

No. 644,518.

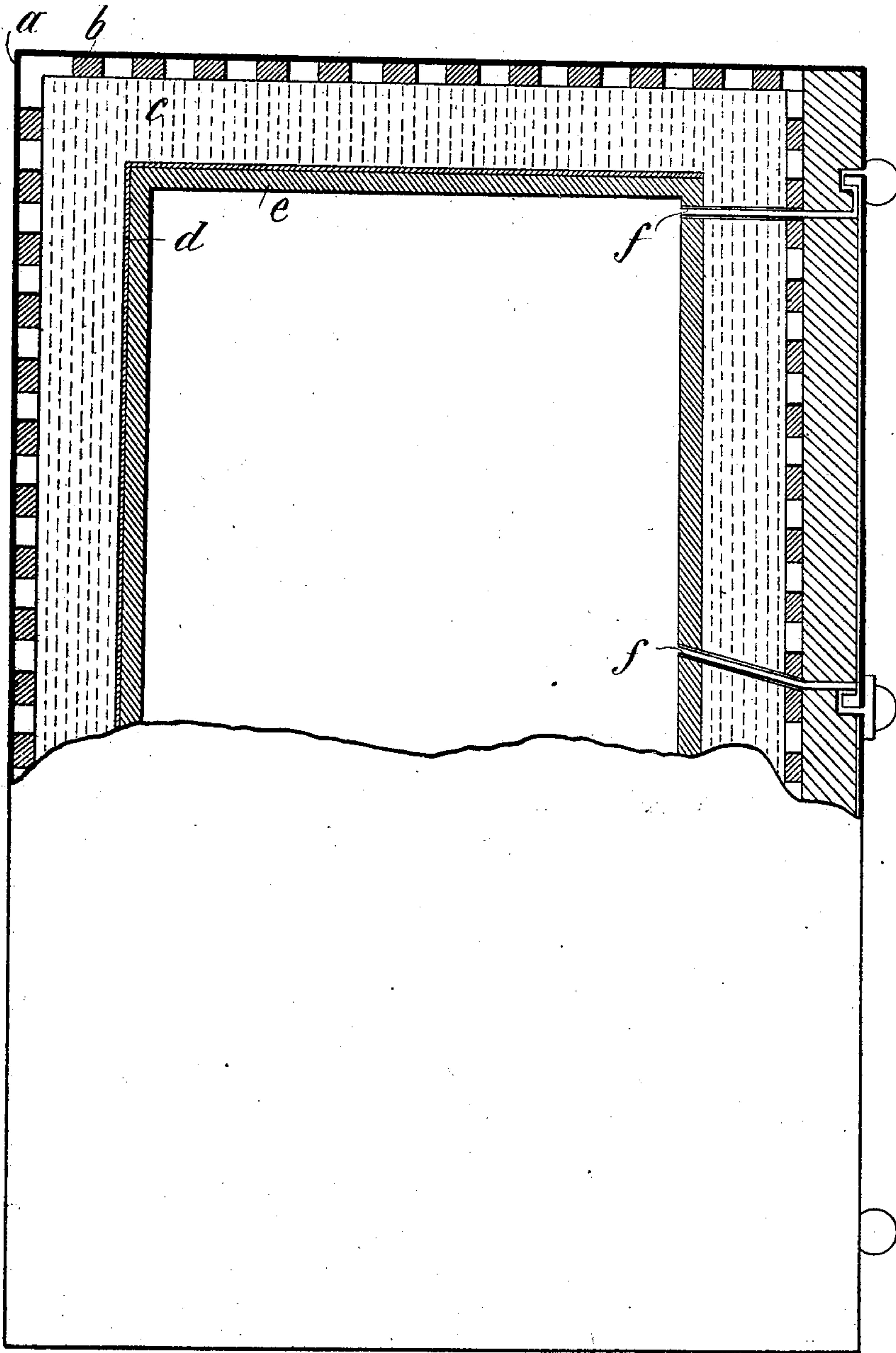
Patented Feb. 27, 1900.

S. JABLONSKI.

SAFE, &c.

(Application filed Oct. 13, 1899.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## SAFE, &c.

SPECIFICATION forming part of Letters Patent No. 644,518, dated February 27, 1900.

Application filed October 13, 1899. Serial No. 733,517. (No model.)

*To all whom it may concern:*

Be it known that I, STEFAN JABLONSKI, a subject of the Emperor of Russia, residing at Warsaw, in the Province of Poland, in the Empire of Russia, have invented certain new and useful Improvements in Safes and other Fireproof Receptacles; 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, reference being had to the accompanying drawing, and to letters of reference marked thereon, which forms a part of this specification.

This invention relates to an improved construction of safes and other fireproof receptacles whereby in the case of these being subjected externally to heat a perfect closure of all joints of the safe through which heat might penetrate into the interior is effected, while at the same time the inner surface of the safe or receptacle cannot become heated to any high degree either by conduction or radiation, so that the safe can be lined internally with wood.

The invention is based on the known property of an isolating fireproof mass, composed mainly of water-glass, spirit-varnish, and a binding-cement, (made of baryta, alumina, graphite, &c.,) expanding under heat, and consequently completely filling out the spaces between the inner and outer walls of the receptacle, as also the joints or interstices thereof and of the doors.

The invention consists in the application on the inner side of the outer wall of the safe or at other points between the inner and outer walls of bars arranged in the form of grating, the interstices of which are left unfilled by the said fireproof-filling mass (which is applied in the form of hard slabs or blocks) so long as the safe is not subjected to excessive external heating. At the joints of the doors, &c., the filling mass is covered in by simple thin wood sheathing. When the safe is subjected externally to fire heat, the filling mass expands and fills out the free spaces between the grating-bars, and as the wooden bars of the grating and the sheathing burn away the

spaces and open joints left thereby also become filled with the expanding mass. The inner lining of the safe is thus entirely surrounded by a hermetic inclosure of a material that is a bad conductor of heat, and the lining and contents of the safe are consequently effectually protected.

The accompanying drawing shows by way of example a part-sectional plan of a safe or other fireproof receptacle constructed according to my invention.

Against the inner surfaces of the outer walls *a* of the safe are placed frames *b*, formed of wood gratings, and between these gratings and the inner walls or wood lining *e* (which may have an outer sheet-metal covering *d*) is placed the fireproof material *c*, which is a bad conductor of heat, the interstices between the wooden bars of the grating being left free. The fireproof mass is in the form of hard slabs, which on being fitted in have their joints made good by some of the mass in a fused state, or the mass can be introduced in the form of layers in a plastic condition confined between sheets of pasteboard and be united together by pressing.

The door or doors of the safe are constructed in a similar manner, and at the joints the fireproof mass is covered by thin wood sheathing *f*.

When the fireproof material *c* is heated by conduction through the outer walls of the safe, it expands and fills out the spaces of the wood gratings, and when these have burned away, as also the sheathing *f*, at the joints the mass also expands into and completely fills out the spaces left by these, so that the inner wall or wooden lining of the safe is effectually inclosed on all sides by the fireproof material.

I claim—

1. In a safe, a filler between the inner and outer walls composed of a fireproof compound expansible when exposed to the action of heat and a thin wood sheathing or lining covering said filler at the door-joints, for the purpose set forth.

2. In a safe, a filler between the inner and outer walls made of slabs of a fireproof com-

pound expansible when exposed to the action of heat, a wood grating interposed between said filler and the outer walls of the safe, and a thin wood sheathing or lining covering the  
5 filler at the door-joints, for the purpose set forth.

In testimony that I claim the foregoing as

my invention I have signed my name in presence of two subscribing witnesses.

STEFAN JABLONSKI. [L. S.]

Witnesses:

BOLESDAW HORODZIN,  
ADAM MICKIEWICZ.