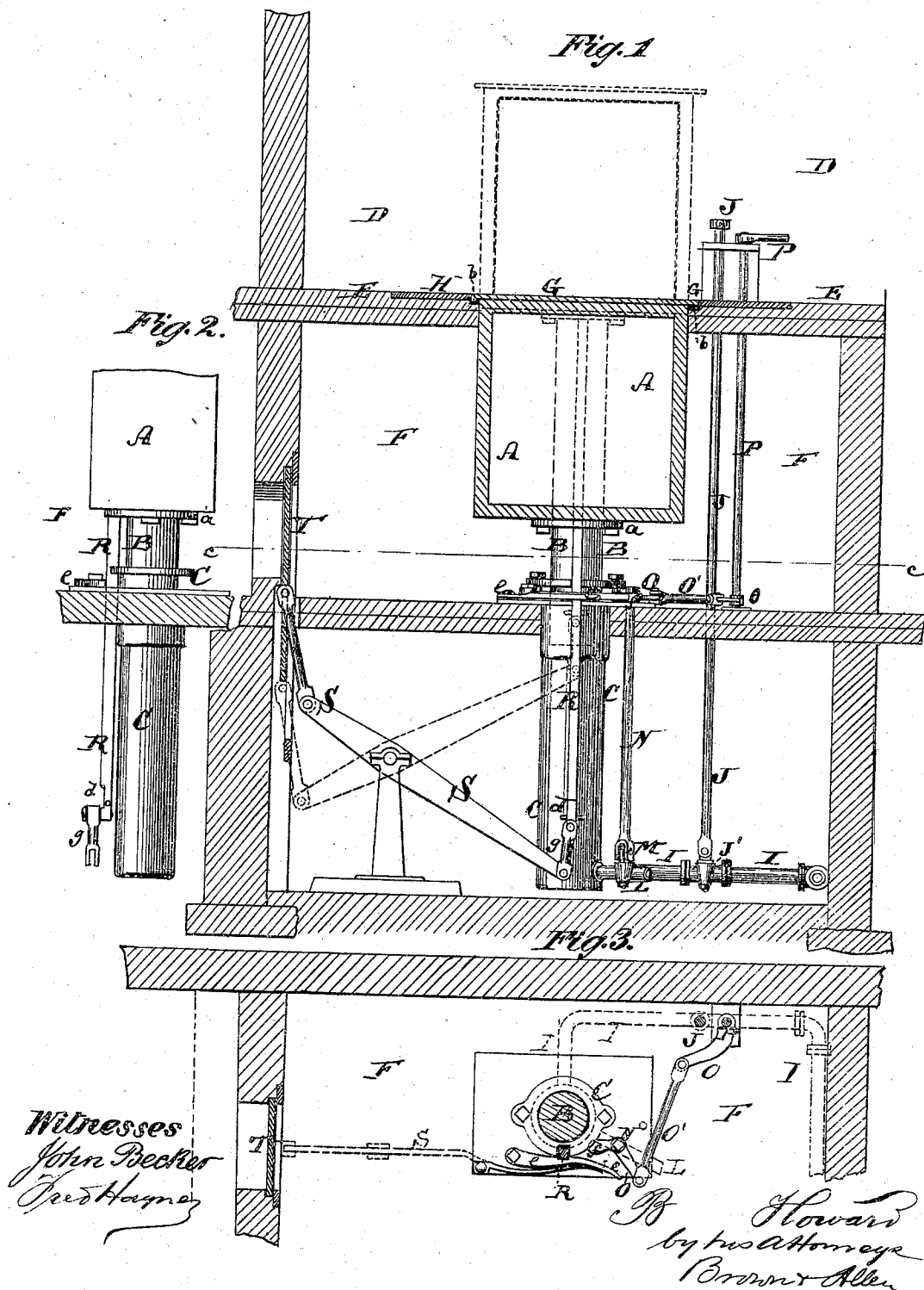


B. HOWARD.

Fire and Burglar-Proof Safes.

No. 139,792.

Patented June 10, 1873.



UNITED STATES PATENT OFFICE.

BENJAMIN HOWARD, OF ST. CLAIR, PENNSYLVANIA, ASSIGNOR TO HIMSELF
AND THOMAS WATKINS, OF SAME PLACE.

IMPROVEMENT IN FIRE AND BURGLAR PROOF SAFES.

Specification forming part of Letters Patent No. **139,792**, dated June 10, 1873; application filed
March 24, 1873.

To all whom it may concern :

Be it known that I, BENJAMIN HOWARD, of St. Clair, in the county of Schuylkill and State of Pennsylvania, have invented an Improved Fire and Burglar Proof Safe, of which the following is a specification:

Figure 1 is a vertical front elevation of my improved fire and burglar proof safe. Fig. 2 is a side view of the hydraulic barrel; and Fig. 3, a horizontal section taken on the line *c c* Fig. 1.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to a new manner of supporting and constructing fire and burglar proof safes, with the object of keeping them, when closed, entirely out of the way of fire and water, so that in case of a conflagration the same cannot be reached by the destructive elements, nor its contents injured. My invention consists in a new combination of devices for keeping the safe elevated, operating the valves, and also, in combination with such movable safe, of a sliding door leading to the lower receptacle, so that such door can be opened automatically by the action of the press whenever the safe is raised into the counting-room, and to admit persons for repairing or lubricating the apparatus into such lower receptacle.

In the accompanying drawing, the letter A represents a safe made of metal of suitable shape and size. To its under side is bolted, by a projecting flange, *a*, the plunger B of a hydraulic press. This plunger extends into the barrel C of the press, which barrel is secured in the masonry of the building. D is the counting-room or apartment in which the safe is to be used when opened. E is the fire-proof floor of the counting-room, and F the receptacle beneath the counting-room into which the safe can be lowered. The walls, ceiling, and floor of the receptacle F are made of solid masonry, or of metal, or both, in such manner as to be absolutely fire-proof. To the upper surface of the safe A is bolted or otherwise firmly secured a plate, G, which extends beyond the sides and ends of the safe, as indicated in Fig. 1, and which, when the safe is lowered into the receptacle F, laps over or fits into a metal plate,

H, which is firmly bolted or otherwise secured to the floor E. Suitable elastic packing *b* may be arranged in the floor E for the plate G to rest on, so that an absolutely water-proof joint can be produced. I is a water-pipe leading into the lower part of the barrel C. J' is the valve for opening said pipe and allowing water to flow into the barrel. L is the water-discharge pipe from the lower part of the barrel C, and M the valve for opening such discharge-pipe. The stem N of the valve M is, by jointed levers O O, connected with a vertical shaft, P, which extends into the counting-room, so that from there the valve M can be opened or shut. The stem J of the valve J' also extends into the counting-room, as shown in Fig. 1, to be readily turned therein. When the valve M is closed and the safe A lowered, as shown by full lines in Fig. 1, and the valve J' then opened, water is forced into the lower part of the barrel and the plunger B raised so that the safe will be lifted into the counting-room, as shown by dotted lines in Fig. 1. In this position the safe can be approached and its contents reached. When the valve J' is closed and M opened the water will flow out of the barrel C and the safe will be lowered into the receptacle F, as shown by full lines in Fig. 1, thus to be out of reach of burglars as well as of fire and water. From the flange *a* of the plunger B is suspended a rod, R, which has at its lower end a notch, *d*, for the reception of a spring-catch, *e*, said spring-catch being, by preference, pivoted to the floor of the receptacle F. When the safe is elevated the catch *e* springs into the notch *d* of the rod R and holds the safe in its raised position, absolutely preventing it from being lowered; but when the shaft P is turned to open the valve M, a projection, *f*, on one of the levers O, strikes the spring catch *e* and throws it out of the notch *d*, so as to permit the automatic lowering of the safe. The lower end of the rod R is, by a link, *g*, connected with a beam, S, whose outer end is connected with a sliding door, T, that closes an opening in the side of the receptacle F. The connection of this door with the beam and safe is such that when the safe is lowered the door is raised and closed, and access to the receptacle F thereby prevented, while, when the safe is elevated into

the counting-room the door is lowered and open to allow parties to reach the receptacle F for the purpose of repairing the masonry, &c. I propose to make the door T so small, that burglars, even when they reach it, will have difficulty in operating upon it.

Instead of making the safe vertically movable as shown, it may be connected with the hydraulic press in such manner as to be horizontally movable with substantially the same effect, the combination with the door T being a desirable, but not necessary, adjunct to my invention.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The rod R, combined with the safe A, and hydraulic press, and with the spring-catch *e*, substantially as specified.

2. The combination of the shaft P, levers O, and valve-stem N, with the projection *f*, and spring-catch *e*, for operation as described.

3. The door T connected with the beam S with the movable safe A, substantially as and for the purpose specified.

BENJAMIN HOWARD.

Witnesses:

JOHN SINEY,

JOSEPH TOWNSEND.