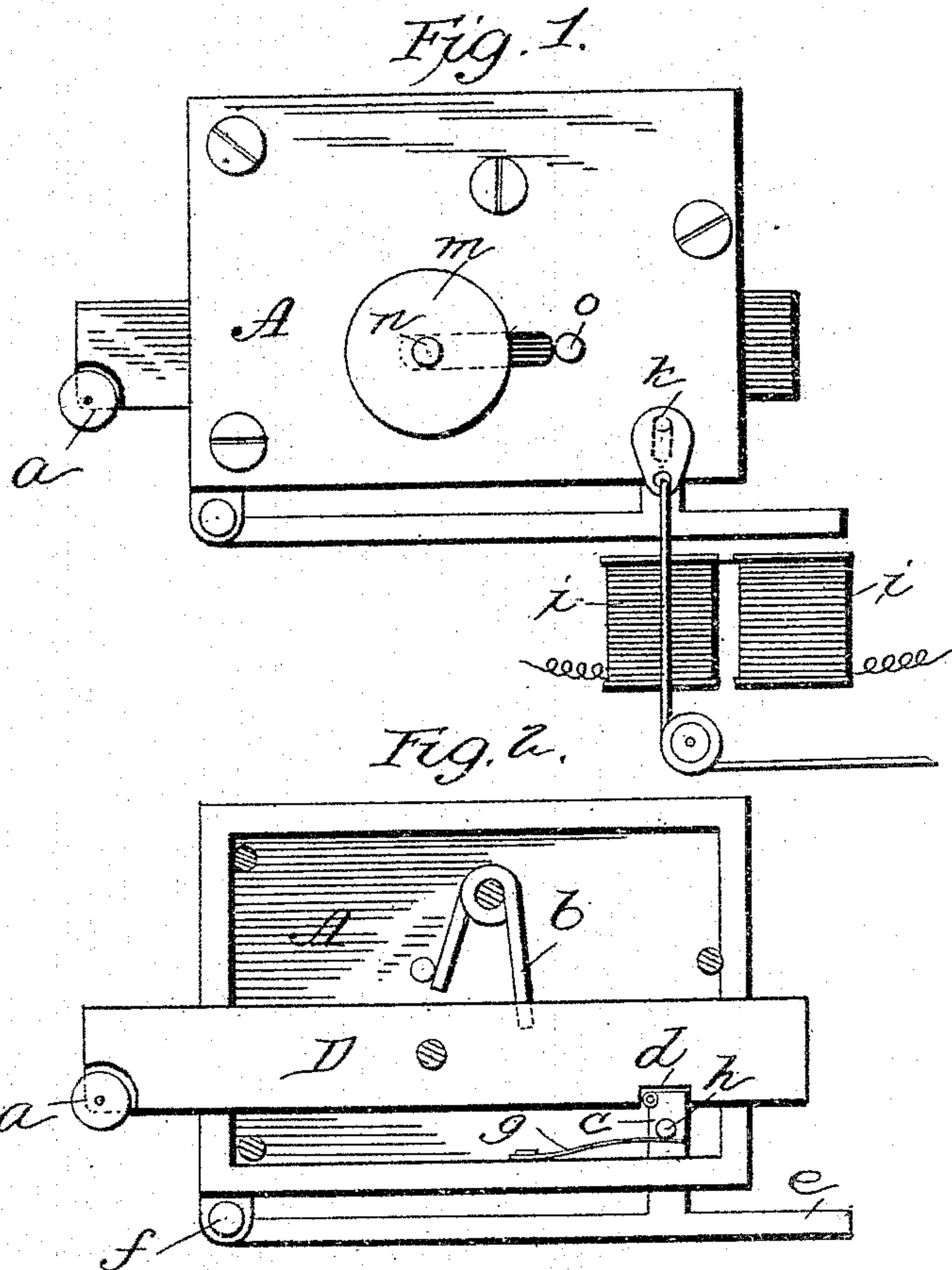


(No Model.)

O. A. MOYER & H. W. RHODES.
ELECTRIC LOCK.

No. 491,369.

Patented Feb. 7, 1893.



Attest
Malcolm Donaldson
Wm Hall

Inventors
Oliver A. Moyer
Henry W. Rhodes
by Elmer H. Hall

UNITED STATES PATENT OFFICE.

OLIVER A. MOYER AND HENRY W. RHODES, OF OGDEN, UTAH TERRITORY.

ELECTRIC LOCK.

SPECIFICATION forming part of Letters Patent No. 491,369, dated February 7, 1893.

Application filed April 9, 1892. Serial No. 428,442. (No model.)

To all whom it may concern:

Be it known that we, OLIVER A. MOYER and HENRY W. RHODES, citizens of the United States of America, residing at Ogden, in the county of Weber and Territory of Utah, have invented certain new and useful Improvements in Locks, of which the following is a specification.

Our invention relates to a simple form of lock adapted to be automatically operated by electricity and particularly applicable for fire alarm stations though we do not limit ourselves in this respect.

The invention consists in the construction hereinafter described and particularly pointed out in the claims.

In the drawings: Figure 1 is a front elevation of the lock and Fig. 2 is a like view with the front plate removed.

In the drawings the frame of the lock is shown at A and this supports a locking bolt D which carries upon its locking end an anti-friction roller *a*, so as to prevent binding as it is shot into place. This bolt is held normally retracted by means of a spring *b* which may be in the form shown in Fig. 2, or of any other desired form. The bolt is moved forward into a locked position against the pressure of the spring *b* and is held in this position by means of a dog *c* entering a recess *d* in the underside of the bolt, this dog being an extension of a bar *e*, pivoted to the locked frame at *f*. The dog *c*, and its bar are held up into engagement with the locking bolt by means of a spring *g*, on the inside of the lock frame, the end of which extends under a projection *h*, as shown clearly in Fig. 2. It will thus be seen that in order to allow for the release of the bolt B the pivoted bar *e*, with its dog *c*, must be moved upon its pivot so as to withdraw the dog from the notch or recess in the bolt which will thus allow the spring to throw the bolt back.

We attain the movement of the bar *e* in an automatic manner by means of electro mag-

nets *i*, forming a part of an electric circuit and arranged beneath the bar *e*, which acts as an armature, and thus on the passing of the current through the magnets the armature *e*, will be retracted and thus will withdraw the dog forming a part thereof, from the recess in the locking bolt.

Instead of operating the dog electrically we may extend the projection *h* outside the frame through an elongated slot and secure to the end of it a disk *k*, to which a cord or wire may be secured as at *l* leading to a proper position for manipulation by authorized persons.

In order to indicate when the bolt has been retracted we support a bell *m*, on a pin *n*, carried by the bolt and projecting through an elongated slot in the frame, and in the movement of this bolt the gong strikes the projection *o* on the frame and causes it to sound.

We claim as our invention:

1. In combination with a lock frame, a sliding bolt therein, a spring for placing the bolt under tension, a notch in the bolt a lever pivoted at one end of the frame having a dog engaging the notch under spring tension and means for releasing the bolt by swinging the lever on its pivot and withdrawing the dog from engagement therewith, substantially as described.

2. In combination with a locking bolt under spring tension, a lever pivoted at one end of the frame having a dog projecting therefrom and engaging a notch in said bolt also under spring tension, electro magnets in proximity to the pivoted bar or levers for retracting the same under the impulse of a current, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

OLIVER A. MOYER.
HENRY W. RHODES.

Witnesses:

CHAS. MEIGHAN,
ED. T. MORTON.