

Jan. 7, 1930.

O. H. BRASIER

1,742,984

COIN BANK

Filed April 5, 1929

2 Sheets-Sheet 1

Fig. 1.

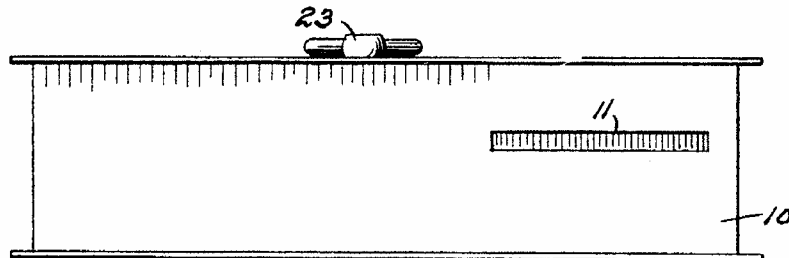
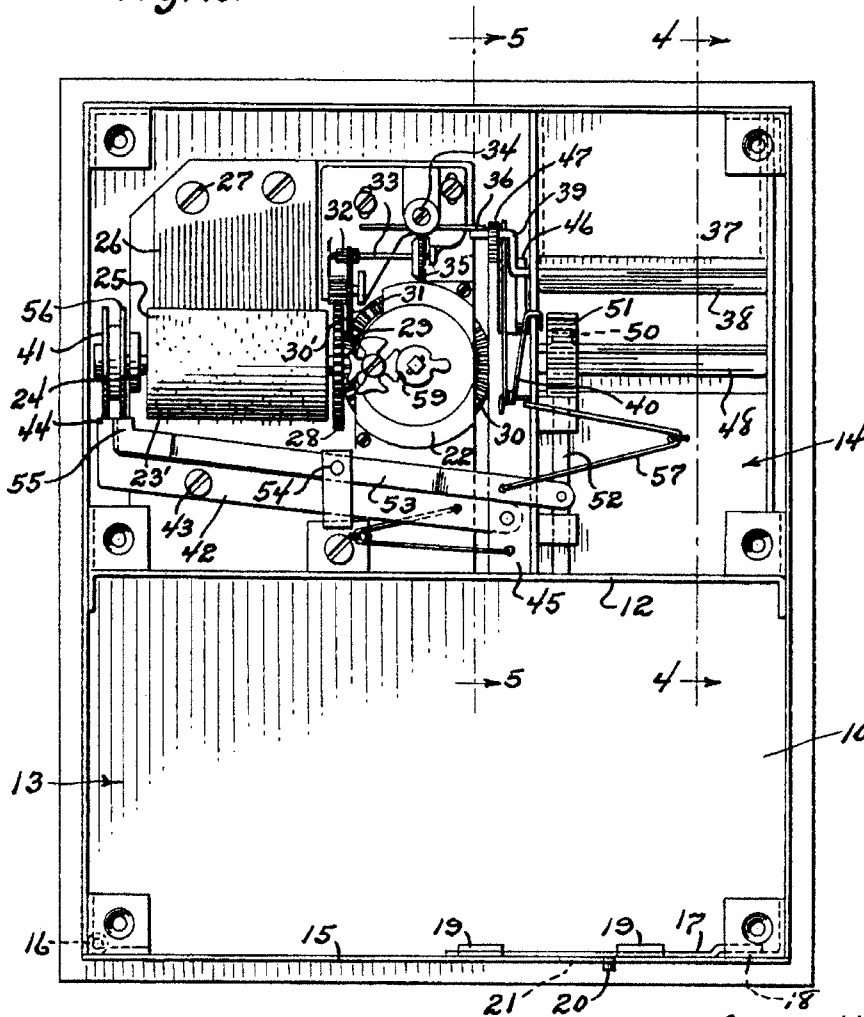


Fig. 2.



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COIN BANK

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This invention relates to banks of the character adapted for the insertion of coins for the purpose of saving, an object of the invention being to provide a bank which includes

5 a musical apparatus or mechanism controlled by the insertion of a coin, and adapted to operate for a predetermined period in a pleasing and attractive manner each time a coin is inserted.

10 Another object of the invention is the provision of a bank which includes a spring motor driven apparatus, normally held inactive, but which, upon the insertion of a coin, will be released so that the motor will operate

15 to actuate the apparatus, while at the expiration of a predetermined period of operation, the motor will be again held inactive.

With the above and other objects in view, the invention further includes the following

20 novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claims.

In the drawings:—

25 Figure 1 is a plan view of the bank.

Figure 2 is an elevation with one of the side plates removed.

Figure 3 is an edge view partly broken away.

30 Figures 4 and 5 are sections on the lines 4—4 and 5—5 of Figure 2 with the parts in their normally inactive position.

Figure 6 is a view similar to Figure 5 but showing a coin in position to release the motor with the releasing means held against

35 return movement.

Figure 7 is a like view showing the position of the parts when the coin is released.

Referring to the drawings in detail where-
40 in like characters of reference denote corresponding parts, the reference character 10 indicates a housing or receptacle which is provided with a slot 11 for the insertion of coins after the manner of the usual savings

45 bank. The receptacle or bank is divided by means of a partition 12 into a coin compartment 13 and a compartment 14 within which is housed the musical apparatus and the controlling mechanism therefor. The coin com-

50 partment 13 is provided with a bottom 15

which is hinged as at 16 and this hinged bottom is normally held in closed position by means of a bolt or latch 17 whose end engages a flange 18. The bolt or latch 17 operates in guides 19 and is provided with a finger piece

55 or stud 20 which is operable in a slot 21 provided in the bottom 15. The bottom may thus be normally held in closed position, but may be opened when desired for the removal of the coins.

As previously stated, the bank is provided with a normally inactive motor driven musical apparatus which, upon the insertion of a coin, operates for a predetermined period. This apparatus is driven by a spring motor

65 which is positioned within a housing 22 and which is provided with a finger piece or stem 23, whereby the motor may be wound.

While this motor is shown as operating a musical apparatus, it is within the province

70 of the present invention to actuate an apparatus of a different character, either musical or otherwise.

The apparatus shown comprises a cylinder 23 which is mounted upon a shaft 24 and which is provided with radially disposed

75 pins 25. Arranged in the path of the pins 25 are the teeth 26 of a comb-like member which is suitably mounted as indicated at 27. Obviously, when the cylinder is rotated, the

80 pins 25 will engage the teeth 26 and cause the latter to vibrate in the usual well known manner.

Mounted upon the shaft 24 is a gear 28 and a pinion 29, the latter being engaged and

85 driven by a gear 30 which is operated by the spring motor 22. The gear 28 drives a pinion 30, while fast upon the shaft with this pinion is a gear 31. This last mentioned gear

90 drives a pinion 32 which is mounted upon a shaft 33 and this shaft is geared to a shaft 34 through the medium of gearing 35. The shaft 34 is disposed at right-angles with respect to the shaft 33 and has fast thereon op-

95 positively extending blades 36 which provide controlling means for the motor 22, as will be hereinafter apparent.

Extending from the coin slot 11 is a coin chute 37, below which is pivotally mounted a

100 plate or blade 38 which is arranged in the

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Fig. 3.

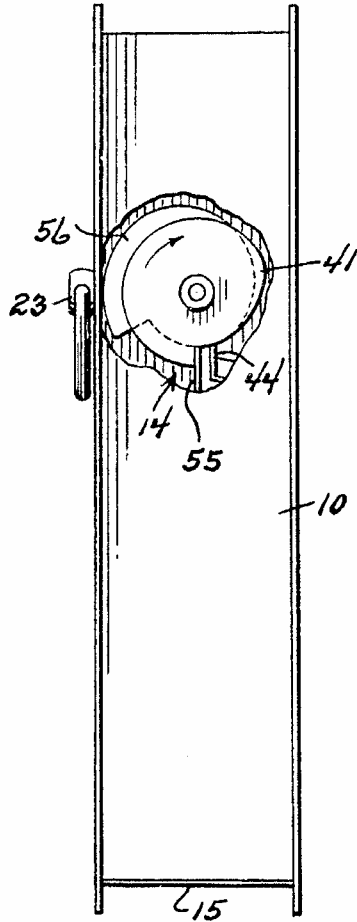


Fig. 4.

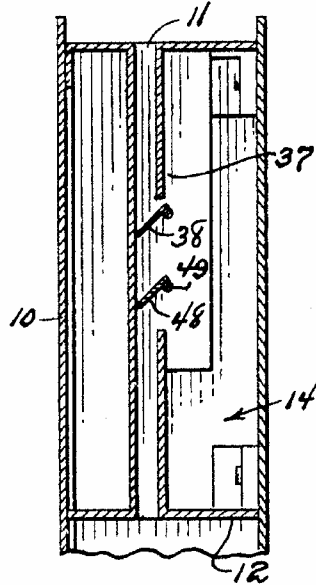


Fig. 5.

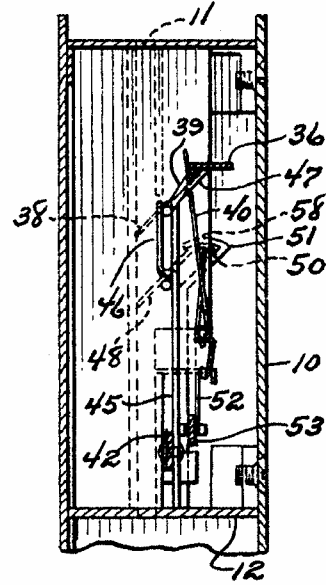


Fig. 6.

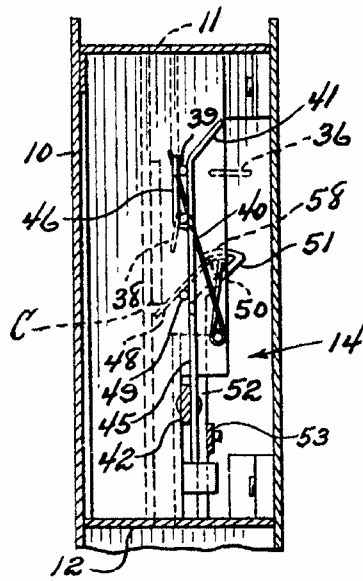
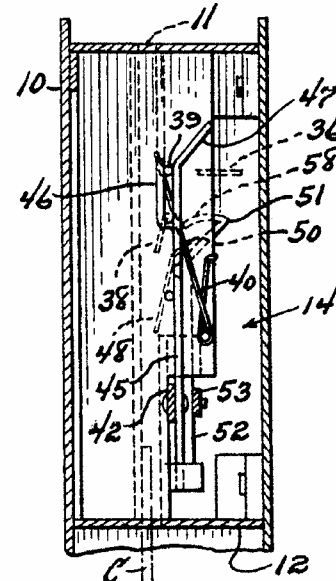


Fig. 7.



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path of an inserted coin. Extending from this plate or blade is a crank arm 39 whose outer end is normally arranged in the path of rotation of the blades 36 and is yieldingly held in such position by means of a spring 40.

In order to hold the crank arm 39 out of the path of the blades 36, the shaft 24 has secured thereon a cam 41. This cam is engaged by an arm 42 which is pivotally mounted as shown at 43 and which is provided with an angular end 44 which rides upon the surface of the cam. The opposite end of the arm 42 has pivotally secured thereto the lower end of a bar 45 which is normally arranged in the position shown in Figure 5 of the drawings. The upper end of this bar is provided with an offset parallel finger 46, which together with the bar, provides a forked end to receive the end of the crank arm 39, while the upper extremity of the arm 45 is provided with an inclined portion 47 which guides the crank arm into the forked end of said arm 45 when the latter is moved upward from the position shown in Figure 5 to the position shown in Figure 6. This upward movement is effected by the angular extension 44 of the arm 42 riding upon the high part of the cam 41, and as long as this extension 44 remains upon the high portion of the cam the crank arm 39 will be held out of the path of the blades 36 so that the musical apparatus will operate under the influence of the spring motor 22. When the angular portion 44 of the said arm 42 rides upon the low portion of the cam 41, the bar 45 will descend to release the crank arm so that the latter will be returned to position in the path of the blades 36 by means of the spring 40.

During the operation just described, the coin (which is indicated at C in Figure 6 of the drawings) will remain in the position shown by contact with a stop 48. This stop 48 is similar to the plate or blade 39 and is mounted for pivotal movement as shown at 49. The stop 49 is provided with an extension 50 which is normally located in the path of an inclined extension 51 provided at the upper end of a vertically movable bar 52. This bar is pivotally secured to one end of an arm 53 which is pivotally mounted as shown at 54 and which carries at its opposite end an angular extension 55 which rides upon the periphery of a cam 56. This cam is similar to the cam 41 and acts to move the rod pivotally in one direction, movement in an opposite direction being under the influence of a spring 57. The upper extremity of the bar 52 is provided with an inwardly disposed extension 58 which is also adapted to engage the extension or lug 50 of the stop 48.

Upon the insertion of a coin, the latter will engage the blade 38 to rock the crank arm 39 sufficiently to move the same out of the path of the blades 36. The shaft 24 will

then be operated under the action of the spring motor 22 whereupon, the bar 45 will be elevated to move the crank arm 39 sufficiently to release the coin which has been held by the blade 38. The coin will then drop upon the stop 48, the size of the coin however being sufficient to prevent the return of the crank arm 39 into the path of the blades 36 when the bar 45 descends.

Continued rotation of the shaft 24 will elevate the bar 52 so that the inclined portion 51 of this bar will engage the lug 50 and rock the stop 48 upon its pivot. The coin will then be released so that it will fall into the coin compartment 13. As soon as the coin is released, the crank arm 39 will return into position in the path of the blades 36 to stop the operation of the motor. Previous to the return of the crank arm 39 however, the bar 52 will have descended so that the portion 58 will engage the lug 50 and return the stop 48 into the path of the next inserted coin.

The motor 22 is provided with a Geneva action 59 so as to prevent overwinding.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claims.

Having described the invention what is claimed is:—

1. In a coin bank, a musical apparatus, a spring motor operatively connected therewith, a motor controlling member, spring influenced means normally engaged with the controlling member and located in the path of an inserted coin to release said member when a coin is inserted and permit the motor to operate to actuate the musical apparatus, a stop located in the path of the coin to hold the latter in position and prevent the return of the spring influenced means, and means controlled by the operation of the motor to actuate the stop and release the coin at the expiration of a predetermined period.

2. In a coin bank, a musical apparatus, a spring motor operatively connected therewith, a motor controlling member, spring influenced means normally engaged with the controlling member and located in the path of an inserted coin to release said member when a coin is inserted and permit the motor to operate to actuate the musical apparatus, a stop located in the path of the coin to hold the latter in position and prevent the return of the spring influenced means, a longitudinally movable stop actuating member, and means controlled by the operation of the motor to operate the stop actuating member and release the coin at the expiration of a predetermined period.

In testimony whereof I affix my signature.
OSCAR H. BRASIER.