

JOHN BURGE.

Improvement in Time Locks.

No. 123,378.

Patented Feb. 6, 1872.

Fig. 1.

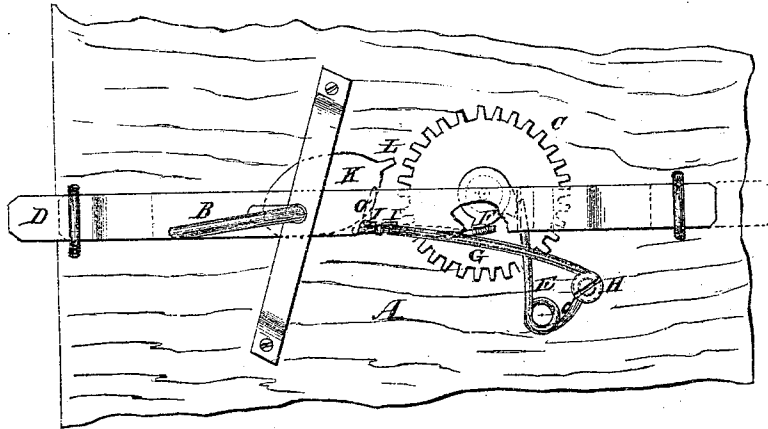
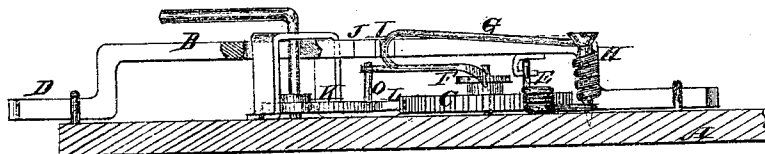


Fig. 2.



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JOHN BURGE, OF CIRCLEVILLE, OHIO.

IMPROVEMENT IN TIME-LOCKS.

Specification forming part of Letters Patent No. 123,378, dated February 6, 1872.

Specification describing a new and useful Improvement in Burglar-Proof Locks, invented by Dr. JOHN BURGE, of Circleville, in the county of Pickaway and State of Ohio.

This invention relates to locks which are placed upon the inside doors of vaults or safes, and are moved and operated by clock-work, so that no key-hole or other aperture through the door is necessary; and it consists in a mechanism composed of a revolving cam-wheel and actuating plate and springs, by means of which a continuous motion thereof, in one direction, locks and unlocks the door, the construction and arrangement being as hereinafter more fully described.

In the accompanying drawing, Figure 1 represents a top or plan view of the lock. Fig. 3 is an edge view.

Similar letters of reference indicate corresponding parts.

A is the bed or plate of the lock. B is the bolt. C is a cog-wheel, which is revolved beneath the bolt. The latter moves upon its ends, the middle portion being raised so as to pass over the operating parts of the lock, as seen in Fig. 2. D is the locking end of the bolt. E is a spring confined to the plate A, the end of which bears against a lug on the under side of the bolt with a constant pressure, and tends to shoot the bolt at all times. F is a cam attached to the wheel C, which throws the bolt back and unlocks the lock once for every revolution of the wheel. G is a spring attached to the stud H, the end of which forms a hook, as seen in Fig. 2, which enters one of the two notches, I J, in the edge of the bolt. This spring bears against the edge of the bolt with a constant pressure. When the spring enters the notch I it holds the bolt locked, as seen in Fig. 1. When in the notch J it holds the bolt unlocked. This spring is thrown out from the bolt by the

plate K, to which a revolving movement is given by clock-work connected therewith, actuated by spring or weight to revolve it.

I do not confine myself to any particular clock-work or mechanism for this purpose, but design to use any motive power within the safe or vault by which the purpose may be effected.

The plate K has upon its periphery one cog or finger L, and on its side, and flush with its edge, a lug, O. At each revolution of the plate it engages with a cog in the wheel C and moves the wheel a certain distance—one-eighth of a revolution, more or less. As the finger leaves the wheel the lug strikes the spring G and forces it from the notch I, in which it is, but the bolt will not be moved except when forced back by the cam F. When the lug O works with the cam the bolt will be thrown back, and this, as before stated, will occur once for every revolution of the wheel C. Now, the clock-work may be so constructed and adjusted that the door will be unlocked once in twenty-four hours, or once in six or twelve hours, or once a week, as may be desired.

I do not limit or confine myself to the precise form or arrangement of any of the parts described, as they may be varied in many ways without departing from my invention.

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

1. The bolt B, cam F, springs E and G, and plate K, with the finger L and lug O, when the same are constructed and arranged to operate substantially as and for the purposes described.
2. The notches I J in the bolt B, in combination with the spring G and the lug O on the plate K, for the purposes set forth.

Witnesses:

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