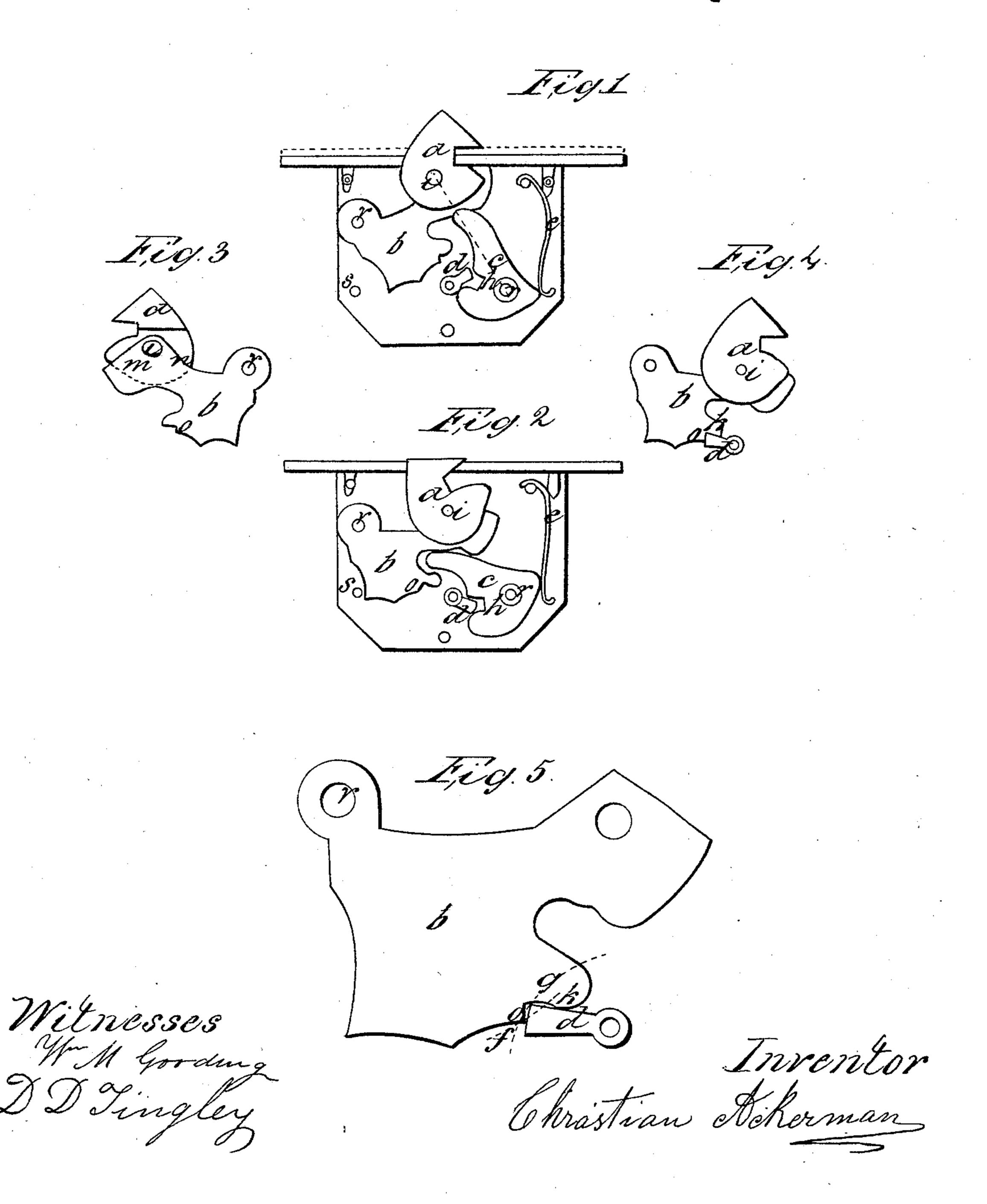
C. Ackerman, Piano Lock. Nº 21,543. Patented Sep. 21,1858.



UNITED STATES PATENT OFFICE.

C. ACKERMAN, OF NEWARK, NEW JERSEY.

LOCK.

Specification of Letters Patent No. 21,543, dated September 21, 1858.

To all whom it may concern:

Be it known that I, Christian Ackerman, of the city of Newark, in the county of Essex and State of New Jersey, have invented to certain new and useful Improvements in Locks, and which I have described in the following specification and illustrated in the accompanying drawings with sufficient clearness to enable those of competent skill to make and use the same.

The nature of my invention consists in such a construction and arrangement of parts as to give a peculiar rolling motion to the bolt and so to secure the same that it cannot be driven back without the entire destruction of the lock.

In the drawings Figure 1 is a view of the parts in position when the bolt is out and the closet or drawer is locked. Fig. 2 is the position of the parts when the bolt is down and the drawer unlocked. Fig. 3 shows the peculiar construction of the bolt as it appears on one side. Fig. 4 the same as it appears on the other side. Fig. 5 is an enlarged view of the fall to which the bolt is attached, given to show how and why the key is prevented from turning the wrong way when attempting to lock it.

The same letters refer to the same parts

30 in each figure.

It will be seen that the bolt a is attached to the fall b in such a manner as to partially revolve upon the pin i the distance being limited by the shoulder shown in Fig. 3, the 35 shoulder on a coming in contact each way with the edges of the fall b at m and n. The curves on the back of a is made to effect the turning of the bolt while it is rising through the face plate of the lock, by being 40 adapted to the rising motion of b when turning on the pin v, and the bolt is prevented from going too far through the face plate by being made to catch against the underside of the face plate at the same time that 45 b touches it, and when unlocked the bolt is held level with the face plate by the back

edge of b coming in contact with the pin s. The lever c moves upon the pin r, its upper end and the under edge of part of b are adapted to the motions of each other so that b0 when the key d is turned, the lever lifts the fall b and with it the bolt a, the key operates in the recess b in the lever b.

It will be seen that when locked the bolt cannot be forced back because the lever c 55 is in such a position that the force operates in a line from the pin of the bolt to the pin of the lever as shown by the dotted line in Fig. 1. The lever c is assisted in its motion by the spring e.

In Fig. 5 is shown the essential mode contrived to prevent the key from being turned the wrong way when about to shoot out the bolt, the curve g is the line of the motion of the key, and the curve f the line of motion of the fall b at the notch a; as these curves cross each other's track, when the key presses against the point b on b it brings the point a in contact with the end of the key and prevents it turning any farther.

The peculiar shape and motion of the bolt in this lock adapts the lock to all kinds of dressing cases closets and drawers &c. as well as to piano fortes and melodeons, which is very convenient and useful.

The lock is simple, not liable to get out of repair and admits of the introduction into it of a variety of modes of balking the pick lock fraternity.

I am aware of various claims on rotating 80 bolts to locks and therefore do not claim the mere rotation.

I claim—

The use of the fall b and lever c in their combination with the eccentric moving bolt 85 a when constructed and operated as herein above set forth.

CHRISTIAN ACKERMAN.

Witnesses:

W. M. Gooding, D. D. Tingley.