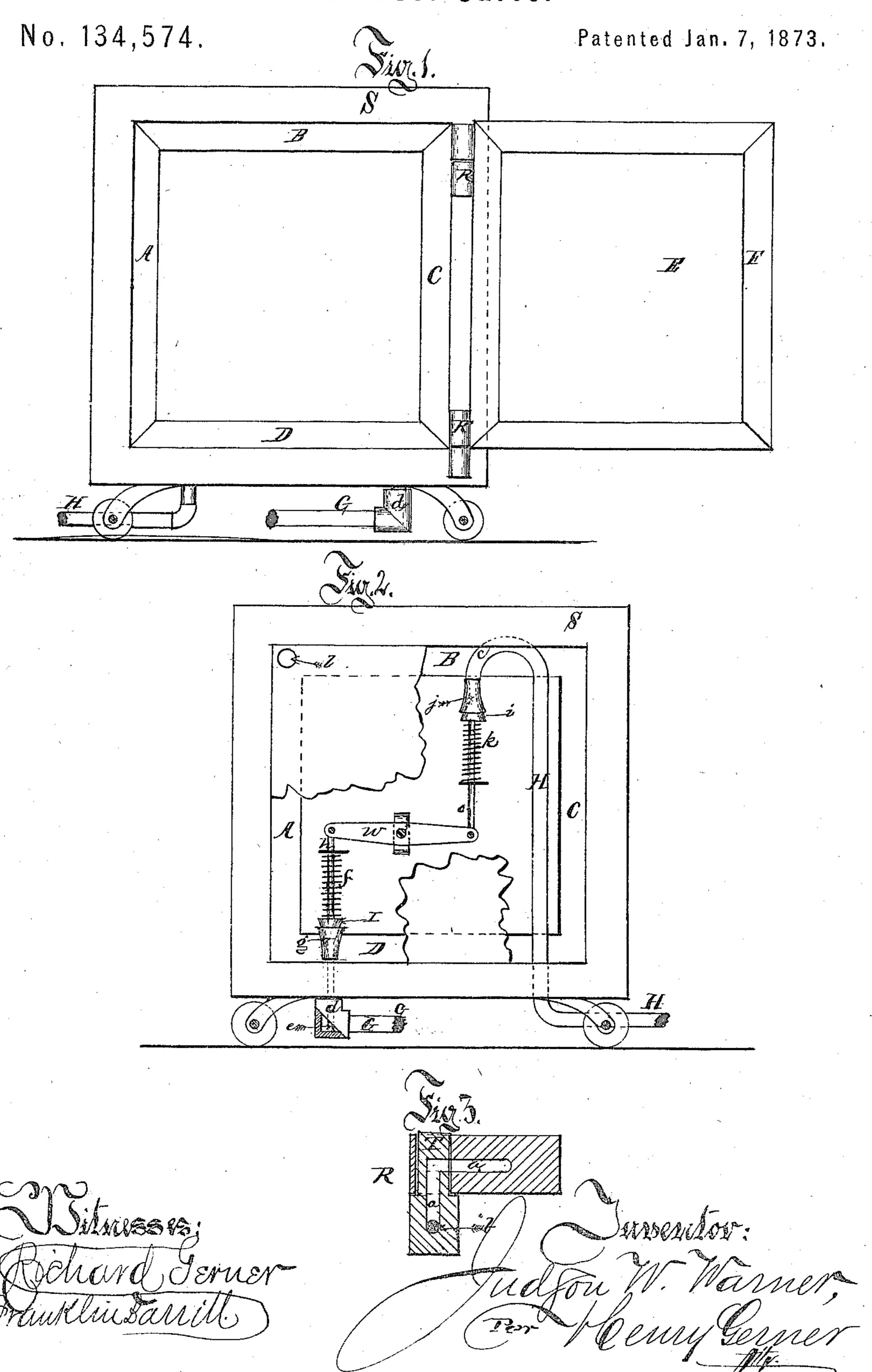
J. W. WARNER.

Fire-Proof Safes.



UNITED STATES PATENT OFFICE.

JUDSON W. WARNER, OF ONEIDA, NEW YORK.

IMPROVEMENT IN FIRE-PROOF SAFES.

Specification forming part of Letters Patent No. 134,574, dated January 7, 1873.

В.

To all whom it may concern:

Be it known that I, Judson W. Warner, of Oneida, county of Madison, State of New York, have invented certain Improvements in Fire Proof Safes, of which the following is

a specification:

The object of my invention is to further increase the fire-resisting qualities of safes. The filling in of safes with non-conducting materials has proved not to be a sufficient protection in case of a prolonged exposure to an intense heat. My invention relates to that class of safes in which spaces are provided in the top, bottom, sides, and door of the same into which a constant flow of water is introduced, which, being exposed to any degree of heat, cannot be raised to a temperature of over 212° as long as the water-supply is kept up. My invention consists in the employment of a plug of fusible metal upon the pipe under the safe-body, and upon which rests the extremity of a valve-stem, said stem being connected to a valve within one of the safe-chambers, which valve has an upwardextending rod encircled by a coil spring. The upper extremity of this rod is connected to a rocking lever, which is, at its opposite end, connected to an additional rod, spring, and valve in the upper part of the chamber, so that in case of fire the fusible metal burns away and the two valves close the openings in the pipes and prevent the flow of water out of the compartments.

In order to describe my invention more fully, I refer to the accompanying drawing forming

a part of this specification.

Figure I is a front view of a safe embodying my invention with the door shown open. Fig. II is a back view of the same with the back plate partially removed. Fig. III is a sectional view of one of the hinges.

A, B, C, and D are spaces or compartments in the top, bottom, back, and sides of a safe, S. The door E is also made hollow or provided with a compartment, F. The hinges R R, carrying the door, are made hollow, and a groove, a, and hole b cut into the staples T

T of these hinges, by which communication is obtained between the compartments A, B, C, and D and compartment F in the door E. An inlet-pipe, G, introduced through the bottom into one of these compartments, connects with a water-reservoir—the Croton or any sufficient supply—and thus carries water into all the compartments in the safe as well as into the compartment in the door. An outlet-pipe, H, for the carrying off the water, is provided for inside of the compartment, having an elbow, c, and extends through the outside bottom of the safe and leads into a sewer or any other convenient channel.

The end of the pipes G and H, having a bell-shaped mouth in the interior of the compartment, will be closed in case the heat should injure the lead or composition joint d forming a connection for this pipe, which would, naturally, first be displaced or broken before the iron pipe. In case this lead or composition joint d be displaced the rod e, connected with the valve I and spring f, will drop down and thus close the bell-formed mouth or valve-seat g; at the same time, the rod h, connected with a lever, w, to the rod o, having a valve, i, on the opposite end, will close the mouth or valve-seat j, the spring kpushing it against the seat, and thus prevent the water as well from running out of the compartments and the door as escaping rapidly through evaporation when the safe should be exposed to a high heat.

To guard against accidents or explosions under such circumstances a safety-valve, or, by preference, a spring safety-valve, is placed in the opening l, or in any other convenient place in the top of the safe. By this arrangement a constant flow of water is provided for through all compartments in the top, bottom, back, sides, and the door, which will carry off the heat as fast as it is communicated to any part of the safe as long as the

water-supply is kept up.

As many of the safes in present use may be made permanent or be supported on masonry, rendering the detachment unnecessary, it is obvious that a much greater degree of safety will be attained in constructing safes after the manner herein set forth.

I am aware that it is not new to introduce water between the walls of a safe.

Having thus fully described my invention, I desire to claim—

In combination with a safe provided with hollow chambers and an induction and eduction water-pipe, the fusible plug d, valve-

stem, valve, and spring h f I, rocking lever w, and rod, valve, and spring o k i, all constructed substantially as and for the purposes set forth.

This specification signed this day, the 2d of December, 1872.

JUDSON W. WARNER.

Witnesses:

RICHARD GERNER, FRANKLIN BARRITT.