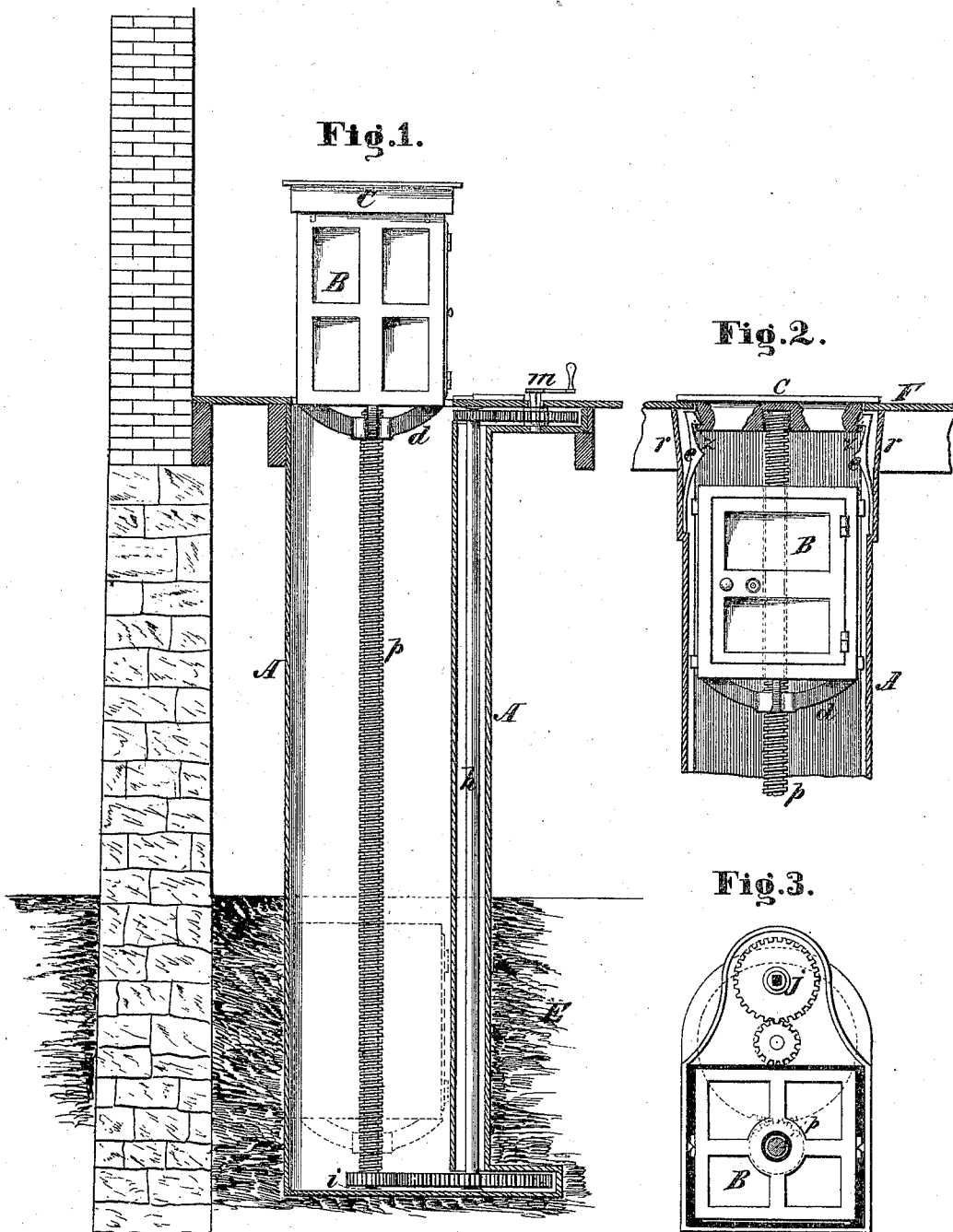


M. McCALL & R. O. WOOD.

Safe-Vaults.

No. 139,907.

Patented June 17, 1873.



Witnesses,
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MORTIMER McCALL AND ROSTO O. WOOD, OF BUFFALO, NEW YORK.

IMPROVEMENT IN SAFE-VAULTS.

Specification forming part of Letters Patent No. **139,907**, dated June 17, 1873; application filed June 17, 1872.

To all whom it may concern:

Be it known that we, MORTIMER McCALL and ROSTO ORRIN WOOD, of Buffalo, Erie county and State of New York, have invented certain new and useful Improvements in Fire and Burglar Proof Safes; and that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification.

The object of this invention is to provide a place of safety for articles of value, papers, books, &c., where they will be secure from thieves, fire, water, &c. The invention consists in providing a vertical casing with spring-catches for securely fastening the cap or cover to the casing, the spring-catches being automatically released from the cover by the safe while being raised; also in providing a vertical casing with a screw operated by suitable mechanism for raising and lowering a safe, in combination with spring-catches for securing the cap or cover to the casing.

Figure I is a side elevation, showing the safe elevated for use. Fig. II is a sectional side elevation, showing the safe being lowered into the earth. Fig. III is a plan view of the invention.

A represents a case or tube which is hollow, and of suitable size and length for the purposes for which it is designed. B is a safe; C, the cap or cover. E represents the earth; F, the office floor. The case A is provided with guides which keep the safe steady and in position while being lowered or raised within the case or tube. With a view of protecting the safe from burglars we propose to make the case of iron and steel, or either, in a strong and substantial manner; but where protection from fire only is wished, it may be constructed of lighter material. At the bottom, and within the case, is a stationary metallic socket, *i*. In this socket rests the lower end or pivot of a screw, which is revolved by means of a small gear which is attached to its lower end and connected with other gearing. *h* is a rod or shaft, on either end of which is placed a small gear which makes good the connection between the screw and the gear in which the driving-crank *m* is placed. More gearing can be attached at the will of the operator to increase or diminish the speed of the screw.

The crank *m* is made portable, and can be removed to a place of safety when not required for use. The socket *j* is also securely fastened when not in use. B represents a safe for the reception of valuable papers, &c., which is made to fit nicely in the case.

The safe is placed upon the platform or nut *d*, through or at the edge of which the screw *p* passes. The screw also passes through or at the side of the safe as it is lowered into the case. In this position, (shown in Fig. 1,) by means of machinery above described, and operated by crank *m*, the safe is lowered at night when the business of the office is closed, to such a point below the surface of the earth as will render it safe from danger or injury in case of fire. The cap or cover C follows the safe down, closing the opening at the top of the case A, and is locked down by spring-catches *z z* arranged within the case, which catches engage in holes or sockets in either side of cover C when adjusted in proper position to receive them. These catches are withdrawn by the action of the safe when it is again raised in the morning for business, the safe coming in contact with the projections *e e* on the spring-catches, and forcing them from the sockets, allowing the cap or cover C to rise with and on the top of the safe, where it remains until it is again lowered into the case. The safe is constructed without any filling whatever. The cap or cover may or may not contain filling.

The advantages of this device for the purposes for which it is designed may be briefly stated as follows: First, it protects the safe against injury in case of fire. Second, the safe, being made burglar-proof, as much so as a safe can possibly be made, it is rendered more secure by being lowered into the case, which also is proposed to be made burglar-proof. Third, by having the case water-tight, the safe and contents are more secure from injury during the fire. Fourth, if a fire occurs, the safe is so thoroughly protected that when removed after the fire, it is again ready for use. Fifth, a safe can be made much smaller and provide the same amount of space within as those much larger of ordinary construction filled with cement, &c. Sixth, the safe is raised and lowered by the office-clerk without

leaving the office. Seventh, being so much smaller it will require less metal and consequently cost much less in its manufacture, and taking so little space it is admirably adapted for use in private residences, as well as for business-offices. Eighth, it not only saves the safe and its contents, but also saves insurance on such property. Ninth, the case or tube being made portable, it can be transferred from one place to another without difficulty or much expense. Tenth, the case can be used in combination with safes of any manufacture.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The cap provided with sockets, in combination with spring-catches attached to the casing, to be automatically operated by the safe while being raised, as shown and described.

2. The combination of the safe B, screw *p*, operated by proper mechanism, vertical casing A provided with spring-catches *z*, and cap C, all operating together as and for the purposes described.

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