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GUARD FOR COIN COLLECTION RECEPTACLES

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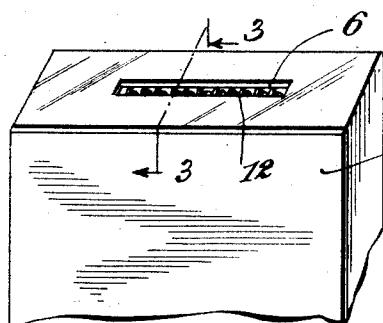


Fig. 1.

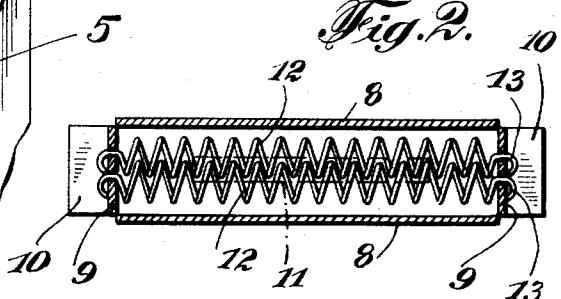


Fig. 2.

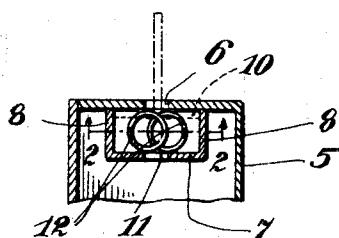


Fig. 3.

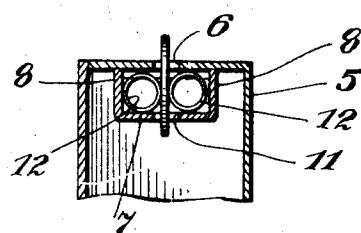


Fig. 4.

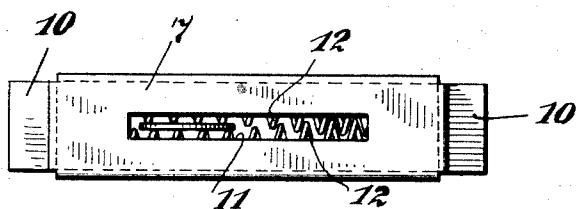


Fig. 5.

INVENTOR

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## UNITED STATES PATENT OFFICE.

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## GUARD FOR COIN-COLLECTION RECEPTACLES.

Application filed July 5, 1923. Serial No. 649,421.

This invention relates to guards for coin collection receptacles and has for its primary object to provide a simple and effective device of this character which may be readily applied and used in connection with coin banks or safes of various types to prevent the extraction of coins therefrom through the coin receiving slot while permitting of the ready insertion of coins through said slot 10 into the bank or receptacle.

It is another object of the invention to provide a yieldable guard element extending continuously along the inner side of the coin receiving slot and locally displaceable by 15 pressure of the coin inserted through said slot while substantially closing the remaining portion of the slot against the possible extraction of a coin therethrough.

In one embodiment of the present improvements, the novel feature of the invention is primarily characterized by the interfitting relation of the convolutions of two parallel coil springs, such interfitting parts of the convolutions extending from opposite directions over the inner side of the coin receiving slot. These spring convolutions are so spaced from each other that when coins of various sizes are inserted through the slot, only the convolutions directly engaged by the coin 20 are relatively displaced to such an extent as to permit of the passage of a coin through the slot, said interfitting convolutions substantially closing the remaining portion of the slot and acting as a barrier against the withdrawal of a coin therethrough.

It is a further general object of the invention to provide a device for the above purpose which is simple and inexpensive in its construction so that it will not materially add to the manufacturing cost of such coin 40 banks or safes and which will also be exceedingly durable and therefore, not liable to get out of order.

With the above and other objects in view, the invention consists in the improved guard device for coin collection receptacles and in the form, construction and relative arrangement of the several parts, as will be herein-after more fully described, illustrated in the

accompanying drawings and subsequently 50 incorporated in the subjoined claim.

In the drawing wherein I have illustrated one simple and practical embodiment of the invention and in which similar reference characters designate corresponding parts 55 throughout the several views:

Figure 1 is a fragmentary perspective view of a coin collection receptacle such as a portable bank or safe, showing the coin entrance slot in one wall thereof provided with my 60 improved guard device;

Figure 2 is a detail view of the guard, the housing walls for the same being shown in section;

Figure 3 is a transverse section taken on 65 the line 3-3 of Figure 1;

Figure 4 is a similar view illustrating the manner in which the resilient guard members are relatively displaced upon the insertion of a coin into the receptacle; and, 70

Figure 5 is a bottom plan view showing the resilient guard springs locally displaced from normal position by a coin.

Referring in detail to the drawing, for purposes of illustration I have shown a part 75 of the bank 5 which may be of any desired form and is provided in one of its walls with the coin entrance slot 6.

To the inner side of the wall of the bank structure and extending longitudinally of 80 the slot 6, a sheet metal housing 7 is suitably secured. As herein shown the bottom of this housing is provided with angularly disposed side walls 8 and end walls 9, respectively, extending along the sides and the 85 opposite ends thereof, the upper edges of said walls contacting closely with the inner face of the wall of the bank 5. The end walls 9 may be provided with the horizontal attaching flanges 10 to be riveted, welded or otherwise permanently fixed to the wall of the bank. The bottom 7 of the housing is provided with a longitudinally extending slot 11 which is of the same length as the slot 6 and in alignment therewith. 90

Within the housing just described a pair of resilient coil springs 12 are arranged, said springs having their coil convolutions ex- 95

panded and extending the full length of the housing, the terminals of said springs as shown at 13, being suitably secured to the end walls 9. These coil springs 12 are arranged in parallel relation to each other and the inner opposed sides of the coil convolutions project over the slots 6 and 11 and are disposed in interfitting relation as clearly shown in Figure 2 of the drawings. It will, therefore, be apparent that these spring convolutions present a yielding barrier to the insertion of a coin through the slots 6 and 11 into the bank or receptacle. However, by engaging the edge of the coin upon the interfitting parts of the spring coils at the outer sides thereof as shown in Figure 3 of the drawings, and exerting sufficient downward pressure, these spring coils at the point of insertion of the coin may be displaced laterally, as seen in Figure 4 of the drawing, so that the coin may pass between the same and through the slot 11. By striking the upper edge of the coin shown in Figure 4 a sharp blow, it may be forced downwardly below the convolutions of the spring coils and through the slot 11 in the bottom 7 into the bank. The coil convolutions then immediately return to their normal interfitting relation.

From reference to Figure 5 of the drawing it will be seen that when a coin is thus inserted through the slot 6, only the spaced convolutions of the springs which are directly engaged by the coin are separated to such an extent as will permit the passage of said coin through the slot. Thus as the other spring coils for the remaining length of the slot retain their interfitting relation, coins previously deposited in the bank or receptacle cannot be extracted therefrom by agitating the same or inverting the bank. This localized displacement of the spring convolutions also prevents the extraction of the coins by the insertion of a fine wire between the springs as the spaced interfitting relation of the spring convolutions would prevent the proper manipulation of such a wire to successfully effect the extraction.

As will be best seen from Figures 3 and 4, the housing for the coil springs 12 is of sufficient depth to completely encase the springs and hold them throughout their lengths slidably against the under side of the top of the receptacle so that the springs cannot sag by their weight or be pushed downwardly at any point throughout their lengths. The housing, also, is of a width such that the side walls 8 completely encase the sides of the springs 12 throughout their lengths and prevent the springs from spreading beyond the point which will permit the coins to be frictionally grasped between the opposed convolutions without distorting the same, and so houses the convolutions between the bot-

tom 7 and sides 8 that any attempt to flatten or distort any of the convolutions causes them and their adjacent convolutions to only project further into intermeshing relation and thus effectively prevent any successful manipulation of the guard to release coins which have already been deposited in the receptacle.

From the foregoing description considered in connection with the accompanying drawing, the construction and several advantages of my improved guard device will be fully understood. Heretofore it has been usual to provide a series of guard members along each edge of the coin slot which were pivotally mounted and movable by gravity to normal position. In such devices however, it is possible to extract the coins by simply displacing the guard members by the insertion of a slip of paper so that the coins may drop outwardly between the same through the slot. It will be apparent from the above description of my present invention that the latter makes it impossible to effect the withdrawal of the coins from the bank in a similar manner, since the insertion of such a paper slip would only displace the coins with which the slip engages, the remaining portion of the slot being closed by the other interfitting spring convolutions. The device is also of exceedingly simple construction and may be very readily applied to numerous types of coin banks or safes now in general use without necessitating any structural changes therein or greatly increasing the cost of manufacture.

While I have herein shown and described one simple and practical embodiment of the invention, it is nevertheless to be understood that the device is susceptible of considerable modification in the form, proportion and relative arrangement of the several parts and I, therefore, reserve the privilege of resorting to all such legitimate changes as may be fairly embodied within the spirit and scope of the invention as claimed.

I claim:

A guard for coin receptacles having a slot through which coins are adapted to be inserted comprising a housing having a bottom and side walls and end walls adapted to be secured against the under side of the top of the receptacle beneath the coin receiving slot, said housing having in its bottom a coin receiving slot adapted to register with the slot in the top of the receptacle and the slot in the housing being arranged intermediate the side walls, a pair of coil springs secured at opposite ends to the end walls of the housing and extending lengthwise thereof with their axes at opposite sides of the slot in the bottom of the housing, said housing being of sufficient depth to engage the bottom thereof beneath said springs for slidably

supporting the same against the under side of the top of the receptacle and said housing being of a width to restrict the separation of said coil springs beyond the point of frictionally engaging a coin inserted through the slots between said springs whereby distortion of the convolutions of the springs is prevented, said springs being disposed in the

housing with their convolutions in overlapping relation and adapted to be spread apart into engagement with the side walls of the housing by a coin inserted through said slots. <sup>10</sup>

In testimony that I claim the foregoing as my invention, I have signed my name hereunder.

EDMUND H. SANDKUHL.