H. Ahrend.

Piano Lock.

No. 90,805. Patented Jun. 1, 1869.

Fig. 1.

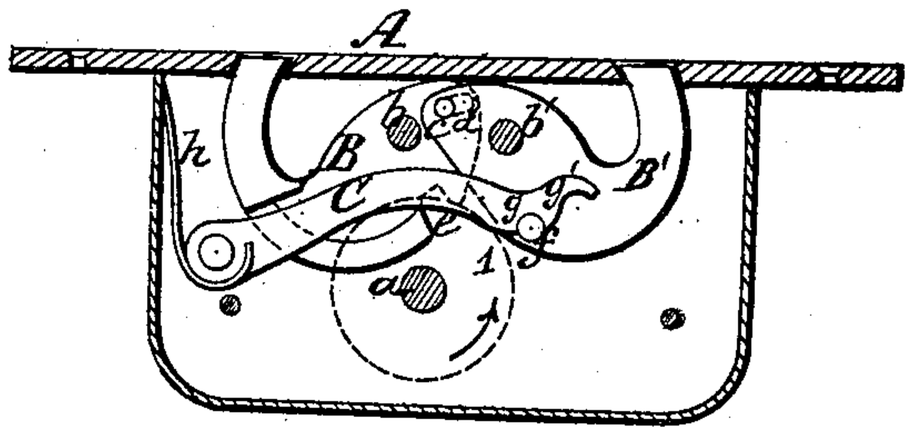
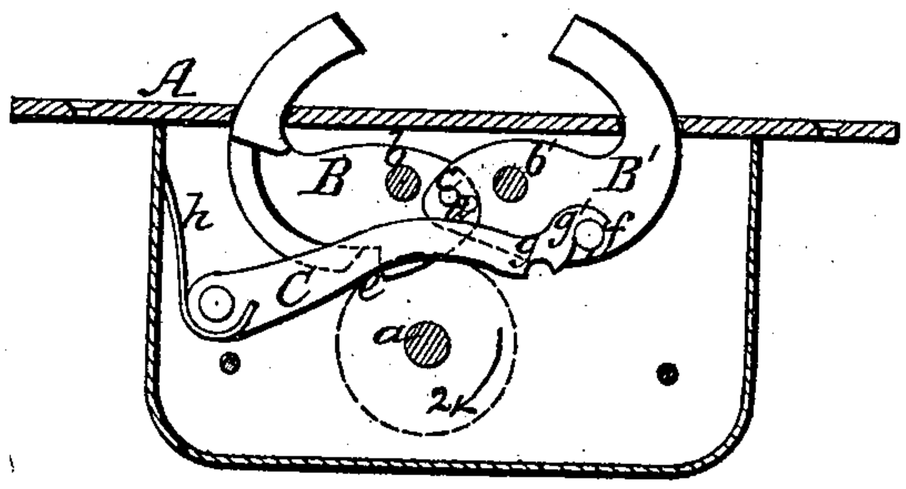


Fig. 2



Witnesses
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per
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Attys.

United States Patent Office.

HERRMANN AHREND, OF BROOKLYN, NEW YORK.

Letters Patent No. 90,805, *dated June* 1, 1869.

IMPROVED LOCK FOR PIANO. &c.

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, HERRMANN AHREND, of Brooklyn, in the county of Kings, State of New York, have invented a new and useful Improvement in Locks for Piano-Fortes, &c.; and I do hereby declare the following to be a full, clear, and exact description thereof, 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 front view of the locking-mechanism when the bolts are thrown back.

Figure 2 is a similar view of the same when the bolts are thrown out.

Similar letters indicate corresponding parts.

This invention consists in the arrangement of two curved bolts, which swing each on its separate pivot, and are connected by a pin secured to the shank of one bolt, and catching in a slot in the shank of the other, in combination with a recess in the shank of one of the bolts, and with a notched spring tumbler, which engages with a stud secured in the shank of the second bolt, in such a manner, that by the action of the key, the tumbler is raised, and as the bit of the key enters the recess of the first bolt, and bears against one of its sides, both bolts are simultaneously thrown in or out, and the tumbler catches over the stud of the second bolt, and both bolts are firmly retained in position.

In the drawing—

The letter A represents a case, which encloses the mechanism of my lock.

This mechanism consists essentially of two curved bolts B B′, which swing each on its separate pivot *b b′*, secured in the case, and passing through the shanks of the bolts, as shown in the drawing.

The shanks of the bolts B B′ overlap each other, and in the shank of the bolt B′ is secured a pin, *c*, which catches in a slot, *d*, in the shank of the bolt B, so that by turning one bolt on its pivot, the other bolt is compelled to move with it.

The bolts are operated by means of a key, which is guided by the pin *a*, and the bit of which catches in a notch, or recess *e* in the shank of the bolt B.

From the shank of the bolt B′ projects a stud, *f*; and a tumbler, C, which is provided with two notches *g g′*, and subjected to the action of a spring, *h*, catches over this stud, and retains the bolts firmly in position.

If the key is inserted into the lock, and turned in the direction of arrow 1, fig. 1, the tumbler is first lifted from stud *f*, and then the key catches in the recess *e*, and the bolts are thrown out to the position shown in fig. 2. The tumbler descends, and its notch *g′* catches over the stud *f*, so that the bolts cannot be forced back by a pressure against their outer ends.

If the key is turned in the direction of arrow 2, fig. 2, the bolts are carried back again to the position shown in fig. 1, and they are retained in this position by the tumbler C.

By these means a simple and durable lock is obtained, which is applicable to piano-fortes, sewing-machine cases, or other articles of a similar construction

Having thus described my invention,

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

The bolts B B′, swinging on separate pivots *b b′*, and connected by a pin, *c*, and slot *d*, in combination with the tumbler C and stud *f*, all constructed and operating substantially in the manner shown and described.

This specification signed by me, this 6th day of April, 1869.

HERRMANN AHREND.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.