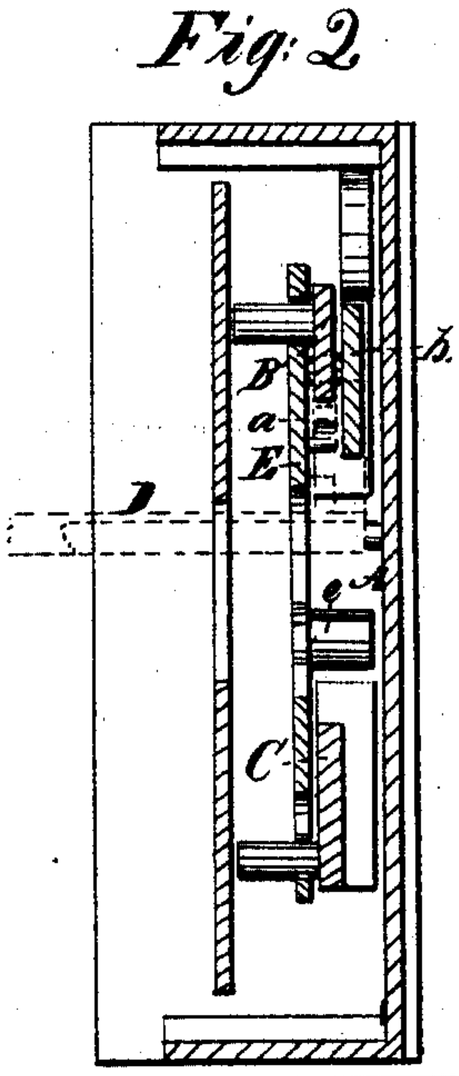
Stachelin & Young,

Lock.

No. 55,549. Patented June 12, 1866.

Fig: 1.

Fig: 2



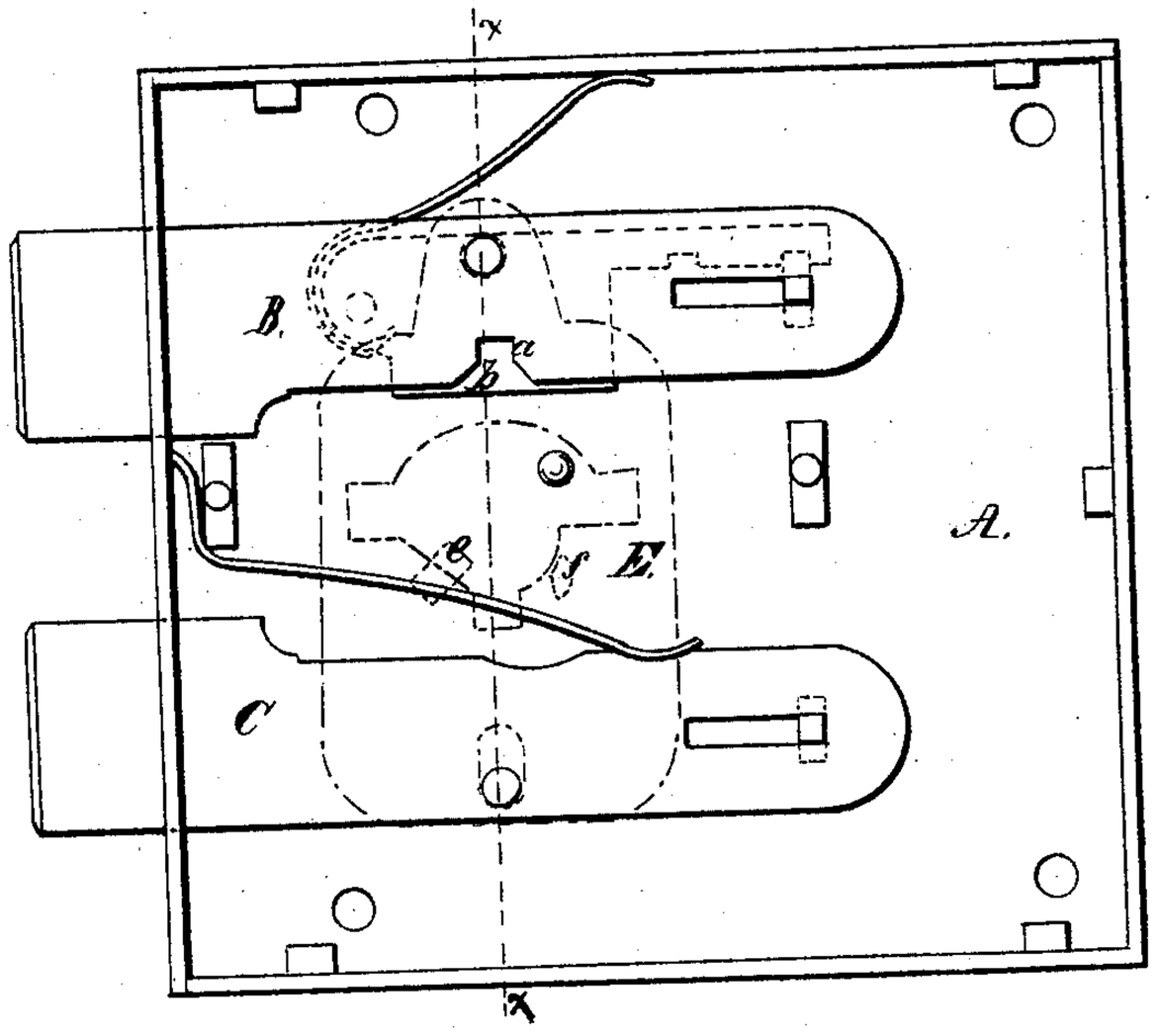
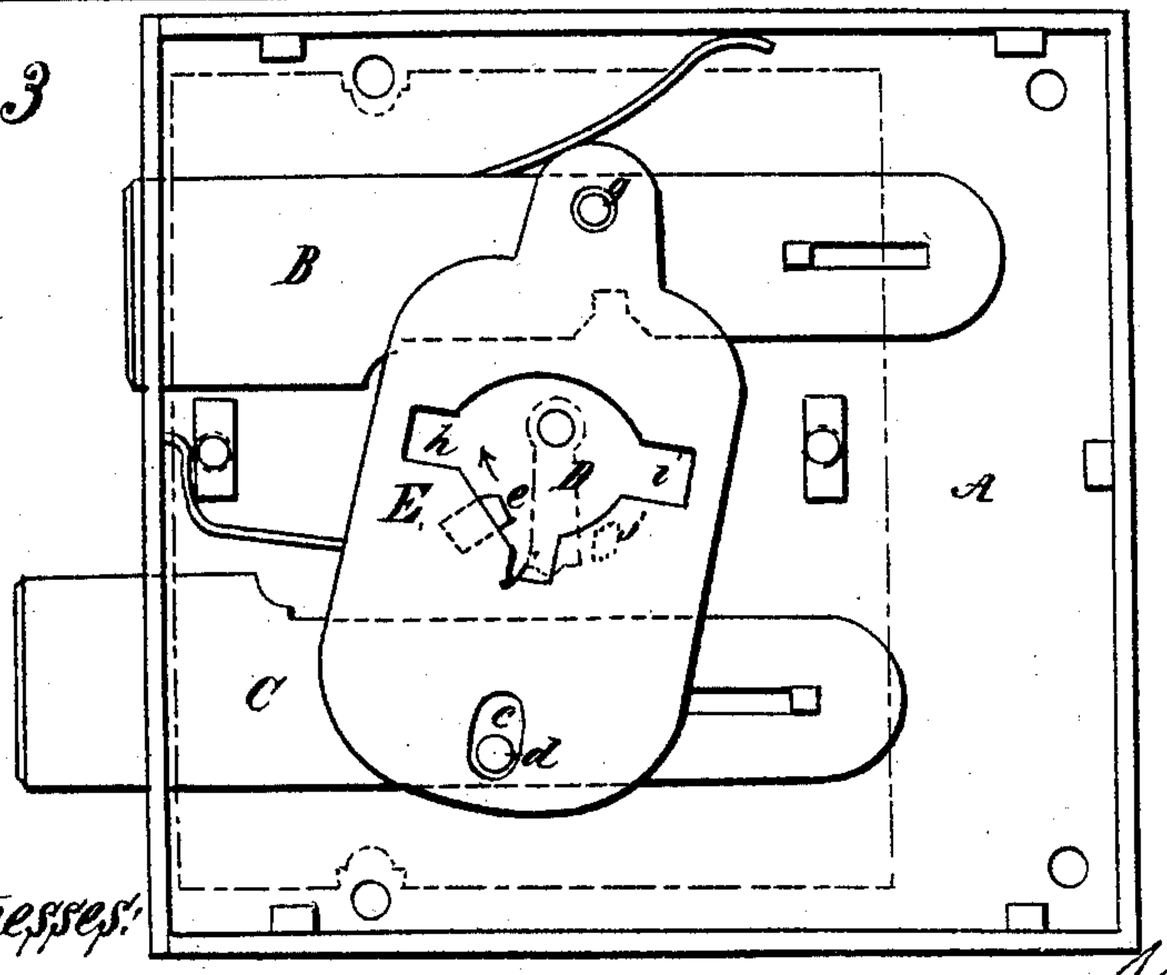


Fig: 3



Witnesses:

Thos. Tusch

W. B. Covington

Inventors:

M. Stachelin

H. Young

By Munn & Co

attys.

UNITED STATES PATENT OFFICE.

MARTIN STACHELIN AND HENRY YOUNG, OF PORT CHESTER, NEW YORK.

IMPROVEMENT IN LOCKS.

Specification forming part of Letters Patent No. **55,549**, dated June 12, 1866; antedated June 8, 1866.

To all whom it may concern:

Be it known that we, MARTIN STACHELIN and HENRY YOUNG, of Port Chester, in the county of Westchester and State of New York, have invented a new and Improved Lock; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents an inside elevation of this invention, showing the parts in the position which they assume when fully locked. Fig. 2 is a transverse vertical section of the same, the line *x x*, Fig. 1, indicating the plane of section. Fig. 3 is an inside view of the lock when the bolt is unlocked and the night-latch or supplementary bolt thrown forward or locked.

Similar letters of reference indicate like parts.

This invention relates to a lock with two bolts, one of which takes the place of the ordinary bolt and the other that of the night-latch or latch operated by means of handles. Both bolts are subject to the action of one and the same key, which acts on the main bolt in the ordinary manner, and on the latch by means of a swinging frame, which is suspended from a pivot attached to the main bolt, and which is provided with an oblong slot that catches over a stud projecting from the shank of the latch. This frame is placed in such a position that when the bit of the key acts on the main bolt it turns between said frame and the front plate of the lock, and it is provided with lugs or projections, on which the bit of the key operates when it is desired to move the latch. Said bit, however, is so narrow that it turns on either side of the swinging frame, and the lock is so constructed that it can be operated only by a person acquainted with its construction.

A represents the case of our lock, which is constructed of cast-iron, sheet metal, or any other suitable material, in the ordinary or any other desirable form or shape. This case contains the working parts of our lock, which consist chiefly of two bolts, B C, one of which takes the place of the ordinary shot-bolt, whereas the other takes the place of the night-latch, or of an ordinary door-latch, the former being operated solely by the key D, and the latter by the key and also by a suitable thumb-piece or handle if desired.

The shot-bolt B is constructed in the ordinary manner, with a notch, *a*, to admit the bit of the key, and with a tumbler, *b*, which arrests it after it has been thrown forward or backward, and the bit of the key is of such a shape that it acts upon said shot-bolt when the key is inserted into the lock, so that its bit turns close on the inner surface of the front plate of the case A.

The shot-bolt B connects with the latch C by means of a swinging frame, E, which is suspended from a pin, *g*, that is secured in the shank of the shot-bolt and which is furnished with an oblong slot, *c*, that catches over a stud, *d*, fastened in the shank of the latch. This frame is so situated that the bit of the key turns on either side of the same—that is to say, between it and the front plate of the case and between it and the back plate of the lock—and it is provided with two lugs or ears, *e f*, which are in such a position that the bit of the key comes in contact with them when it is made to rotate between said frame and the front plate of the case A. If the key is turned so that its bit strikes the lug *e*, the latch C is thrown forward, and by turning the key in the opposite direction it strikes the lug *f* and carries the latch wholly or partially back. It carries the same clear back if the shot-bolt is thrown forward; but if said bolt is back, the latch is only partially moved back and the door is not opened.

In order to open a door to which our lock is attached, it is necessary after inserting the key to turn the bit slightly toward the heads of the bolts, causing it to drop between the lugs *e f*, and by turning said key back the latch is drawn in or unlocked. The bit of the key has now to be raised above the frame E and turned forward a quarter of a revolution, when it comes opposite a notch, *h*, in the frame, which permits the same to drop down to the inner surface of the front plate of the case, and by continuing to turn the key after it has dropped down through the notch in the frame the shot-bolt is withdrawn or unlocked. In order to withdraw the key without locking the latch it has to be turned until its bit comes under one of the notches, *i* or *j*, in the swinging frame, and then it must be raised before it can

be turned so as to bring the bit opposite the key-hole. If this precaution is not taken, and the key is turned in the direction of the arrow marked near it in Fig. 3 until it comes in contact with the stud *e*, the latch will be thrown forward, and if the key is then turned back until the bit comes opposite the key-hole the latch will be carried in only half-way, and the door cannot be opened. A person not acquainted with the lock will have considerable difficulty in unlocking the same.

It is obvious that our lock can be easily so arranged that the key can be inserted from either side and the latch can be operated by a thumb-piece or by knobs from either side of the door to which the lock is attached.

We claim as new and desire to secure by Letters Patent—

The swinging frame E, applied in combination with the shot-bolt B, latch C, and key D, substantially as and for the purpose set forth.

The above specification of our invention signed by us this 8th day of August, 1865.

MARTIN STACHELIN.
HENRY YOUNG.

Witnesses:
M. M. LIVINGSTON,
C. L. TOPLIFF.