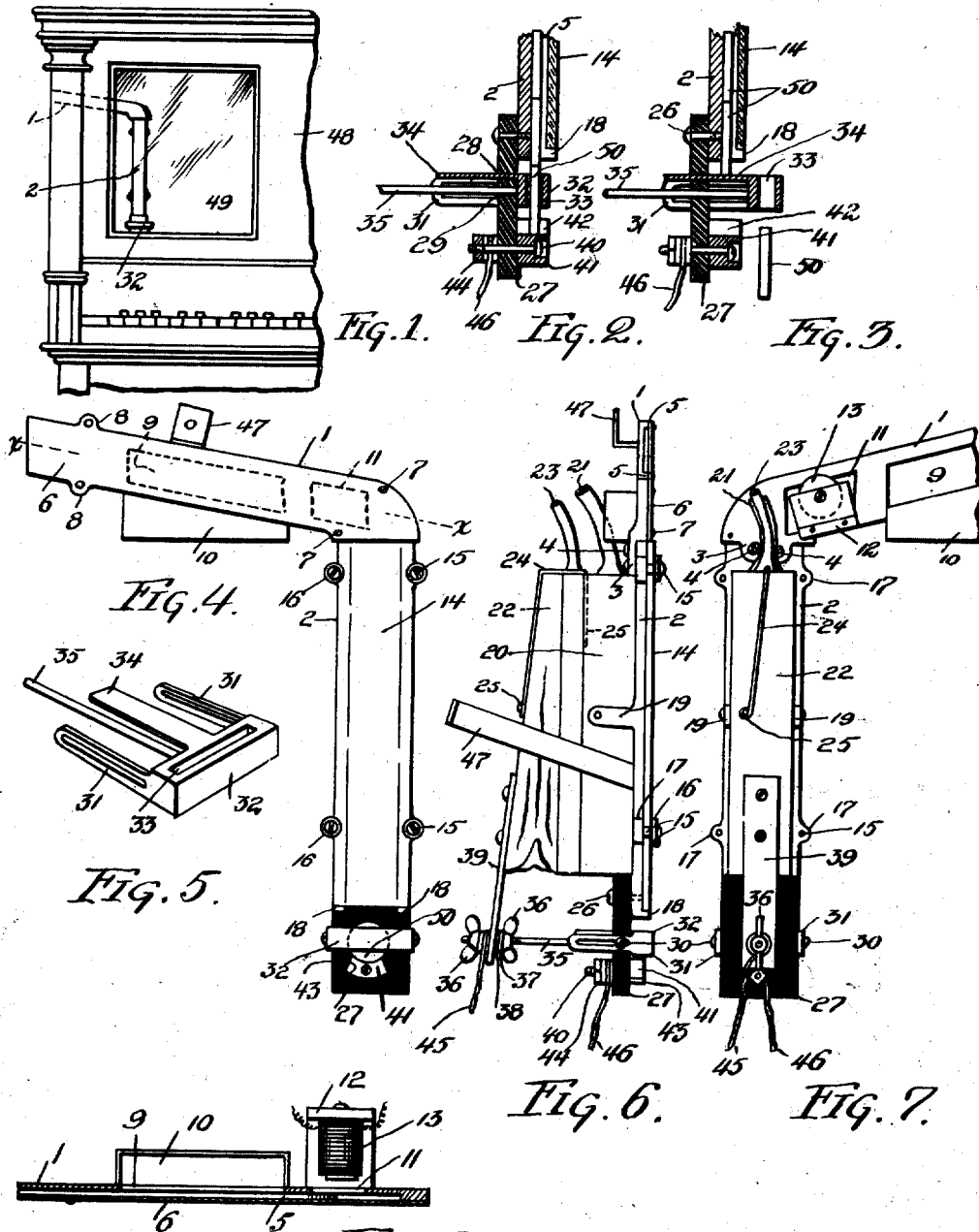


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 COIN CONTROLLED MECHANISM FOR MECHANICAL PLAYING INSTRUMENTS.  
 APPLICATION FILED AUG. 17, 1910.

990,667.

Patented Apr. 25, 1911.



WITNESSES: FIG. 8.

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# UNITED STATES PATENT OFFICE.

ADOLPH J. POHLMANN, OF PITTSBURG, PENNSYLVANIA.

COIN-CONTROLLED MECHANISM FOR MECHANICAL PLAYING INSTRUMENTS.

990,667.

Specification of Letters Patent.

Patented Apr. 25, 1911.

Application filed August 17, 1910. Serial No. 577,728.

*To all whom it may concern:*

Be it known that I, ADOLPH J. POHLMANN, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Coin-Controlled Mechanism for Mechanical Playing Instruments, of which the following is a specification.

10 This invention relates to coin-controlled mechanisms for self-playing piano instruments, and the primary object of my invention is to provide a novel coin-controlled mechanism that can be easily located in a piano and loaded with coins, whereby a plurality of tunes or pieces can be successively played, thereby eliminating the necessity of depositing a coin in the instrument after each piece of music has been played.

20 Another object of this invention is to provide a mechanism of the above type with novel means for detecting the use of improper coins, as pennies, slugs, etc., thereby preventing the instrument from being fraudulently or surreptitiously used.

25 A further object of this invention is to provide a coin-controlled mechanism for self-playing pianos that will coöperate with the electrical circuit and pneumatics used in connection with the instrument, the mechanism being simple in construction, durable, free from injury by ordinary use, inexpensive to manufacture, and highly efficient for the purposes for which it is intended.

35 With the above and such other objects in view as may hereinafter appear, the invention consists of the novel construction, combination, and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing forming a part of this specification, wherein:

45 Figure 1 is an elevation of a portion of a piano showing the preferred location of the coin-controlled mechanism. Fig. 2 is a vertical sectional view of a portion of the mechanism in its normal position. Fig. 3 is a similar view showing the mechanism in an adjusted or actuated position. Fig. 4 is an enlarged front elevation of the mechanism. Fig. 5 is a perspective view of a coin delivery slide. Fig. 6 is a side elevation of the mechanism. Fig. 7 is a rear elevation of the same, and Fig. 8 is a longitudinal sec-

55 tional view of a coin chute taken on the line  $x-x$  of Fig. 4.

To put my invention into practice, I provide two chutes 1 and 2, the chute 1 having one end thereof provided with a depending lug 3 adapted to be secured by screws 4 or other fastening means to the rear face of the chute 2, whereby the chute 1 will be disposed at an angle at the upper end of the chute 2, and both chutes provide a magazine of sufficient length to hold a plurality of coins, preferably twenty five-cent pieces. The chutes 1 and 2 are channel-shaped in cross section and the flanges 5 thereof are adapted to serve as guides for the coins placed in the upper end of the chute 1. The front side of the chute 1 is covered by a metallic plate 6 secured to the chute 1 by screws or other fastening means 7 extending into lugs 8 carried by the longitudinal edges of the chute 1. The chute 1 has the rear face thereof provided with an oblong opening 9 and connected to said chute below said opening is a coin tray 10. The opening 9 allows pennies and small coins to drop out of the chute 1, thereby preventing such coins from passing into the chute 2. The chute 1 is provided with another opening 11, this opening being located between the lower end of the chute 1 and the opening 9. Adjacent to the opening 11 is a bracket 12 supporting an electro-magnet 13, which is adapted to attract slugs and other counterfeit coins and prevent slugs from entering the chute 2.

75 The chute 2 has the front side thereof closed by a transparent plate 14 held in place by screws 15 and washers 16, said screws entering lugs 17, carried by the side edges of the chute 2, while the washers 16 extend over the edges of the plate 14. The lower edge of the plate 14 is supported upon outwardly projecting lugs 18, carried by the chute 2 at the lower end thereof.

90 The vertical edges of the chute 2 are provided with rearwardly projecting arms 19 and mounted between these arms against the chute 2 is a casing 20. Connected to the upper end of this casing is a duct or flexible tube 21 adapted to connect with one of the pneumatics or exhaust valves of the piano. The casing 20 is in communication with a bellows 22 mounted upon the rear face of said casing, and this bellows is connected by a duct or flexible tube 23 to a valve located

within the piano instrument. The bellows 22 is normally held in an extended position by a spring 24 having one end thereof connected to the outer side of the bellows, as at 25, while the opposite end is located between the bellows and the casing 20.

Mounted upon the rear face of the chute 2 at the lower end thereof by screws or other fastening means 26 is a plate of insulation 27, preferably made of fiber. This plate is provided with a slot 28 and an opening 29 directly beneath said slot. Slidably connected to the vertical edges of the plate 27 by screws 30 are the slotted parallel arms 31 of a coin delivery slide 32, said slide having the head thereof provided with a vertical slot 33 adapted to aline with the chute 2. The slide 32 is provided with a rearwardly projecting coin rest 34 adapted to extend through the slot 28, and a rearwardly projecting rod 35 adapted to extend through the opening 29. The rear end of the rod 35 is threaded for wing thumb nuts 36 and arranged between said thumb nuts are metallic washers 37, felt washers 38, and the lower end of an arm 39 secured to the outer side of the bellows 22.

Secured to the front side of the plate 27 by a screw 40 is a coin support 41 having a coin seat 42. This coin support is prevented from tilting upon the screw 40 by a pin 43 located at one side of the support. The screw 40 extends through the plate 27 and has the rear end thereof provided with nuts 44. A wire 45 is connected to the rear end of the rod 35 and another wire 46 is connected to the rear end of the screw 40, these two wires being in circuit with a suitable source of electrical energy located within the piano.

The chutes 1 and 2 are provided with brackets 47, whereby they can be secured upon the inner side of the piano 48 at one end thereof, with the upper end of the chute 1 exposed at the end of the piano, whereby coins can be deposited in the chute. The front side of the piano 48 is provided with a transparent plate 49, whereby coins within the chute 2 can be observed.

A coin-controlled mechanism constructed in accordance with my invention operates in the following manner: After the chutes 1 and 2 are loaded with coins, the first coin placed in the chute will descend to the support 41 and complete an electrical circuit between the wires 45 and 46, the circuit passing through the support 41, the coin 50 and the coin delivery slide. After the first piece of music has been played one of the perforations in the sheet of music will cause a pneumatic to be actuated, which will exhaust air through the duct 21 from the bellows 22, and simultaneous with this action another pneumatic or valve will close the duct or tube 23, thus allowing the exhaust of air from the bellows 22 to actuate the same and through the medium of the arm 39 and rod 35 shift

the coin delivery slide. The coin held within the slot 23 will be carried off of the support 41 and will drop into a suitable coin receptacle within the piano. When the slide is shifted outwardly the next coin will be supported upon the rest 34 and when the spring 25 returns the bellows to its normal position, the coin will drop into the slot 33. Another electrical circuit will be completed and the next piece of music played. This operation is continuous and depends on the number of coins deposited within the chute.

The electrical connections, pneumatics, and valves heretofore mentioned are common to various types of self-playing pianos and form no part of my invention.

I do not care to confine myself to the location of the chute within the instrument, and various changes can be made without departing from the spirit and scope of the invention.

What I claim, is:

1. In a coin-controlled mechanism for self-playing pianos, chutes having the ends thereof connected and adapted to hold a plurality of coins, a bellows and casing supported by one of said chutes and connected together and adapted to have air exhausted therefrom, a coin delivery slide located at the lower end of said chute and adapted to be moved by the exhaust of air from said bellows, an insulated plate carried by the lower end of said chute and supporting said slide, and a fixed coin support carried by said plate beneath said slide and chute and adapted to hold a coin and complete a circuit through said slide adapted to operate the piano.

2. In a coin-controlled mechanism for pianos, chutes having the ends thereof connected and one of said chutes being disposed at an angle to the other of said chutes, an insulated plate and a casing therebeneath carried by the lowermost chute, a coin delivery slide carried by said plate transversely movable therethrough, a coin support carried by said plate beneath said slide and lowermost chute and adapted to normally support a coin within said slide, means carried by the rear face of the lowermost chute and adapted to move said slide to remove a coin from said support, said means including a bellows adapted to have air exhausted therefrom, and means in connection with said bellows for restoring said bellows and said slide to their normal position.

3. In a coin-controlled mechanism for self-playing pianos, chutes having the ends thereof connected and one chute being disposed at an angle to the other chute, said chutes providing a magazine for coins, means carried by the angularly disposed chute for removing improper coins therefrom, a plate of insulation carried by the lowermost chute, a transversely movable

slide carried by said plate, a fixed coin support carried by said plate and adapted to support a coin in said slide when the latter is in its normal position, a bellows carried  
5 by the rear side of the lowermost chute and adapted to have air exhausted therefrom to move said slide, and coin means carried by said slide for supporting coins within the lowermost chute during the delivery of a

coin from said slide, and means adapted to 10 establish electrical connections by a coin within said slide.

In testimony whereof I affix my signature in presence of two witnesses.

ADOLPH J. POHLMANN.

Witnesses:

R. E. PAULIN,

E. E. DODSON.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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It is hereby certified that Letters Patent No. 990,667, granted April 25, 1911, upon the application of Adolph J. Pohlmann, of Pittsburg, Pennsylvania, for an improvement in "Coin-Controlled Mechanism for Mechanical Playing Instruments," were erroneously issued to the inventor, said Pohlmann, whereas said Letters Patent should have been issued to *Morris Price and Manfred Feitler, of Pittsburg, Pennsylvania*, as shown by the record of assignments in this office; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 23d day of May, A. D., 1911.

[SEAL.]

C. C. BILLINGS,  
*Acting Commissioner of Patents.*