

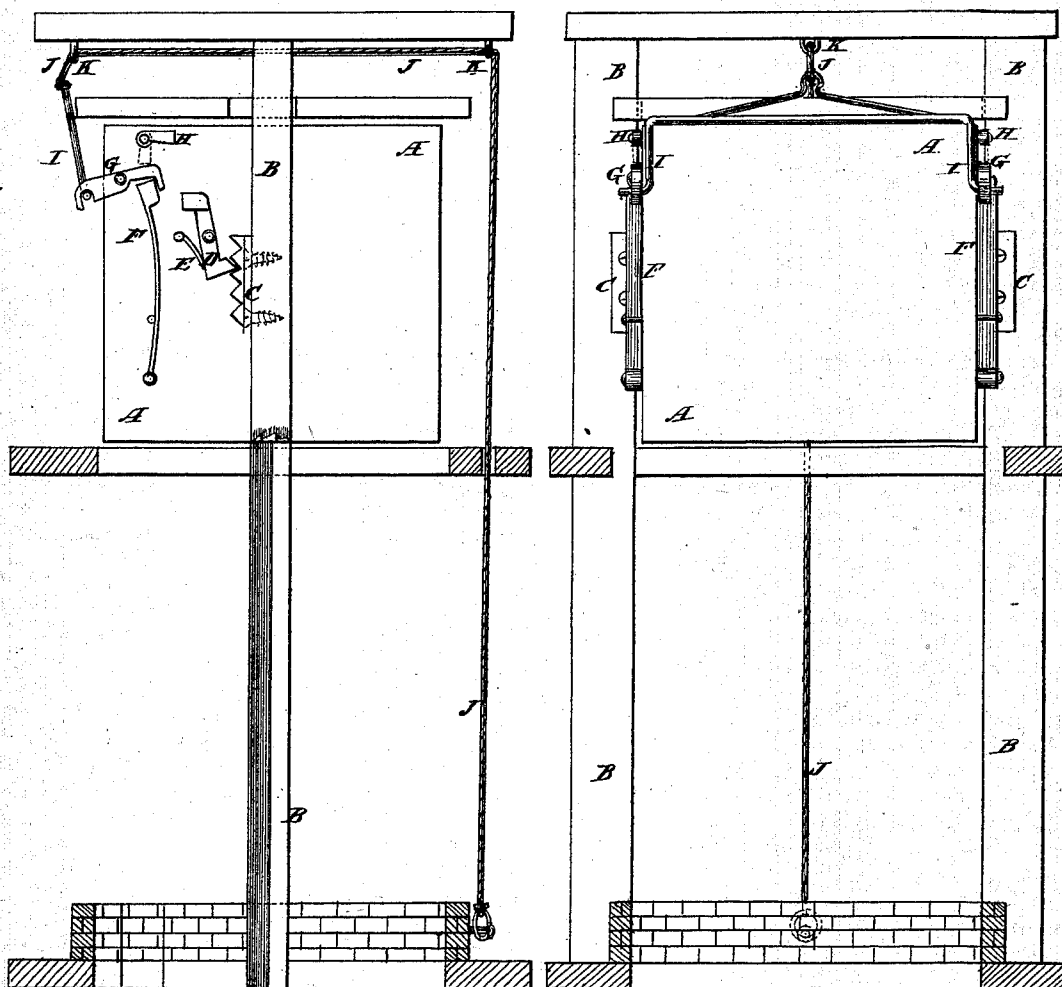
C. MORGAN.
Fire-Escapes for Safes.

No. 144,470.

Patented Nov. 11, 1873.

Fig. 1.

Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

CHARLES MORGAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
HIMSELF AND FRANK MANNING, OF SAME PLACE.

IMPROVEMENT IN FIRE-ESCAPES FOR SAFES.

Specification forming part of Letters Patent No. **144,470**, dated November 11, 1873; application filed
April 26, 1873.

To all whom it may concern:

Be it known that I, CHARLES MORGAN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Fire-Escapes for Safes, of which the following is a specification:

Figure 1 is a side view of a safe to which my improvement has been applied. Fig. 2 is a front view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish a simple and effective device by means of which a safe may be automatically made to descend into a well upon the breaking out of a fire in any story of the building. The invention consists in the combination of the ratchet-bars, the pawls, the springs, the spring-hammers, the pivoted lever-catches, the buttons or equivalent fastenings, the yoke, and the cord with each other, as hereinafter fully described.

A represents a safe, which is placed between two or more guide-posts, B, between which it slides up and down, which posts lead down through the various stories of the building to a hole or well in the ground or other receptacle below all draft. To the sides of the posts B, in the story where the safe A is to be located, are attached ratchet-bars C. To the sides of the safe A are pivoted pawls D, in such positions that their engaging ends may take hold of the teeth of the ratchet-bars C and support the safe A. The pawls D are held against the ratchet-bars C by springs E, also attached to the sides of the safe A. F are spring-hammers attached to the sides of the safe A in such positions that when released they may strike against the free ends of the pawls D and withdraw their engaging ends from the ratchet-bars C. G are lever-catches, which are pivoted to the sides of the safe A in such positions that the hooks formed upon their inner ends may take hold of the hammers F and hold them away from the pawls D, as shown in Fig. 1, in which position they may be locked by buttons H piv-

oted to the sides of the safe A in such positions that they may be turned down upon the inner ends of the catches G, and thus prevent the hammers from being accidentally released. Upon the outer ends of the catch-levers G are formed hooks to receive the ends of the yoke or gambrel I, to the center of which is attached a cord, J, which passes over guide-pulleys or guides K attached to the ceiling or other supports, and passes through the various stories of the building to the lower one, where its end is secured. During the day, or when the building is occupied, the buttons H are turned to lock the lever-catches G down upon the hammers F, and thus secure them from being accidentally released. At night, or when the building is to be left unoccupied, the yoke I is placed under the hooks of the lever-catches G, the cord J arranged as described, and the buttons H are turned away from the lever-catches G. If, now, a fire should break out in any story through which the cord J passes, the said cord will be quickly burned off, releasing the catches G and hammers F, which strike the pawls D, withdrawing the engaging ends of said pawls from the ratchet-bars C, and allowing the safe to drop. The safe may be provided with a fire-brick cover, L, which, when the safe has dropped to a place beneath the draft, will protect it from any fire, even should the said safe be made of wood. This enables the safe to be readily made burglar-proof.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination of the ratchet-bars C, the pawls D, springs E, spring-hammers F, pivoted lever-catches G, buttons or other fastenings H, yoke I, and cord J with each other, and with a safe suspended substantially as herein shown and described.

CHARLES MORGAN.

Witnesses:

J. G. ROTHERMEL,
FRANK MANNING.