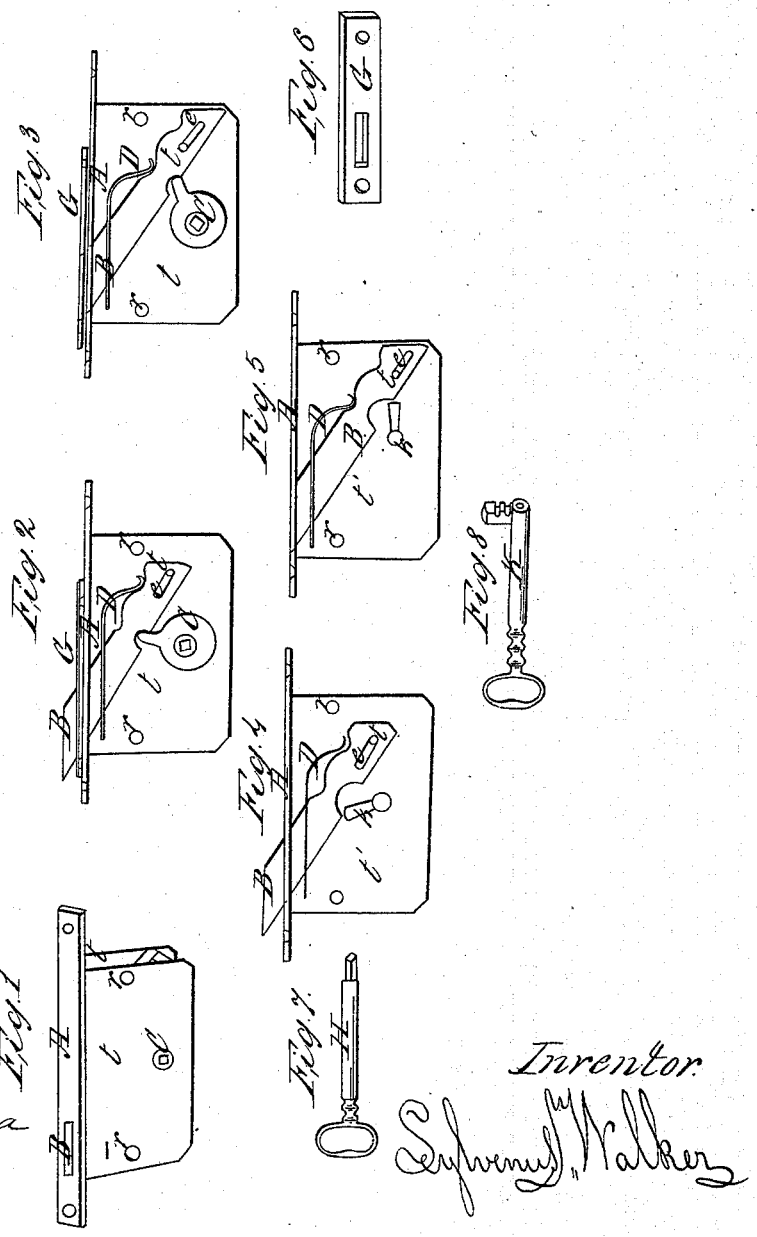
S. Walker,

Piano Lock,

No. 47,349. Patented Apr. 18, 1865.



Witnesses
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SYLVENUS WALKER, OF NEW YORK, N. Y.

LOCK FOR PIANO-FORTES.

Specification forming part of Letters Patent No. **47,349**, dated April 18, 1865.

To all whom it may concern:

Be it known that I, SYLVENUS WALKER, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Piano-Forte Locks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which the marks of reference correspond in all the figures.

My said improvements form a simple and durable lock in which the bolt moves diagonally, and hence applicable to piano-fortes, melodeons, sewing-machines, chests, and writing-desks, boxes, sliding doors, &c.

My invention also embodies certain forms of construction calculated to simplify the process of manufacture of the lock and reduce the cost, a peculiar construction of the bolt which moves diagonally through the face-plate and corresponding catch-plate, in the operation of locking and unlocking, and may be constructed to lock and unlock by means of a key with a square end, or one with a bit, with equal facility.

To enable others to construct and use my invention, I will proceed to describe the construction and operation of the same.

In the drawings annexed, Figure 1 is a perspective view. Fig. 2 shows the inside of the lock, the front-plate being removed, showing the bolt in a locked position. Fig. 3 is a similar view showing the bolt in an unlocked position. Fig. 4 is a view of its construction for chests, writing desks, &c., in which a key with a bit is substituted for the one with a square end, as in Figs. 1, 2, and 3. Fig. 5 is a similar view showing the bolt in an unlocked position. Fig. 6 is a view of the catch-plate. Fig. 7 is a view of the square-ended key for Figs. 1, 2, and 3. Fig. 8 is a view of the key for the lock, as shown in Figs. 4 and 5. It will be observed the tumbler is omitted, as the bit of the key actuates the bolt in a similar manner as the tumblers in the former figures.

A represents the face plate, of sheet-brass or other metal.

B represents the bolt having a wedge-shaped end.

C represents the tumbler having a square hole in its center for the key to operate the bolt.

D represents the spring for holding the bolt in its locked or unlocked position.

e represents a small slot in the rear end of the bolt to guide the direction of the bolt by means of the small pin *t*, also forming a stop for the bolt.

G represents the catch-plate, of sheet brass, with a slot corresponding to the bolt B, also screw-holes for fastening the same to the top or cover.

H represents a key with a square end, also corresponding to the square hole in the tumbler.

K represents a key with a bit to operate the bolt in the operation of locking or unlocking, as shown in Figs. 4 and 5.

t t are to represent the two side plates of the lock with a key-hole in the front one to correspond to the style of key to be used. These plates are held together by two rivets, *r r*. It will be observed that the spring D is acted upon by the bolt B, being moved up and down by means of the key in locking the bolt, the two notches upon the upper side that the end of the spring catches into, to hold the bolt in a locked or unlocked position. It will be observed that the circular part of the bolt between those two notches operates upon the spring in the usual manner as in ordinary locks.

This lock is designed as a mortise-lock. The body part of the lock is to be let into the wood-work until the face-plate presents a smooth, even surface with the same, so that no part of the lock or catch-plate projects when unlocked and open, but when locked the bolt rises up through the face-plate and catch-plate diagonally, thereby locking the two together in a very simple and effective manner, as shown in the several figures. Locks of this class as heretofore constructed are very complicated, and expensive of manufacture, besides being very liable to become disarranged and defective of operation. If the top or cover become warped it will not lock. The advantages of my invention are designed to overcome all these objections. I have designed to speak of what I consider as new in my invention, leaving out that which is common in ordinary locks, as being well understood.

What I claim as my invention, and desire to secure by Letters Patent, is—

A lock constructed with the diagonal movement of the bolt B, substantially in the manner and for the purposes set forth.

SYLVENUS WALKER.

Witnesses:

L. M. DOUDNA,

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