

UNITED STATES PATENT OFFICE

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COIN SAVINGS BANK

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This invention relates to coin receptacles, and more particularly pertains to savings banks of the type adapted to receive and contain a predetermined number of coins of one denomination.

5 An object of the invention is to provide a coin receptacle of the above character having a plurality of separate coin magazines arranged around a common center, together with means whereby the several magazines may be filled with coins deposited in a single coin receiving slot, whereby the receptacle may be constructed in a watch shaped casing and thereby rendered convenient for carrying in a pocket like a watch.

15 Another object is to provide the receptacle with an indicator or counter for designating the number of coins deposited therein, which is operated by the placing of the coins in the coin receiving slot.

20 Another object is to provide a coin receptacle embodying a rotary coin conveyer carrying a guideway to which a coin is delivered through a slot in the receptacle casing and adapted to deliver a coin to certain of several coin receiving magazines on rotation of the carrier, and in which means are provided for normally locking the carrier against rotation relatively to the receptacle casing operable by depositing a coin in the guideway to release the carrier and permit rotation thereof.

25 Another object is to provide an arrangement whereby the aforesaid locking means and the coin counter or indicator actuating means will be carried on the coin conveyer and be so interconnected as to operate collectively on placing a coin in the guide way.

30 A further object is to provide a coin receptacle embodying the above and other features in which the parts are of simple construction and adapted to be readily assembled.

35 With the foregoing objects in view, together with such other objects and advantages as may subsequently appear, the invention resides in the parts and features, and in the combination, construction and arrangement of parts hereinafter described and claimed and illustrated by way of ex-

ample in the accompanying drawing, in which:

Fig. 1 is a view of the coin receptacle as seen in front elevation;

Fig. 2 is a view of same as seen in side elevation;

Fig. 3 is a view in rear elevation;

Fig. 4 is a plan view of the upper end of the receptacle with portions broken away;

Fig. 5 is a view in section and elevation as seen on the line 5—5 of Fig. 2 in the direction indicated by the arrows;

Fig. 6 is a view in vertical section taken on the line 6—6 of Fig. 1;

Fig. 7 is a perspective view of the coin magazine partition member as detached;

Fig. 8 is a perspective view of a rotary face plate, showing the rear side thereof;

Fig. 9 is a detail in cross-section as seen on the line 9—9 of Fig. 5.

Referring to the drawing more specifically, A indicates generally the receptacle casing, which is here shown and is by preference of watch shape form; it embodying a cylindrical side wall 10 fitted with a radially projecting stem 11 and including a back wall 12, hinged at 13 and forming a closure for the back of the casing. A key controlled catch 14 mounted in the stem 11 is engageable with a keeper 15 on the closure wall 12 to lock the latter in its closed position.

35 In carrying out my invention, the casing A is formed with a partition 16 extending parallel with the back wall 12 and connected at its margin to the inner surface of the side wall 10 in spaced relation to the forward edge of the latter. This partition 16 is formed with a series of openings 17 through which coins are adapted to pass flatwise from the front of the partition 16 for depositing in magazines indicated generally at 18. A plurality of these magazines, of any suitable number, and three of which are here shown, are arranged around a common center constituting the axis of the cylindrical casing. The coin receiving magazines 18 are here shown as formed by a block 19 projecting from the back of the parti-

tion 16 centrally thereof and having radiating members 20 projecting between the openings 17, the side faces of which are formed in continuation of the margins of the openings, and are adapted to conform to a portion of the margins of a coin. The block 19 is formed with a central bore 21 in which is received a pivot pin 22 as shown in Fig. 6; the pin being formed with a head 23 on its outer end and being engaged at its inner end by a detachable pin 24 passed therethrough and seating in a channel 25 on the end face of the block 19, whereby the pivot pin is held against rotation and detachment while the pin 24 is in place. Removal of the pin 24 permits ready detachment of the pivot pin 22.

Revolubly mounted on the pivot pin 22 is a circular face plate B which is formed with a central opening 26 to receive the pivot pin 22 and is provided with a marginal flange 27 for seating on the outer margin of the cylindrical side wall 10 of the casing A. The plate B is held in place by the pivot pin 22 in a seated position on the casing A, and is designed to be manually rotated and for which purpose is provided with a hand-hold 28. The face plate B is designed to constitute a coin conveyer; it being provided with a guideway 29 on its rear face formed by spaced parallel shoulders *a* and *b* projecting from the marginal portions of its rear face, and to which guideway a coin may be delivered through a coin receiving slot 30 formed in the wall 10.

The back face of the face plate B is formed with an annular channel *c* surrounding a central hub portion *d*, and revolubly supported in the channel *c* is an annulus 31 formed on its outer periphery with ratchet teeth 32; the inner periphery of the annulus 31 revolubly contacting the margin of the hub *d*. The face of the annulus 31 seating on the face plate B carries numerical indicia *e* adapted to be exposed through a sight opening *f* in the face plate B as shown in Fig. 1; the annulus with its indicia and the sight opening constituting the elements of a counter or register for denoting the number of coins deposited in the receptacle.

As a means for actuating the counter, a rocker arm 33 is pivoted at 34 on the back of the face plate B with the rocker arm projecting diametrically across the hub *d* and overlying the annulus 31 in slidable contact therewith, whereby the annulus is held in place and its movement frictionally retarded; a headed screw 35 screwed into the hub *d* projects through an arcuate slot *g* in the outer end portion of the arm 33 to hold the latter against the annulus 31. The arm 33 is formed with an upstanding lip *h* facing the guideway 29 for engagement by a coin inserted in the latter. A spring *i* engages the arm 33 and serves to yieldably

oppose advance movement of the arm 33 under the urge of a coin pressed against the lip *h* and normally maintains the arm in its retracted position as shown in Fig. 5. The screw 35 forms an abutment which limits retracted movement of the arm 33.

The outer end of the arm 33 is fitted with a spring pawl 36 positioned to engage the ratchet teeth 32 on the annulus 31 in such manner that as the arm 33 is advanced, the pawl will effect a partial revolution of the annulus. As a means for holding the annulus against retrograde movement, a spring pawl 37 carried by the face plate B is engaged with the ratchet teeth 32 as shown in Fig. 5.

As a means for locking the face plate B against rotation with the guideway 29 registering or aligned with the coin receiving slot 30, a bolt 38 is slidably mounted on the back of the face plate, being guided in a groove *j* formed on the latter, the outer end of which bolt is adapted to be engaged in a notch *k* formed on the inner periphery of the wall 10. The inner end of the bolt 38 is connected to the arm 33, being engaged with a lug *l* formed on the latter. The spring *i* serves to yieldably hold the bolt 38 in its locking position.

Extending between the shoulders *a* and *b* of the guideway 29 and arranged in the latter is a plate spring 39 which projects over a portion of the annulus and serves as a means of ejecting a coin flatwise from the guideway into a magazine 18 when the face plate is turned to position the coin opposite one of the openings 17 in the partition. The spring 39 is held in place by tongues *m* and *n* on the margins thereof engaging slots *o* in the shoulders *a* and *b* of the guideway.

In assembling the coin conveyer and its associated parts and applying the same to the receptacle casing, the ratchet toothed annulus is placed in the channel *c* of a detached face plate B and the spring pawl 37 is applied by positioning the inner end thereof into engagement with a slot *p* formed in the marginal recess with the outer hooked end of the pawl in engagement with a ratchet tooth. The rocker arm 33 with the pawl 36 affixed thereto is put in place and a screw constituting the pivot 34 is screwed into engagement with an opening *q* in the face plate; the spring *i* being positioned astride the screw with one end thereof bent into engagement with a socket *r* formed in the face plate and with the other end thereof bearing against the lug *l*. The screw 35 is then screwed into an opening *s* in the face plate through the slot *g*. The bolt 38 is put in place by inserting a bent inner end thereof through an opening in the lug *l*, and the outer end portion of the bolt is laid in the groove *j*.

The face plate is then disposed over the

front of the casing whereupon the pivot pin 22 is inserted through the opening 26 from the outer face of the face plate and passed through the opening 21 in the block 19 and the fastening pin 24 is engaged therewith. When the pivot pin 22 is thus assembled, the head 23 will seat against the outer face of the face plate and the inner face of the marginal flange 27 of the face plate will seat on the front margin or rim of the casing A. On closing the hinged back wall 12, it will become locked by engagement of the key controlled latch 14 with the keeper 15. To effect removal of the face plate without injury to the structure, it is necessary to open the back wall 12 to give access to the fastening pin 24. This opening of the back wall requires the use of a key which is inserted in the outer end of the stem 11 and screwed into engagement with the latch 14 whereby the latter may be retracted out of engagement with the keeper 15. In initially assembling the toothed annulus, it is positioned with a zero indicia thereon exposed through the sight opening *f*.

In the operation of the invention, a coin of a denomination which the device is designed to accommodate is inserted through the coin receiving slot 30 and into the guideway 29 so that its margin will seat on the ear *k* whereupon pressure is applied to the coin so as to effect depression or advance movement of the rocker arm 33 and thereby cause the pawl 36 to engage the ratchet tooth on the annulus 31 and advance the latter a partial revolution and such distance as to expose a succeeding ordinal indicia *e* through the sight opening *f*.

Depression of the rocker arm draws the bolt 38 out of engagement with the notch *k* whereupon by grasping the hand-hold 28, the face plate B may be turned on the pivot pin 22 to bring the coin in the guideway 29 opposite an opening 17 in the partition 16. The spring 39 will then act to discharge the coin through the opening 17 into the magazine 18. On this being accomplished, the face plate may be turned in either direction to bring the bolt 38 back into engagement with the notch *k* whereupon the parts are in readiness to receive another coin. The face plate may be turned in either direction in conveying the coin to the coin magazine. It will be noted that operation of the rocker arm 33, on delivery of a coin to the guideway 29 on the face plate, serves to release the face plate to permit turning thereof and also effects registering or counting of the coin, and that when the arm has been depressed by pushing a coin there against, the coin will be held in the guideway by the spring 39, thus affording an obstruction that will prevent the insertion of another coin so that it then becomes necessary to turn the face plate,

which serves as a conveyer, to cause delivery of the coin into a receptacle in order to clear the guideway for the reception of another coin and permit further operation of the registering element. When the coin magazine contiguous the guideway is filled, a coin will occupy an opening 17 which will permit conveying of a coin past the filled magazine to the succeeding unfilled magazine. The spring 39 projecting into the guideway 29 serves as a guard to prevent removal of coins through the receiving slot 30. When it is desired to empty the magazine, the back wall 12 is opened as before described.

In constructing the device, it is desirable to provide the annulus 31 with a number of ratchet teeth 32 corresponding to the number of coins constituting the capacity of the several magazines, and the numerical indicia of the annulus is arranged in ordination accordingly.

While I have shown and described a specific embodiment of my invention, I do not limit myself to the exact details of construction and arrangement shown, but may employ such changes and modifications as come within the spirit and scope of the invention as defined in the accompanying claims.

I claim:

1. A coin receptacle comprising a casing formed with a coin receiving slot, a revoluble face plate in said casing having a sight opening, a toothed annulus revolubly supported on the back of said face plate having numerical indicia arranged to be exposed through said sight opening, a coin guideway carried on the back of said face plate, means for aligning said guideway with the coin receiving slot in the casing operable to normally hold the face plate against turning in the casing, means engageable with the toothed annulus connected to said last named means operable by the positioning of a coin in said guideway to turn said annulus a portion of a revolution and operable to release the face plate, means for temporarily retaining a coin in said guideway on operation of said last named means, means for holding said annulus against retrograde movement, and a coin magazine opening to the back of said face plate, and arranged to receive a coin from said guideway on turning said face plate to bring the coin opposite the open end of the magazine.

2. In a coin receptacle, a casing having a coin receiving slot, a face plate carried by said casing having an annular channel on the back thereof, and formed with a sight opening in said channel, an annulus in said channel, ratchet teeth on said annulus, a rocker arm pivoted on said plate extending over said annulus and holding the latter in place, a pawl on said arm engageable with said

ratchet teeth, said arm being operable by insertion of a coin in said slot to effect turning movement of said annulus, and numerical indicia on said annulus exposable through said sight opening.

3. A coin receptacle comprising a casing formed with a coin receiving slot, a revoluble face plate in said casing having a sight opening, a turnable member revolubly supported on the back of said face plate having numerical indicia arranged to be exposed through said sight opening, a coin guideway carried on the back of said face plate, means for aligning said guideway with the coin receiving slot in the casing operable to normally hold the face plate against turning in the casing, means engageable with the turnable member connected to said last named means operable by the positioning of a coin in said guideway to turn said member a portion of a revolution and operable to release the face plate, means for temporarily holding a coin in said guideway serving to obstruct said slot, means for holding said turnable member against retrograde movement, and a coin magazine opening to the back of said face plate, and arranged to receive a coin from said guideway on turning said face plate to bring the coin opposite the open end of the magazine.

In testimony whereof, I have affixed my signature.

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