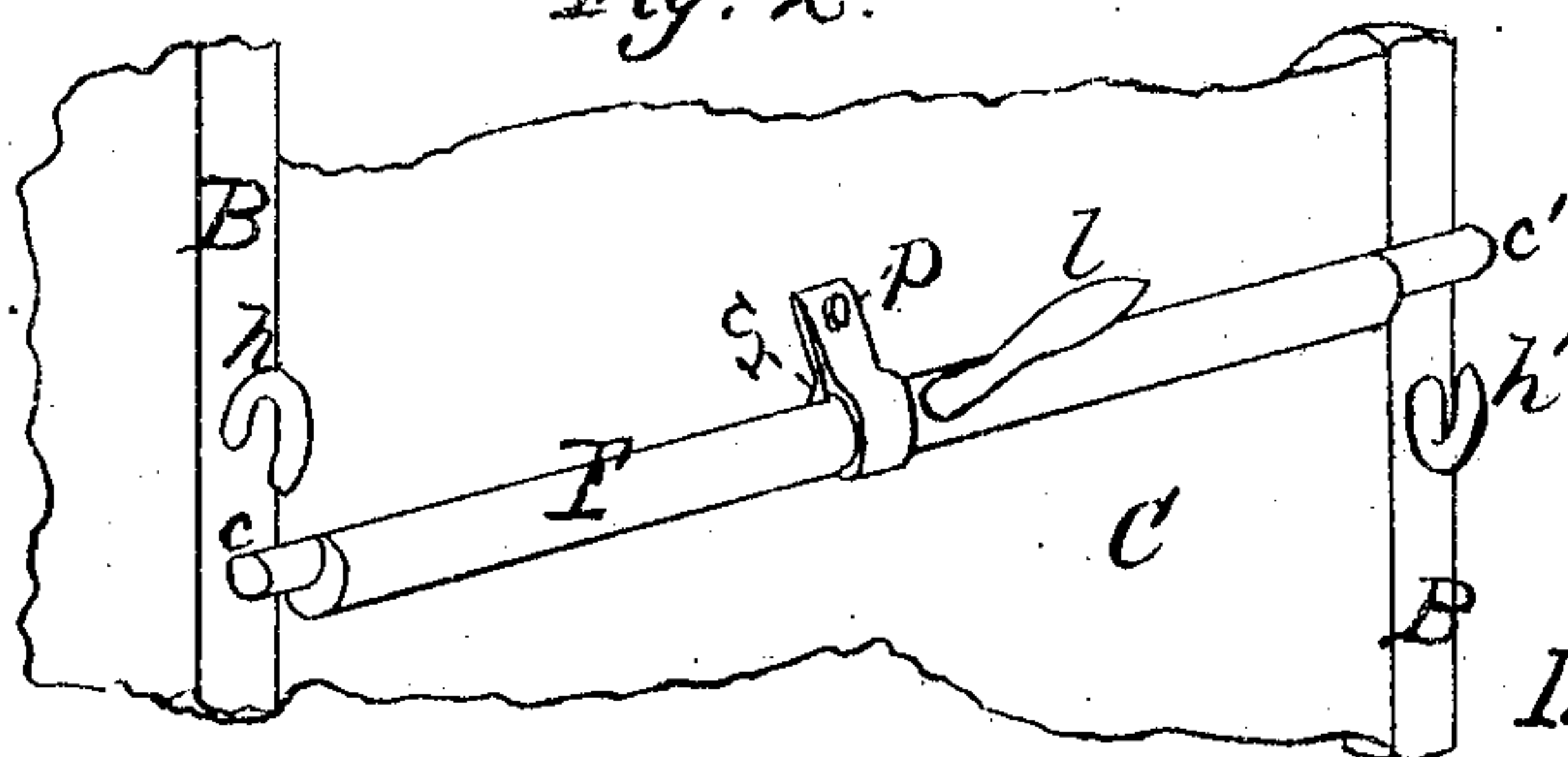


Fig. 2.



Witnesses

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RUSSELL A. BALLOU, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN FIRE-PROOF SAFES.

Specification forming part of Letters Patent No. 75,346, dated March 10, 1868.

To all whom it may concern:

Be it known that I, RUSSELL A. BALLOU, of the city of Boston, in the State of Massachusetts, have invented certain new and useful Improvements in Fire-Proof Safes; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective front view of a safe having my improvements, the interior of the safe being shown, and the walls being partly cut away to show the character of the filling. Fig. 2 is a detail view showing the front of the inner door and the device for holding it forcibly against its bearings when closed.

The same letter marks the same part in both figures.

The nature of the improvements consists in a change in the character of the filling, whereby its non-conducting property is increased, and in preventing the access of steam to the interior of the chamber of the safe, or to any portion thereof in which articles liable to injury from moisture are required to be deposited. I particularly contemplate the needs of watchmakers and jewelers, whose goods, for the most part, would receive irreparable injury from contact with steam or moisture.

In the drawing, A marks the outer walls of the safe. The upper half of the walls is shown as cut away by a horizontal section, displaying the arrangement of the filling L. I employ, for filling, any of the materials which may be preferred, and I embed in said material a supplemental wall of wood, W, surrounding the safe on all sides in the same manner that the outer walls do. Wood is an excellent non-conductor of heat, and its presence in the filling tends to greatly retard the passage of heat from the exterior to the interior of the safe. Should it be reduced to charcoal, it would still retain its non-conducting property. I contemplate treating the wood with chemical preparations having a tendency to diminish or destroy its combustibility; but this is not an essential part of my improvement.

It not unfrequently becomes almost as important to protect the contents of a safe from moisture as from fire or heat. In the steam fire-proof safes, steam is used as the means

of protection from heat, and is brought freely into contact with the contents of the safe, and in all safes, during a fire, there is liability to the entrance of steam. To remedy this difficulty, I apply rubber packing P around the door-frame, and around the edge of the door C of the interior chamber of the safe, and attach to the outside of the door a device for bringing the inner edges of the door forcibly against the door-frame and holding them in that close contact. This device is shown in Fig. 2. It consists of the round bar F, having the eccentrically-placed pivots *c c'* at its extremities. This bar turns in strap *s*, which is pivoted to the door C at *p*. Hooks *h h'* on the door-frame receive the pivots *c c'*, respectively, when the door is closed. A short lever, *l*, serves as a handle to turn the bar F. When this lever is pressed down, the bar F, by virtue of its eccentricity, acts as a cam to press the door C inward upon its bearings, to which the steam-packing P is applied. Thus the chamber of the safe is protected from the ingress of steam by a steam-tight packing. A valve, V, opening outward, serves to relieve pressure from heated air within the chamber, while preventing the entrance of steam from without.

If it is found desirable to protect only a portion of the interior against the ingress of steam, I apply the same principle of construction to a single compartment of the chamber. D represents such a compartment, with its door E, whose edges and frame are provided with rubber steam-packing P, as shown. The door may be kept shut by any appropriate fastening, *b d*.

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

Embedding in the filling of a fire-proof safe a stratum or strata of wood, arranged substantially as described, for the purpose of enhancing the non-conducting power of the safe-walls, as specified.

The above specification of my said invention signed and witnessed at Boston this 5th day of October, A. D. 1867.

RUSSELL A. BALLOU.

Witnesses:

CHAS. F. STANSBURY,
WILLIAM C. CLEVELAND.