June 23, 1953 W. H. WHITCOMB 2,642,985

SUBDIVIDED CASHBOX

Filed Sept. 12, 1950

Fig. 1

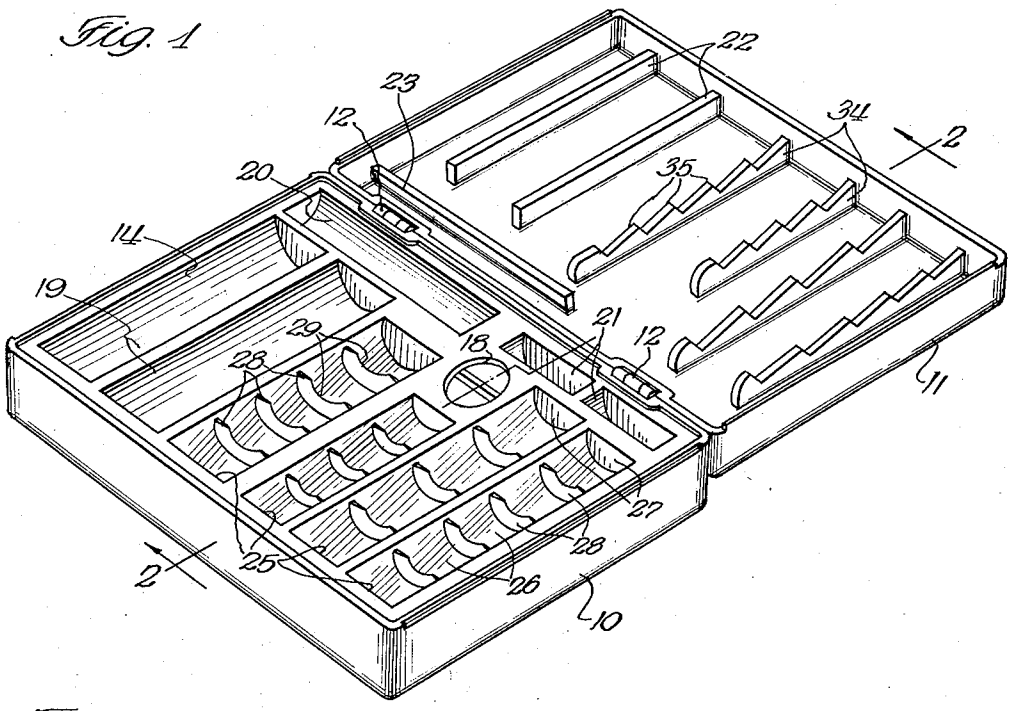


Fig. 2

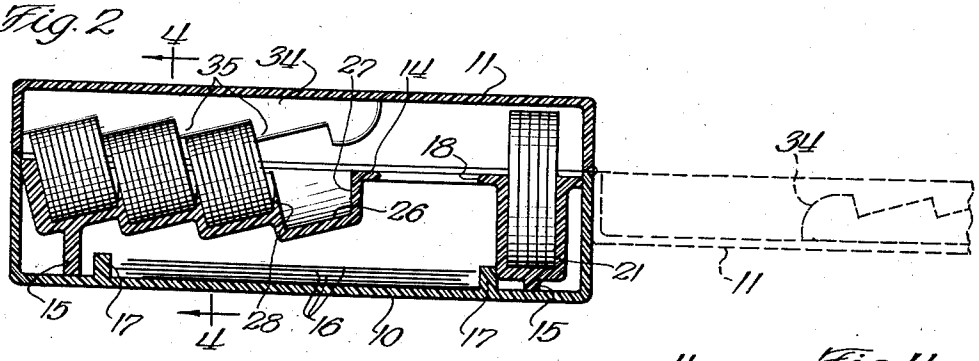


Fig. 3

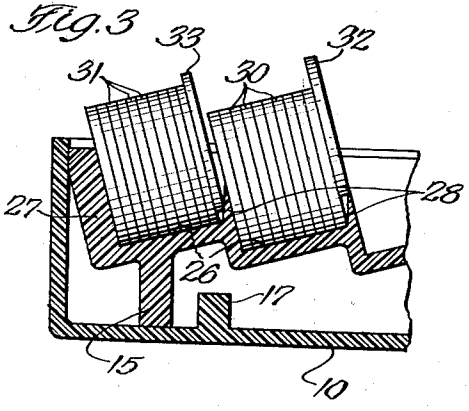
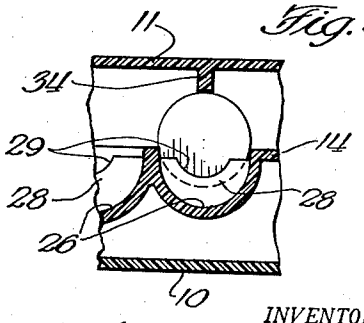


Fig. 4



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SUBDIVIDED CASHBOX

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5 Claims. (Cl. 206—0.83)

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The present invention comprises a cash box for use by checkstand operators, cashiers, clerks and others who must make change often during the course of a day's work and require a large number of coins of different denominations in order to carry out their work. The present invention is designed to provide means whereby a certain value of coins of different denominations may be rapidly placed in the cash box without any possibility of error whereby the manager of an establishment may know that each worker has received a certain total value of coins at the start of each day's work, and the worker may return the same total value of coins at the end of each day's work, without requiring laborious counting on the part of either.

The present invention is an improvement on the cash box disclosed and claimed in my copending application, Serial No. 771,589, filed September 2, 1947, now matured into U. S. Patent No. 2,547,512 issued April 3, 1951, wherein the general objects of the present invention are achieved in substantially the same manner, the present invention having for its object the elimination of any possibility of error arising from the use of a larger than usual proportion of worn and thin coins.

A further object of the present invention is to provide means whereby an exact number of coins may be placed in the box, since any coin in excess of the desired number will stand above the general level of the desired number of coins so as to be visible at a glance.

The foregoing and other objects and advantages of the present invention will be more readily ascertained by inspection of the following specification taken in connection with the accompanying drawing wherein like numerals refer to like parts throughout, while the features of novelty will be more distinctly pointed out in the appended claims.

In the drawing,

Fig. 1 is a view in perspective of a preferred form of the invention;

Fig. 2 is a vertical section taken substantially along line 2—2 of Fig. 1 and showing the operation of the device;

Fig. 3 is a partial section similar to Fig. 2 illustrating other features of the operation of the device; and

Fig. 4 is a substantially vertical section taken substantially along line 4—4 of Fig. 2.

In the preferred form the device comprises a plurality of plastic members which may be easily formed in a molding mechanism and which include a tray 10 and a lid 11 hinged thereto by suitable hinges 12. A third plastic member 14 comprises means providing troughs for the reception of rows of coins of various denominations, this member being so formed as to slide into the

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tray 10 and rest on the bottom thereof in spaced relation thereto by engagement of a pair of flanges 15 with the inner surface of the tray. The flanges hold the bottom of the troughs above the bottom of the tray, so that a pack of paper currency indicated at 16 may be placed in the tray, there preferably being a pair of ribs 17 provided in the bottom of the tray to act as stiffening means and also to provide a central space into which the paper currency may fit. In order that the member 14 may be removed when desired it is provided with an opening 18 through which a finger may be inserted.

The member 14 may be provided with a plurality of ordinary semicylindrical troughs such as indicated at 19, 20 and 21, each of which is capable of holding a certain number of coins of one or another denomination. These troughs are intended primarily as a means of retaining a reserve supply of coins from which to withdraw coins from time to time during the day as the other troughs forming the present invention become empty, but it is to be appreciated that the entire space provided by the member 14 may be provided with inclined, subdivided troughs to be described. In order that coins retained in the troughs 19 and 20 may not be shaken loose as the container is moved about, the lid 11 is provided with ribs 22 and 23 respectively, which engage the tops of the coins placed in the troughs when the lid is closed. The troughs 21 are of such size as to retain larger coins which would extend to the inner surface of the lid when it is closed.

The present invention is concerned with the plurality of subdivided troughs of different diameters indicated at 25. Each of these troughs comprises a plurality of sections indicated at 26, the axes of the sections being parallel but inclined with respect to the longitudinal axis of the trough as a whole. The rear wall 27 of each trough 25 extends up to the upper edge of the member 14 but the rear wall of each of the succeeding sections is preferably of lesser height and comprises in part a knife-edge flange 28 of sufficient height to support the rearmost one of a stack of coins inserted into the section. The upper edge of the flange is preferably recessed as indicated at 29 and the rear surface of the flange is preferably beveled from the floor of the section to the upper edge of the flange. The bases of the flanges are preferably of about the thickness of one coin and form spacers or separators between individual groups of coins inserted into the sections. As will be apparent from the subsequent explanation of their function, the base of the flanges should in any event be of lesser thickness than twice the thickness of a coin. The clear space in each of the sections 26 is of such length as to permit the snug reception

of a certain plurality of newly minted coins—for example, ten newly minted coins **30** are indicated as snugly receivable between successive flanges **28** in Fig. 3. A second group of coins **31** in Fig. 3 is indicated as being worn to more or less extent so that the group does not quite fill the section of the trough. However, regardless of how much the coins are worn, there will not be room for more than the desired number to be snugly and wholly received, since the coins would be taken out of circulation before they would all be worn so thin as to permit this to happen. An excess coin, indicated at **32** and **33**, will either rest on top of the flange **28** or somewhere along its inclined surface, the coin projecting above the remainder of the coins so as to be easily visible and easily grasped for removal. The recess **29** in the top of the flange permits the excess coin to drop between groups of coins sufficiently to rest in upright position rather than to roll about into other troughs in the box. The beveled surface of the flange permits rapid separation of a larger roll of coins into the desired groups, this being rapidly accomplished by anyone after short practice.

In order to prevent the stepped groups of coins from being dislodged as the cash box is carried about, the lid is provided with a plurality of internal ribs **34** whose outer edges are notched as indicated at **35** to provide retaining means engaging the upper surfaces of the groups of coins. The retaining means need not be in firm engagement with the coins as long as they are close enough to the upper surfaces of the coins to prevent their movement from the trough sections. It is to be appreciated that if any coin in excess of the desired number should not be observed and withdrawn the error will, nevertheless, become apparent when an attempt is made to close the lid, since all coins must rest upon the bottoms of the sections **26** in order to permit closure of the lid.

Having illustrated and described a preferred embodiment of my invention, it should be apparent to those skilled in the art that the invention permits of modification in arrangement and detail. I claim as my invention all such modifications as come within the true spirit and scope of the appended claims.

I claim:

1. A cash box comprising means forming a trough for reception of a row of coins, said trough comprising a series of substantially semicylindrical sections whose axes are parallel and inclined to the longitudinal axis of the trough as a whole whereby to provide a plurality of inclined steps, and a plurality of internal, knife-edge flanges rising respectively from the forward edges of said sections to provide spacers therebetween, each of said sections being of such length as to be capable of snugly receiving a certain plurality of newly minted coins in coaxial, face-to-face relation to each other, the base of each of said flanges being of lesser thickness than twice the thickness of a coin.

2. A cash box comprising means forming a trough for reception of a row of coins, said trough comprising a series of substantially semicylindrical sections whose axes are parallel and inclined to the longitudinal axis of the trough as a whole whereby to provide a plurality of inclined steps, and a plurality of internal, knife-edge flanges rising respectively from the forward edges of said sections to provide spacers therebetween, each of said sections being of such length as to be capable of snugly receiving a certain plurality of newly minted coins in coaxial, face-to-face relation to each other, and the base of each of said flanges being substantially equal in thickness to one coin.

3. A cash box comprising means forming a trough for reception of a row of coins, said trough comprising a series of substantially semicylindrical sections whose axes are parallel and inclined to the longitudinal axis of the trough as a whole whereby to provide a plurality of inclined steps, and a plurality of internal, knife-edge flanges rising respectively from the forward edges of said sections to provide spacers therebetween, each of said sections being of such length as to be capable of snugly receiving a certain plurality of newly minted coins in coaxial, face-to-face relation to each other, the upper edge of each of said flanges being downwardly recessed in the central portion thereof, the greatest width of said flanges being less than twice the thickness of a coin.

4. A cash box comprising means forming a trough for reception of a row of coins, said trough comprising a series of substantially semicylindrical sections whose axes are parallel and inclined to the longitudinal axis of the trough as a whole whereby to provide a plurality of inclined steps, and a plurality of internal, knife-edge flanges rising respectively from the forward edges of said sections to provide spacers therebetween, each of said sections being of such length as to be capable of snugly receiving a certain plurality of newly minted coins in coaxial face-to-face relation to each other, the base of each of said flanges being of lesser thickness than twice the thickness of a coin, and the rear surfaces of each of said flanges being beveled from the base of the flange to the upper edge thereof.

5. A cash box comprising means forming a trough for reception of a row of coins, said trough comprising a series of substantially semicylindrical sections whose axes are parallel and inclined to the longitudinal axis of the trough as a whole whereby to provide a plurality of inclined steps, and a plurality of internal, knife edge flanges rising respectively from the forward edges of said sections to provide spacers therebetween, each of said sections being of such length as to be capable of snugly receiving a certain plurality of newly minted coins in coaxial face-to-face relation to each other, the base of each of said flanges being substantially equal in thickness to one coin, the upper edge of each of said flanges being downwardly recessed in the central portion thereof, and the rear surfaces of each of said flanges being beveled from the base of the flange to the upper edge thereof.

WILLIAM H. WHITCOMB.

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