

(No Model.)

P. WILHELM.
BURGLAR PROOF SAFE.

No. 450,956.

Patented Apr. 21, 1891.

Fig. 1.

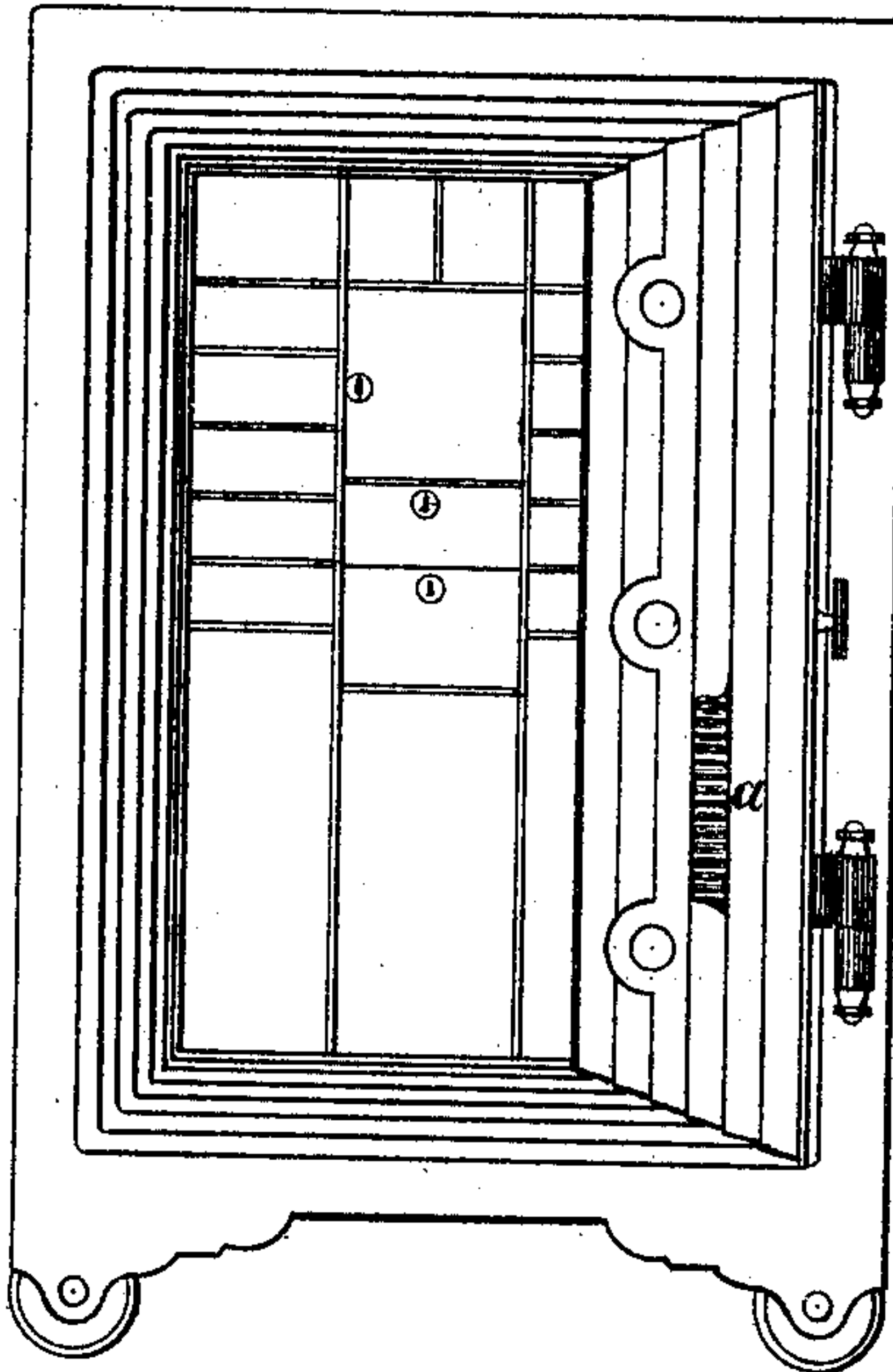


Fig. 2.

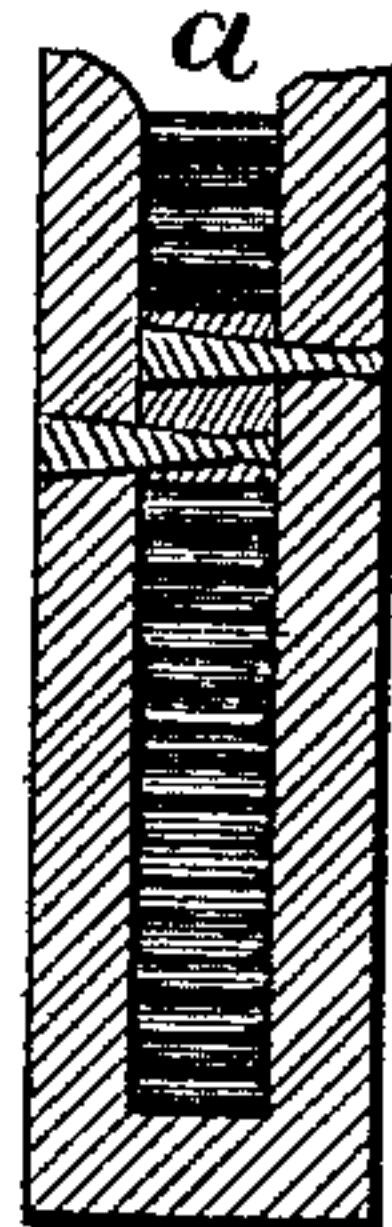


Fig. 3.

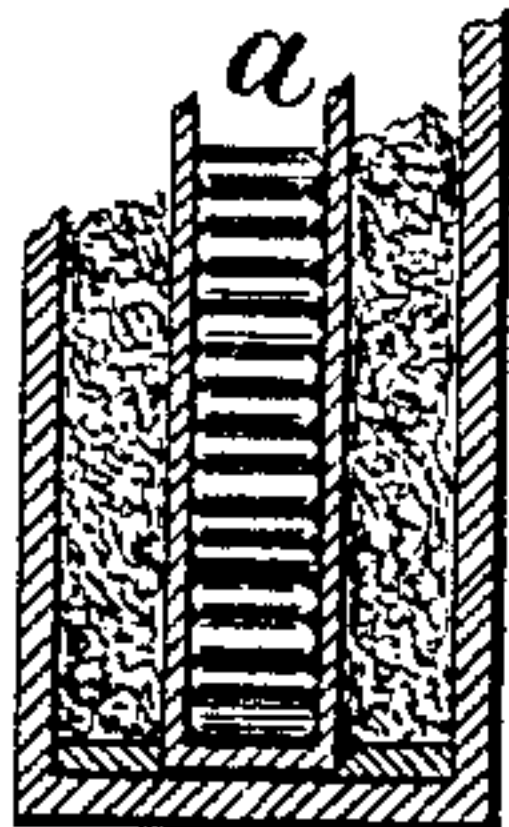


Fig. 4.

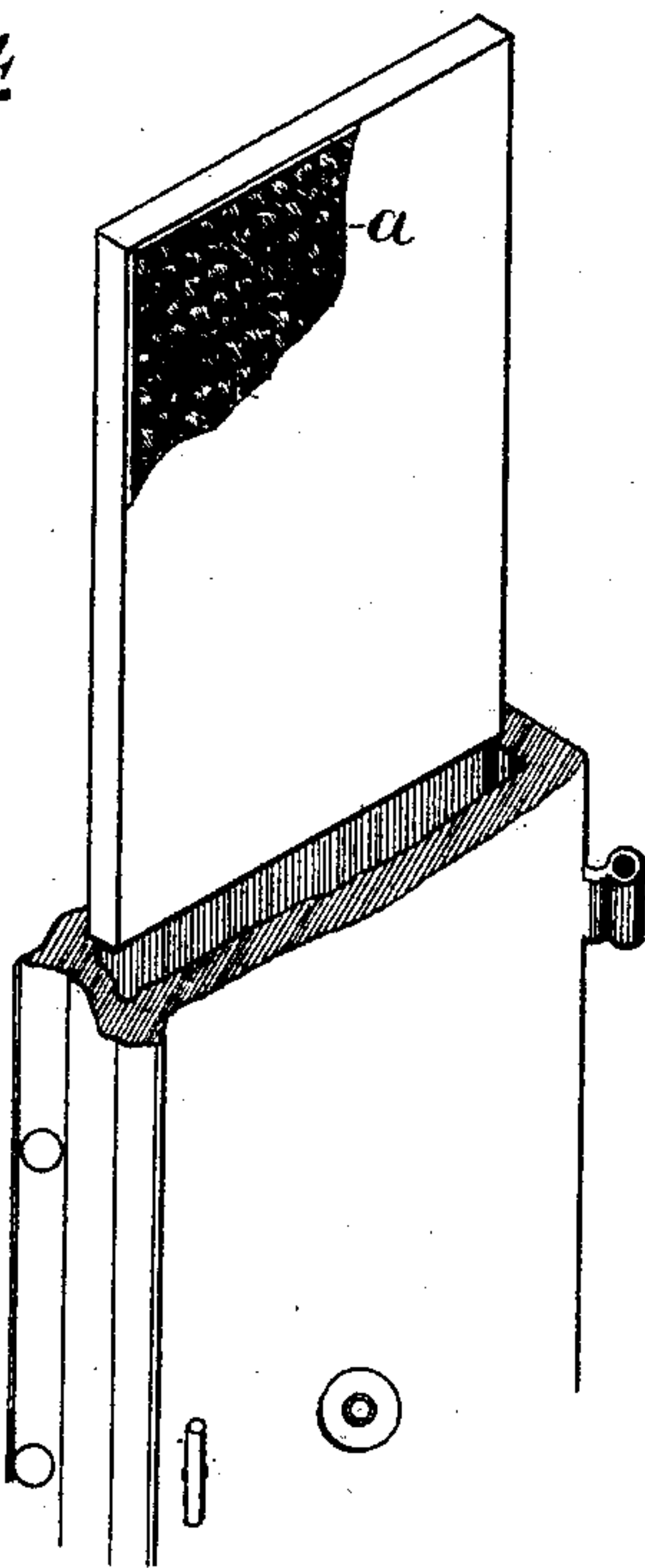


Fig. 5.

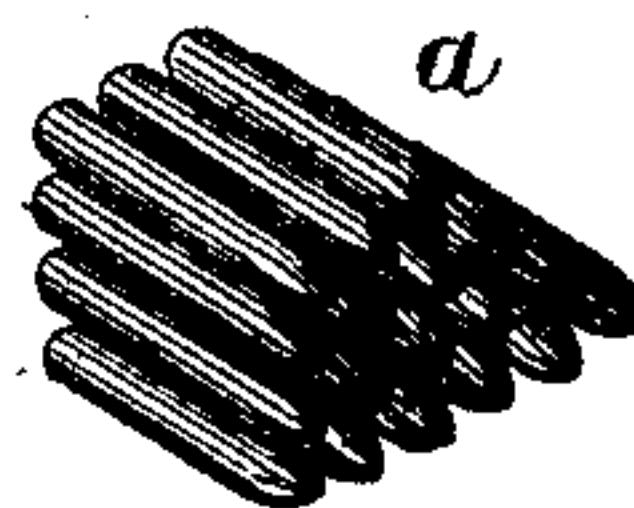
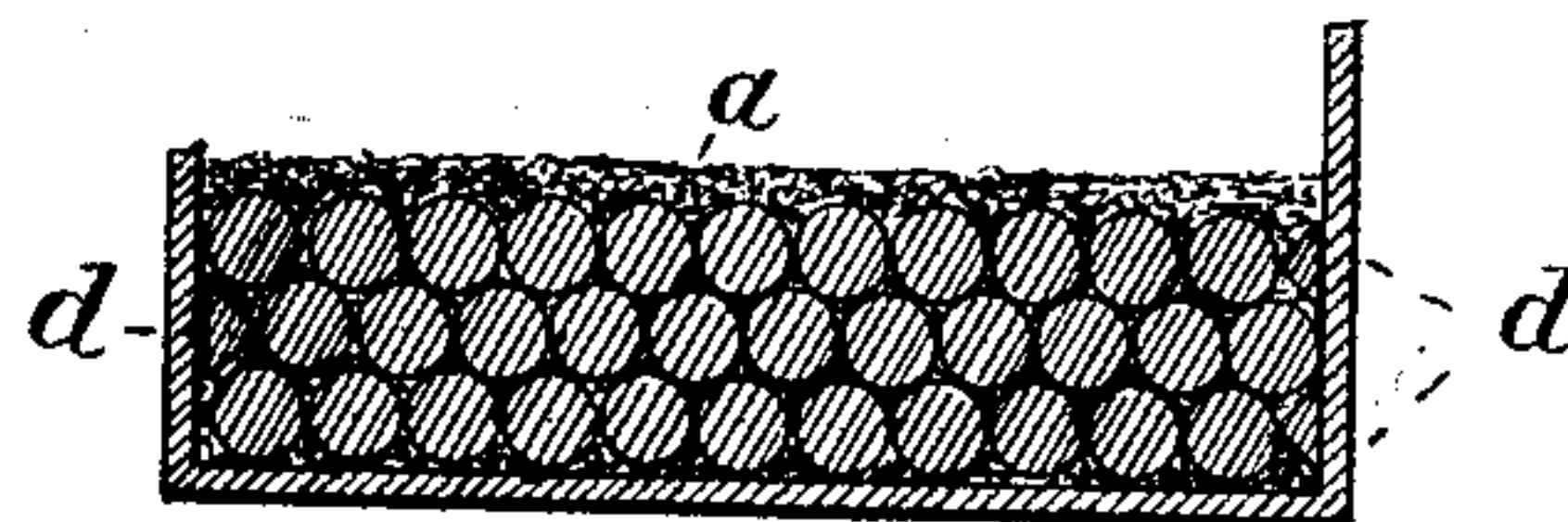


Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

PETER WILHELM, OF PORTLAND, OREGON.

BURGLAR-PROOF SAFE.

SPECIFICATION forming part of Letters Patent No. 450,956, dated April 21, 1891.

Application filed August 28, 1890. Serial No. 363,355. (No model.)

To all whom it may concern:

Be it known that I, PETER WILHELM, a citizen of the United States, residing at Portland, Multnomah county, and State of Oregon, have invented a new and useful Improvement in Burglar-Proof Safes, of which the following is a specification.

My invention relates to the means employed for rendering the doors and walls of safes, vaults, and like work impenetrable by the drill. I accomplish this by providing in the safe-body and door thereof a section or inner wall of short loose rods laid and resting one on the other at right angles to the face of the safe, or so that one of their ends will point toward the exterior thereof, and thus constitute a net-work of rods embedded in a dry non-combustible lubricous substance, facilitating their revolving freely in their places whenever a drilling-tool is brought to bear against them, my invention being arranged as shown in the accompanying drawings, forming a part hereof.

Figure 1 in the drawings is a front elevation of a safe with its door open and at right angles to the body of the safe. Figs. 2 and 3 are partial transverse vertical sectional views. Fig. 4 is a partial perspective view, (said figures 2, 3, and 4 illustrating practical means for adapting my invention for use.) Fig. 5 is a perspective view of the rods, also showing a full plan view of one of them; and Fig. 6 is a partial longitudinal vertical section showing the arrangement of the rods.

Like letters refer to like parts.

The rods *a*, preferably of the shape shown in Fig. 5 and of suitable size, are arranged as shown in Fig. 6, being so laid that their butt-ends *b* will point toward the interior and their tapering ends *c* toward the exterior of the safe, this arrangement being adopted so that the rods may not act as a chisel, against which a sledge might be used with effect, and for other reasons, as will appear hereinafter. The interstices or places about the rods *a* are filled in with some dry lubricous substance unaffected by strong heat—as, *e. g.*, black-lead—so that there will be but little friction of the rods against each other and enable the same to revolve freely in their places when operated upon with a drill, the ends *b* of the rods

being rounded so as to diminish the friction upon the plate or frame-work against which they are placed, and the tapering ends *c* serving to turn the drilling-tool aside as well as, because of its said construction, offering no salient point to facilitate the action of the drill. In the corners and spaces left at the sides of the alternate rows of rods are placed small triangular (or semicircular) bars *d*, somewhat tapering at their exterior ends, so as to leave no unprotected aperture. The rods, arranged and embedded in a lubricous substance, as described, are inclosed by a suitable frame-work that will retain them in position and secure them from being forced out of place.

If desired, the places in which the spindle and mechanism for operating the bolts, as well as such bolts, are located may be protected by plate-work in the manner now in use for that purpose.

The edges of the safe-body and verge of the door are constructed of solid frame-work as well as the interior and exterior of the body and door being all according to the well-known methods now employed for that purpose. Between the plates of this frame-work a section is left open in which to introduce my invention, as seen in Figs. 2 and 3, the latter figure showing a section of the walls of a fire-proof safe with my invention combined therewith, or, if deemed preferable, my invention may also be inclosed in a separate frame-work of its own, (see Fig. 4,) so that it may be inserted in and between the plates constituting the frame-work of the walls or door of the safe.

The means I have described, constituting my invention for rendering safes and vaults burglar-proof, may be applied to every part thereof offering an advantageous or accessible point for being operated upon with a drill, or the same may be adopted in the door thereof only. Should a burglar attempt to drill through the walls of a safe containing my invention and succeed in getting as far as the net-work of rods, the drill can execute no further work, for, being operated on the rods, it will cause these to revolve with it without accomplishing any further work.

I am aware that a layer or series of layers of loose bars or rods capable of revolving in

their places have heretofore been used arranged parallel with the surface or face of the safe and its door; but I do not believe that these means could substitute my invention or
5 that the same are in any way analogous to the means employed by me, consisting, substantially, of an inner wall of loose rods, as described.

What I claim, therefore, as my invention,
10 and desire to secure by Letters Patent, is—
As an improvement in safes, the combina-

tion, with the frame, of a dry non-combustible lubricous filling therein, a net-work of loose rods embedded in the said filling at right angles to the face of the frame and having
15 their outer ends tapered, and the corner or end pieces *d*, substantially as described and set forth.

PETER WILHELM.

Witnesses:

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