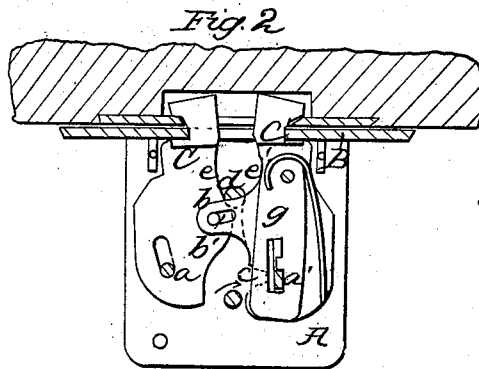
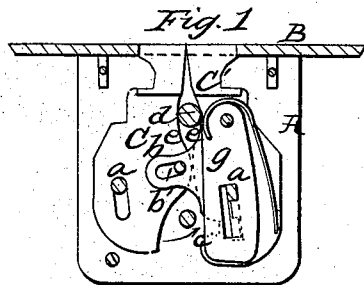


*J. Thielemann,*

*Piano Lock.*

*N<sup>o</sup> 81,226.*

*Patented Apr. 18, 1868*



*Witnesses:*

*J. C. Folles*  
*E. F. Kaestenhuber*

*Inventor:*

*John Thielemann*  
*per*  
*Nat. Santorrod & Haup*  
*attys*

# United States Patent Office.

JOHN THIELEMANN, OF NEWARK, NEW JERSEY.

*Letters Patent No. 81,226, dated August 18, 1868.*

## IMPROVEMENT IN PIANO-LOCKS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN THIELEMANN, of Newark, in the county of Essex, in the State of New Jersey, have invented a new and useful Improvement in Piano-Locks; and I do hereby declare the following to be a full, clear, and exact description, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which drawing—

Figure 1 represents a sectional front view of this invention when the hook-bolts are in.

Figure 2 is a similar section thereof when the hook-bolts are out.

Similar letters indicate corresponding parts.

This invention consists in the arrangement of two hook-bolts, which are united by a slotted lug and pin, and the inner edges of which form cams, which, when the hook-bolts are thrown out, act against a stationary stud in such a manner, that, by turning the key in one direction, said hook-bolts assume a compound motion, viz, a motion outward, and also a motion from each other, whereby the hooks are enabled to catch over the edges of the locking plate, and by turning the key in the opposite direction, the hook-bolts are made to move towards each other, and to recede, thereby releasing the locking plate.

A represents the base or foundation-plate of my lock, said plate being firmly secured to the face-plate B. From the base-plate A rise two studs, *a a'*, which catch in the oblique slots in the shanks of the hook-bolts C C'. These two hook-bolts are connected by a slotted lug, *b*, catching over a stud, *b'*, the lug being connected to one and the stud to the other bolt, as shown in the drawing, and one of the bolts is provided with a notch, *c*, and tumbler *g*, so that it can be thrown in and out by the action of a key in the usual manner. Between the shanks of the two hook-bolts is a stud, *d*, which is firmly secured in the base-plate A, and the inner edges of the shanks of said hook-bolts form cams, *e e'*, which act against the stud *d*.

When the key is turned in the direction of the arrow shown in fig. 1, it catches into the notch *c*, lifts up the tumbler *g*, and pushes the hook-bolt C' out, and by the action of the lug *b* and stud *b'*, the hook-bolt C is carried out together with the bolt C'. As the cams *e e'* are made to slide on the stud *d*, the hook-bolts begin to spread, and the hooks, being thrown out to the position shown in fig. 2, are made to catch over the edges of the locking-plate. If the key is turned in the direction of the arrow, shown in fig. 2, the hooks are made to release the locking-plate, and the bolts are carried back to their original position.

When the bolts are brought back to this position, they close the opening in the face-plate, so that the entrance of dirt or other impurities to the mechanism of the lock is prevented.

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

The hook-bolts C C', connected together by a lug and stud, and provided with cams *e e'*, in combination with a stud, *d*, substantially as and for the purpose described.

JOHN THIELEMANN.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.