

(No Model.)

A. SUEUR.

COIN CONTROLLED STARTING MECHANISM FOR MUSIC BOXES.

No. 466,586.

Patented Jan. 5, 1892.

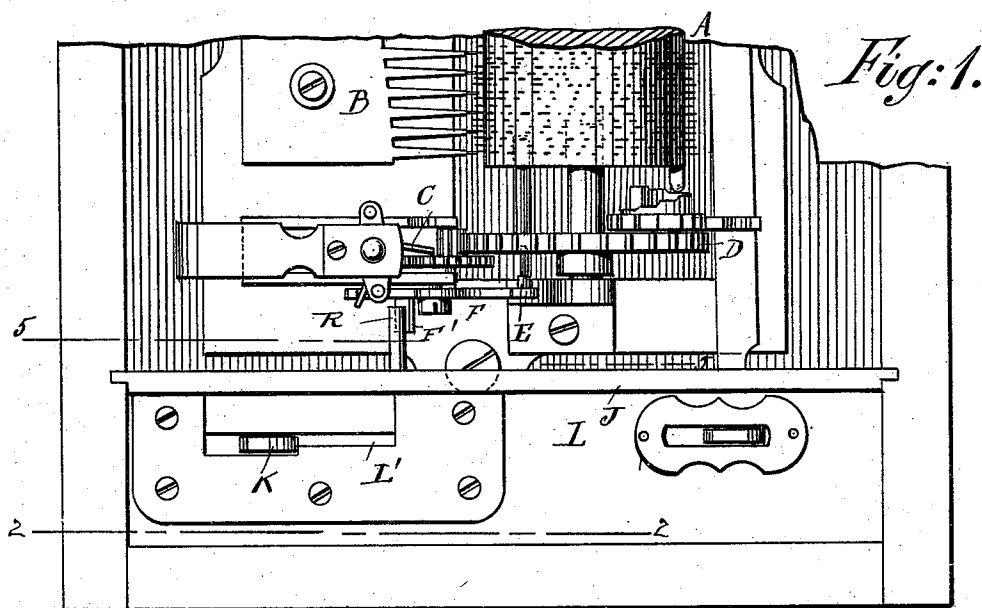


Fig: 2.

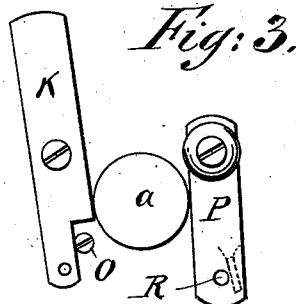
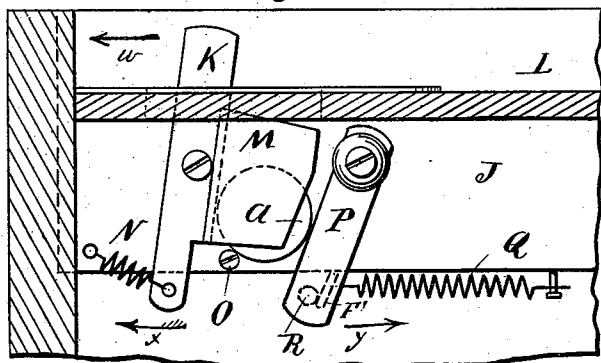


Fig: 3.

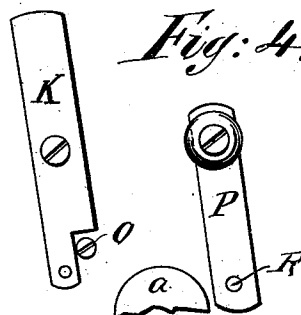
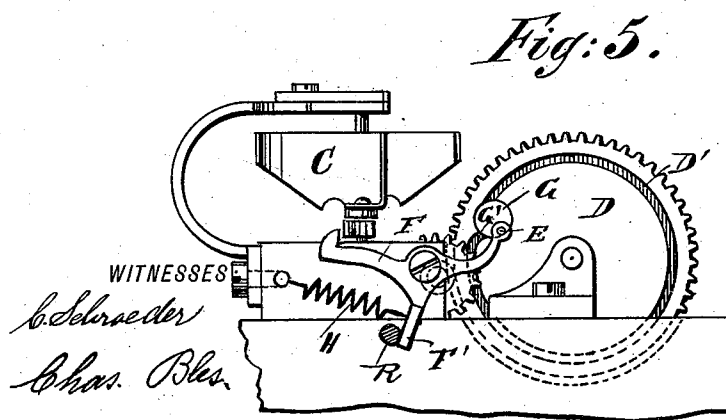


Fig: 4.



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UNITED STATES PATENT OFFICE.

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COIN-CONTROLLED STARTING MECHANISM FOR MUSIC-BOXES.

SPECIFICATION forming part of Letters Patent No. 466,586, dated January 5, 1892.

Application filed September 1, 1891. Serial No. 404,484. (No model.)

To all whom it may concern:

Be it known that I, ALFRED SUEUR, a citizen of Switzerland, and a resident of the city of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in a Coin-Controlled Starting Mechanism for Music-Boxes, of which the following is a specification.

The object of my invention is to provide a new and improved starting device for music-boxes which is so arranged that it can only start the music-box mechanism after a coin has been inserted into a suitable opening in the box.

The invention consists in the construction and combination of parts and details which will be fully described hereinafter, and finally pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of one end part of a music-box provided with my improved coin-controlled starting mechanism. Fig. 2 is a vertical transverse sectional view on the line 2 2 of Fig. 1. Figs. 3 and 4 are detail views showing the positions of the lever. Fig. 5 is a sectional view on the line 5 5, Fig. 1.

The music-box is constructed with the usual cylinder A, comb B, and rotating flyer C for controlling the speed of the driving mechanism. On the end of the shaft of the cylinder the usual cog-wheel D is mounted, which is provided with a circular groove D', in which the pin E on the stop-lever F can travel. In said wheel D and in the groove D' thereof an aperture or recess G is formed, and at said recess G a short cam-groove G' is formed at one end of said groove D'. A spring H, secured to the frame and to a downwardly-projecting lug F' of the locking-lever F, presses said pin E against the inner edge of the groove D'.

To a partition J of the music-box the finger-lever K is pivoted, the upper end of which projects above the top piece L upon said partition J. Said pivoted finger-lever K swings on a slot L' in said top piece L and is provided below said top piece with a wing M, parallel with the partition J and located a distance from the same about equal to the thickness of a coin. A spring N, secured to the partition J and to the lower end of the pivoted fin-

ger-lever K, draws said lower end of the lever K in the direction of the arrow *x*. A stop pin or screw O projects from the partition J a short distance below the wing M of the lever K. A lever P is pivoted to the partition J, and its lower end is drawn in the direction of the arrow *y* by a spring Q, secured to the lower end of said lever P and to the partition J. From the lower end of said lever P a pin R projects laterally and rests against the lug F' of the locking-lever F, against which the latter is pressed by the tension of the spring Q.

In order to start the music-box, it is necessary to press the wing F' on the lower end of the starting-lever F in the direction of the arrow *y*, so as to move the pin E into the part of the groove D'. If the upper end of the finger-lever K, which is the only part of the starting mechanism projecting above the top piece L, is moved in the direction of the arrow *w*, Fig. 2, it does not affect the lever P nor the stop-lever F. If, however, a coin *a* is dropped through the slot L', it rests upon the lever P, the stop pin or screw O, and is held in place by the wing M, as shown in Fig. 2. If now the upper end of the lever K is moved in the direction of the arrow *w*, the edge of the lever K, acting on the edge of the coin, Fig. 3, moves the same in the direction of the arrow *y*, and the cam *a* moves the lever P in the direction of the arrow *p*, whereby the lug F' of the stop-lever F is moved in the direction of the arrow *y* and the pin E is moved outward from the center of the wheel D to the cam part G' of the groove D'. At the same time the fly mechanism C is released the cylinder begins to rotate, as does also the wheel D, and the cam part G' of the groove D' forces said pin E into the groove D'. Thereby the lower end of the lever P is forced still further in the direction of the arrow *y* and the coin is released, as shown in Fig. 4.

As long as the music-box plays the lever P remains in the position shown in Fig. 4, and when the cylinder and wheel D have made one revolution the pin E snaps into the aperture G, the music-box is stopped, and the parts assume the position shown in Fig. 2.

The starting-lever K need only be held for a short time in the position shown in Fig. 3,

as immediately after the fly mechanism C is started the cam action of the part G' of the groove D' brings the pin E into the groove D'.

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

1. In a music-box, the combination, with the usual music-producing devices, of a wheel
10 mounted on the end of the main shaft and provided with a groove and with an aperture or recess in the track of said groove, a locking-
lever having a pin traveling in said groove, a
spring acting on said locking-lever, a pivoted
15 lever having a laterally-projecting part resting against part of said locking-lever, and a
finger-lever pivoted a short distance from the
above-mentioned lever, with the projection
and a coin-supporting pin or projection be-
20 tween said two levers, substantially as set forth.
2. In a music-box, the combination, with the
music-producing devices, of a wheel mounted

on the end of the main shaft and having a
groove; and an aperture or recess in the path of
said groove, a locking-lever having a pin travel- 25
ing in said groove, a spring acting on said lock-
ing-lever, a lever pivoted to part of the music-
box and having a laterally-projecting part
resting against part of the locking-lever, a
spring-connected locking-lever and pressing 30
the laterally-projecting part of the lever
against the part of the locking-lever, a finger-
lever pivoted a short distance from the above-
mentioned lever, and a coin-supporting pro-
jection between said two levers, substantially
as set forth.

In testimony that I claim the foregoing as
my invention I have signed my name in pres- 35
ence of two subscribing witnesses.

ALFRED SUEUR.

Witnesses:

GEO. VARRELMAN,
W. H. HOSCHKE.