Jan. 4, 1944. F. F. DAUGHERTY 2,338,576

CHANGE MAKING DEVICE

Filed Jan. 6, 1941 3 Sheets-Sheet 1

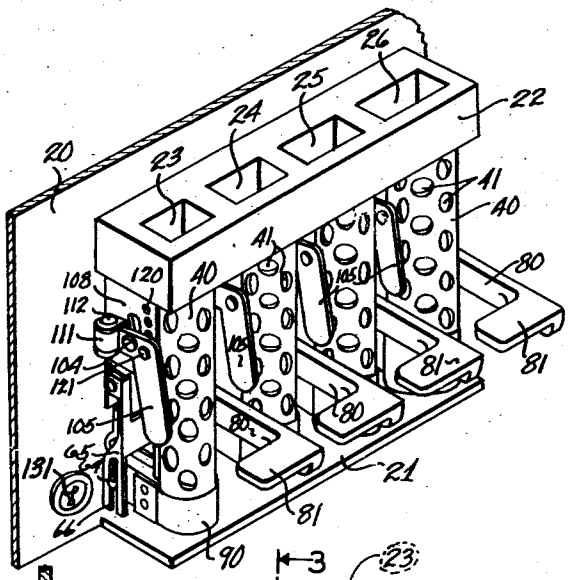


FIG. 1.

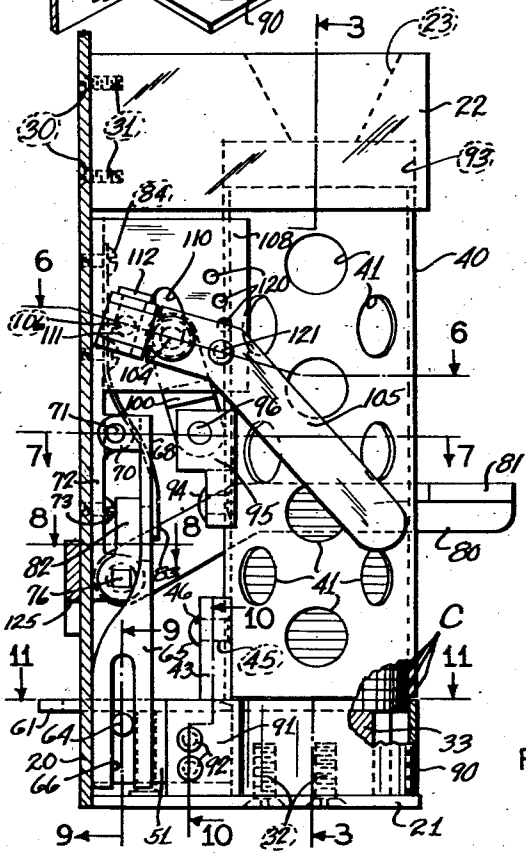


FIG. 2.

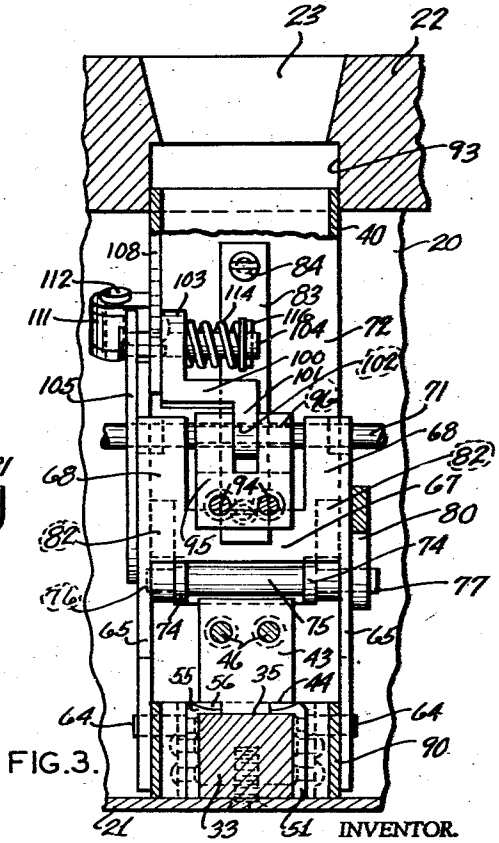


FIG. 3.

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Jan. 4, 1944. F. F. DAUGHERTY 2,338,576

CHANGE MAKING DEVICE

Filed Jan. 6, 1941 3 Sheets-Sheet 2

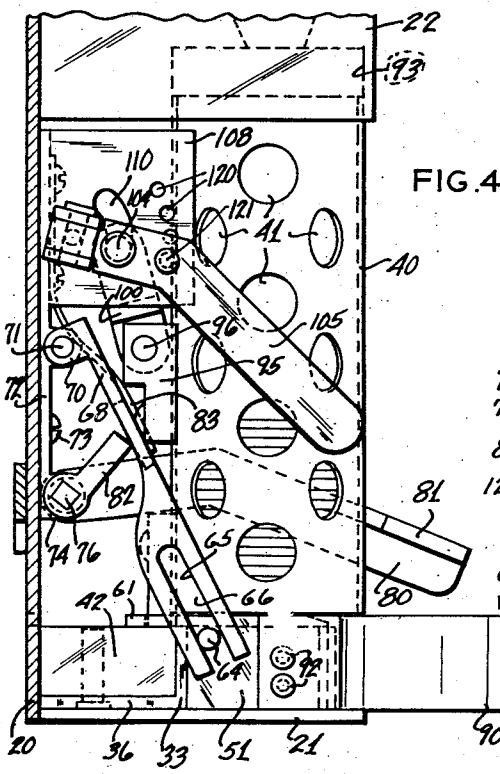


FIG. 4.

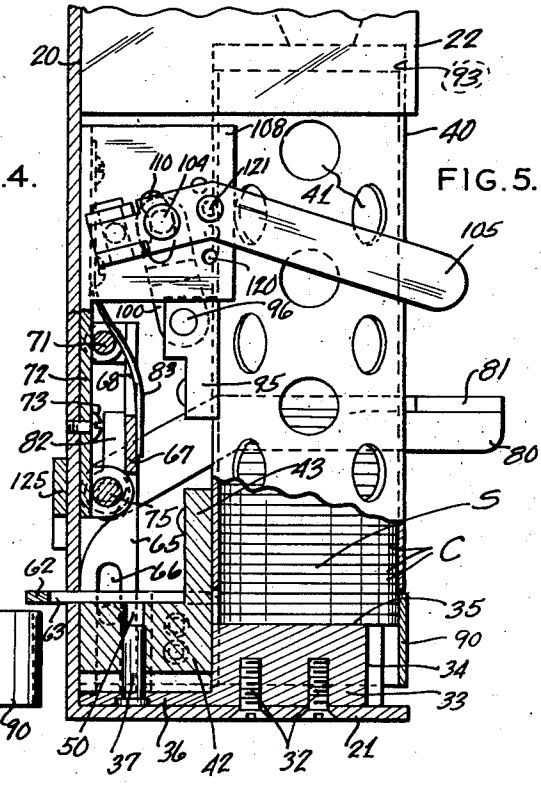


FIG. 5.

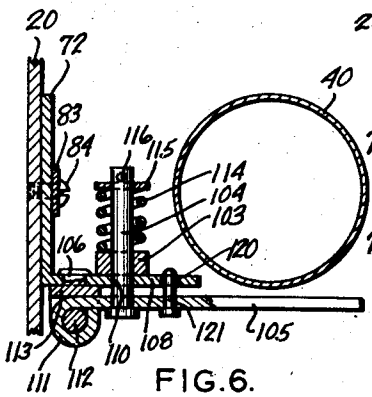


FIG. 6.

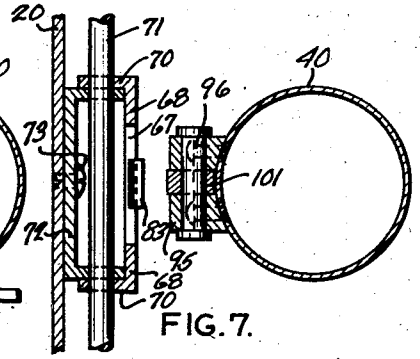


FIG. 7.

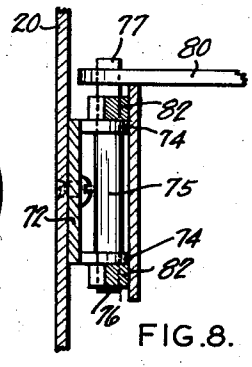


FIG. 8.

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CHANGE MAKING DEVICE

Filed Jan. 6, 1941 3 Sheets-Sheet 3

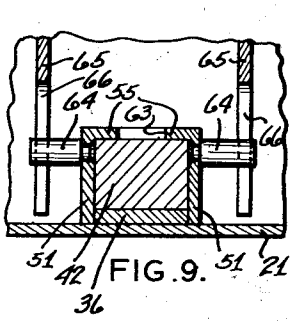


FIG. 9.

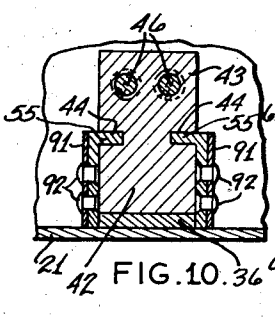


FIG. 10.

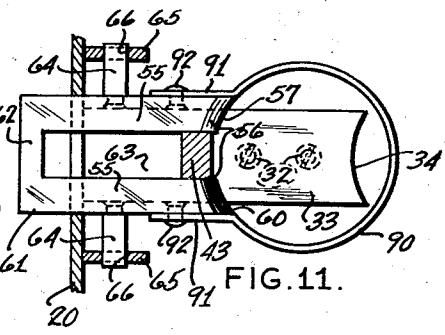


FIG. 11.

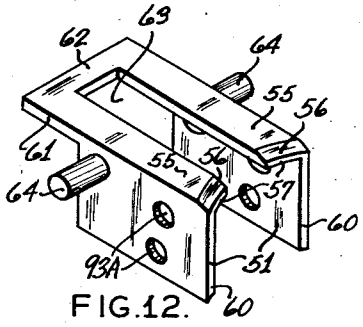


FIG. 12.

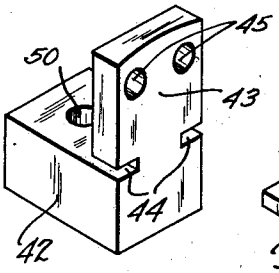


FIG. 13.

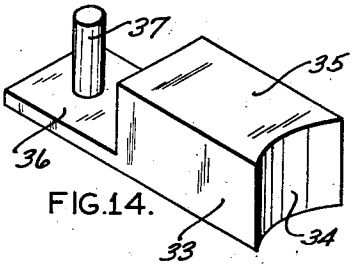


FIG. 14.

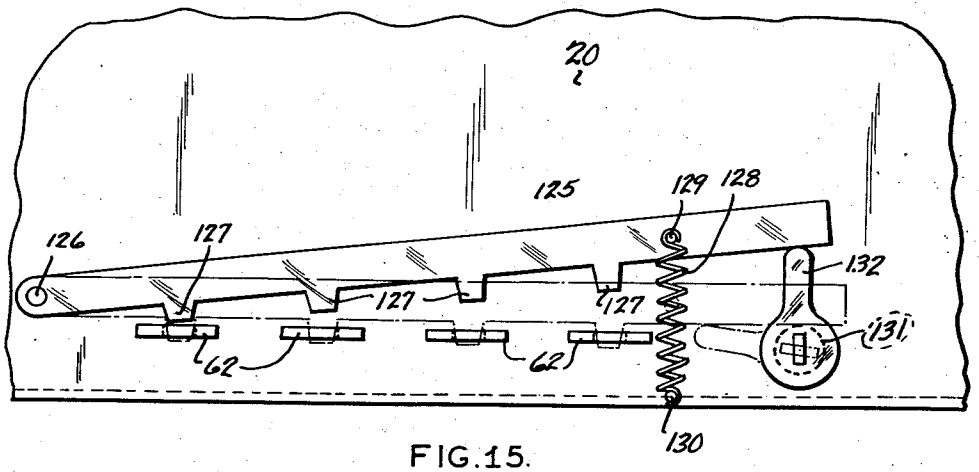


FIG. 15.

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Patented Jan. 4, 1944 2,338,576

UNITED STATES PATENT OFFICE

2,338,576

CHANGE-MAKING DEVICE

Fount F. Daugherty, St. Louis, Mo., assignor to Thomas Francis, Fount F. Daugherty, Neal S. Wood, Thomas H. Mize, Idus L. Rhodes, W. J. Moran, Laura P. Carpenter, and David R. Francis, all of St. Louis, Mo., and Nathaniel Ewing, Fort Lewis, Wash., as trustees

Application January 6, 1941, Serial No. 373,258

2 Claims. (Cl. 133—5)

This invention relates to improvements in change-making devices, and more particularly to an improved assembly for receiving, storing and facilitating the delivery of coins of different denominations, either singly or in predetermined multiple. The present improvements are particularly adapted for use with change-receiving, totaling and recording devices of certain types adapted for usage in public conveyances, although the device of the present invention is equally susceptible, with a number of advantages, of utilization per se, and not in the specific combination or form which, for brevity and definiteness, forms the basis of the present description.

The increasing desirability of fully automatic, theft-proof, self-recording, coin handling and totaling mechanism, to facilitate the collection and accounting of individual cash fares on public conveyances, has augmented the need for improved, more positive and dependable apparatus for delivering individual coins or tokens, as well as for delivery of such units in predetermined multiple; for example, in certain practices it is desirable for the conductor or other crew man of a bus or car to be able instantly and accurately to provide the passenger, say, with four quarter dollar coins, or with five five cent pieces in making change.

The general object of the present invention is to attain a dependable, fool-proof, and positively operating device for the purpose noted.

Yet another object of the invention may be stated as attained in an improved low-cost device, whereby with advantages over the change-making devices heretofore in the trade, a coin-delivering unit may be quickly and instantly adjusted for semi-automatic delivery, per stroke of its ejector, of different numbers of coins. Devices of this kind have widespread application in the hands of street car and bus operators, among turnstile attendants in subways, by newsboys, and in fact, wherever it is required, with the greatest possible despatch and certainty, to make quick change of currency and larger coins in connection with the sales of services or low cost products.

Another important object of the invention may be stated as attained in an improved principle of multiple coin ejection from a barrel-type changer.

A still further important object of the invention is attained in a change-making device particularly adapted for usage in connection with automatic coin-sorting and delivering equipment which may also provide for the recording of total or sub-total values of coins put therethrough from time to time. An exemplary structure of the kind referred to is illustrated, described and claimed in my copending application, Serial No. 312,012, filed January 2, 1940, and entitled Coin handling and totaling devices.

A major object of the invention is attained in an improved provision, when the changer is used in the combination of the preceding object, to prevent actuation of the changer by unauthorized persons. This object is attained by an improved locking arrangement coacting with the ejector mechanism of the change-making device.

The foregoing and numerous other objects will more clearly appear from the following detailed description of the presently preferred form of the apparatus, when considered in connection with the accompanying drawings, in which:

Fig. 1 is an elevation in perspective of a four-barrel type of change-making device, as mounted on a frame or closure plate; Fig. 2 is a vertical sectional elevation of one of the coin-receiving and ejecting units of Fig. 1; Fig. 3 is a vertical section showing portions of one of the coin-handling units, as viewed along staggered planes indicated by line 3—3 of Fig. 2; Fig. 4 is a side elevation of one of the coin-receiving and ejecting units showing the unit in a coin delivery position; Fig. 5 is in part a vertical section, and in part a side elevation similar to Figs. 2 and 4, but better showing certain of the ejecting features; Fig. 6 is a horizontal section of one of the units as taken along line 6—6 of Fig. 2; Fig. 7 is a horizontal sectional elevation as taken along line 7—7 of Fig. 2; Fig. 8 is a fragmentary horizontal section as viewed along line 8—8 of Fig. 2; Fig. 9 is a fragmentary horizontal section as viewed along line 9—9 of Fig. 2; Fig. 10 is a fragmentary horizontal section along line 10—10 of Fig. 2; Fig. 11 is a horizontal section of one of the units, taken through the lower portion thereof along line 11—11 of Fig. 2; Fig. 12 is an elevation in perspective of the coin ejector element; Fig. 13 is an elevation in perspective of a crosshead or guide for the ejector element shown by Fig. 12; Fig. 14 is an elevation in perspective, showing a base block constituting a support for a stack of coins in the coin barrel of one of the units, and Fig. 15 is a vertical elevation as viewed from the rear side of the mounting frame or plate of Fig. 1, and showing a preferred arrangement for locking and unlocking the coin ejector elements of the several coin-dispensing units.

Referring by characters of reference to the drawing, it is preferred, but not essential to the utilization of the principles of the invention, that

it be embodied in a coin-containing and -dispensing assembly of multiple barrel type as suggested by Fig. 1, and further, for the specific combination for which the present improvements were designed, that the multiple barrel changer be carried by a mounting or frame element exemplified by a vertical plate 20. The plate 20, it may be noted, is adapted as a closure for a portion of the encased coin register forming the subject of the copending application hereinabove designated. Otherwise the closure 20 need not be imperforate, and may consist of any suitable vertical mounting for the several barrels and mechanism of the device.

As shown, the plate 20 is formed to present a horizontal shelf or support 21, so that in section the supporting structure presents an L-shaped aspect.

Collectively providing coin chutes or feed conduits for the several barrels of the changer as shown, is an element 22, provided with tapered coin feed openings 23, 24, 25 and 26. In assembly with the coin register, the member 22 is so interfitted with the register that the passages numbered 23 through 26 are effective continuations of coin conduits or guideways in the register. The block 22 is conveniently formed as a single casting or the like, and is secured in place by screws 30 engaging tapped apertures 31 in the block 22.

Since the device of the present invention may consist of only a single coin receptacle and delivery assembly, and since each of the four assemblies shown are or may be identical but for suitable differences in barrel diameter to accommodate coins of different denominations, a description of one such assembly will suffice to cover all thereof. Mounted on the shelf 21 as by screws 32 engaging suitable tapped apertures therefor, is a base block best appearing in Fig. 14 and indicated generally at 33. The base block is characterized by a front or end face 34 of concave, partly cylindrical aspect, the body of the block being of generally rectangular section providing a planar portion or seat 35, which, as will later appear, forms a rest or base for a stack of coins C normally contained by the barrel of the device.

Rearwardly of the body of the element 33 is a relatively thinner portion 36, about centrally of which is disposed a vertical cylindrical guide pin 37 for a purpose later appearing.

Mounted above the base block 33 is the barrel 40, which is preferably of a generally cylindrical form, provided with a number of apertures 41 enabling the operator visibly to determine the approximate extent of the stack of coins in the barrel, and further serving the purposes of preventing any air-cushioning effects below the descending coins introduced to the barrel. The construction of the coin barrel per se, is somewhat similar to others heretofore used in the art, and hence will require no detailed description. The means for supporting the barrel will be hereinafter described.

Proceeding now to a discussion of the coin ejector mechanism, there is provided, as best shown by Fig. 13, a crosshead or guide element generally indicated at 42, and characterized by a generally rectangular, horizontal base block of metal having good wearing qualities. Extending upwardly from the forward end of the block of element 42, is a vertical portion generally indicated at 43 and which is laterally undercut on each of its sides, as at 44, to provide guide grooves for the ejector element. These guide grooves are preferably of substantially rectangular form, as will appear from Fig. 13, and other showings. The upstanding portion 43 on the forward end of member 42, is apertured as at 45 for the reception of rivets, screws or like holding elements such as 46 (Fig. 2) through which the member 42 is secured to the lower rear portion of the barrel. Centrally of the base portion of element 42 is an aperture 50 (Fig. 13) which is of a diameter just sufficient to provide a working clearance with, and a definite vertical guided relation to the pin 37 on block 33.

The ejector proper, in its preferred form, is best shown by Fig. 12 as consisting of a channel element of inverted form, characterized by a pair of vertical side flanges 51, which are connected to, or serve to carry integral horizontal top portions 55. The latter terminate in a bevelled portion 56 terminating further in a stil further reduced bevelled edge 57, which however does not constitute an apex, but presents, for ejecting impact with one of the coins in the stack within the barrel, a narrow vertical arcuate face portion. This edge 57 is carefuly arrived at as to thickness, depth or height, so that it corresponds approximately to the maximum effective thickness of a coin of the denomination for which the barrel associated with the given ejector, is adapted and designed. By this provision, and the careful formation of the portions 56 and 57 to conform to the requirements stated, it will appear that the frontal edge portion of the ejector will itself make impact with only one of the coins at a time. It will appear, however, that the forward vertical edges 60 cooperate with the edge 57, according to condition of adjustment of the given changer, in ejecting coins from the lower portion of the stack therein.

The incomplete bridge portions 55 of the ejector, are continued rearwardly to a certain extent, of the side flanges 51, and thus form an overhanging portion 61, providing a bridge 62 connecting the overhung top flanges 55, and providing what is effectively an aperture 63 through the top of the ejector, for a purpose later appearing. In assembly, as will be noted from Figs. 9 and 10, the ejector proper straddles the block 42 with its portions 55 guidedly engaged in the slots or grooves 44 of the block 42, so that the parts cooperate in constraining the ejector to a horizontal reciprocal movement between an inoperative position as shown by Fig. 2, for example, and a coin-delivery or ejecting position as shown by Fig. 4. Actuation of the ejector between the limits mentioned is provided for through the provision of a pair of trunnions 64 (Figs. 9 and 12), one secured to and fixedly engaged with each of the flanges 51.

The aforesaid actuation of the ejector is further provided for by engagement of the trunnions, each in one of a pair of slotted or forked levers 65, the slotted open end of which is indicated at 66. The widths of slots 66 are such as readily to accommodate the associated trunnions 64, but with only a reasonable working clearance. The paired levers 65 are or may be formed from the same piece of metal, and in such case are connected by a distance piece or bridge element 67. The upper ends 68 of the levers 65 are provided with apertured ears 70 through the apertures of which extend a pivot pin 71. A small auxiliary mounting plate 72 is secured as by screws 73 to the frame element 20 and is similarly provided with instruck and forwardly extended apertured ears, the apertures of which receive the pivot pin 71 and form journal surfaces therefor. The auxiliary mounting plate 72 is provided with an ad-

ditional set of forwardly projecting apertured extensions or ears 74, serving to receive a pivot pin 75, the outer ends of which are conveniently formed of square or other non-circular section as shown at 76 on the left hand end, as viewed facing the barrel, and as indicated at 77 on the opposite end of the pin 75. Over the squared end 77 is secured an ejector throw lever 80, provided with an L-shaped, preferably planar outer end 81 for convenience of accommodating the thumb or finger tips of the operator. Each end of the pivot pin 75, particularly the squared portions 76 and 77 are each provided with an ejector camming lever 82 which, as will appear from Figs. 2 and 4, serve, when the ejector throw lever 80 is depressed at its forward end, cammingly to engage the rear surfaces of the forked levers 65, with the effect of moving the forked levers forwardly or outwardly from their initial position of rest as shown by Fig. 2, to their outermost position as shown by Fig. 4. Retraction of the ejector operating system for a normal position of rest, is cared for by any suitable spring means, conveniently consisting of a clock spring or leaf spring 83, the lower or free end of the spring 83 engaging the bridge portion 67 of the assembly of bifurcate slotted levers. Anchorage of spring 83 is effected as through screws 84 secured to the auxiliary plate 72.

As an added assurance for downward direction of the coins ejected from the stack within the barrel, there is provided as a displaceable extension of the lower extremity of the barrel proper 40, a part-cylindrical structure shown in its extended or coin ejecting position in Fig. 4 and indicated generally at 90. This element is shown in its normal or retracted position by Fig. 5. The shape and plan of this element is best shown by Fig. 11 as being partly circular, with its circular portion of even diameter with the barrel 40. This guard element is provided with a pair of rearwardly presented flange portions 91, each of which is secured by rivets or the like 92, engaging apertures 93A, in the side flanges 51 of the ejector proper. From this it will readily appear that, operatively considered, the ring or guard 90 forms a part of and moves reciprocally with the ejector assembly.

The full operation of the ejector assembly from its position of repose to its full coin-ejecting position, and return, will have been apparent from the description of parts thus far given. It may be noted, however, that as the lever 80 is depressed, partly rotating shaft 75 and with it the camming lever 82, this movement brings the forked levers 65 forwardly or outwardly from their original approximately vertical positions. The trunnions 64, being free to slide within the slots of lever 65, are prevented from following the arcuate movement thereof, being in fact constrained to a horizontal actuation through the aforesaid engagement of portions 55 with slots 44 of the crosshead or guide element 42. It will appear, as from Fig. 5, that as the ejector moves forward, carrying with it the barrel extension or coin-delivering chute 90, the coin impacting edge 57 of parts 55 will engage the coin C in the stack S within the barrel, which impacted coin is at the height above the base block 33 corresponding to the height of the edge 57 above such block. An adjustment is provided for this placement of the ejector, along the stack of coins, and will be hereinafter described. It will be noted that the impingement of edge 57 on the selected one of the coins C, serves to displace such coin horizontally, forwardly or outwardly of the stack S. It will further appear that all of the coins above the lower edge of the barrel proper 40, will be precluded from ejection by the wiping action of the bevelled portions 56 of parts 55 of the ejector, in coaction with the wiping effect of the lower margin of the barrel 40. Since, however, the edges 60 of flanges 51 of the ejector will also engage the coins below that one directly impinged by edge 57, not only the coin directly opposite edge 57 but all of those therebelow, will be displaced outwardly, in the barrel extension 90, so that when the latter is brought beyond the base block 33, the one or more ejected coins will fall of their own weight into the hand of the operator.

Proceeding now to a description of the means whereby the device accomplishes its purpose as a multiple-throw change-making device, there has been briefly referred to, a provision for adjusting the ejector mechanism along the stack of coins so as to throw out not only, if desired, a single lowermost coin in the stack S, but any desired reasonable number of coins below the uppermost selected coin. By this means, if the operator desires to make change, for example four quarter dollars, the coin barrel and associated mechanism designed for handling quarters, is set for a throw of four coins instead of one, two or perhaps three, as may be desired. There will be recounted a preferred arrangement of parts whereby this multiple throw feature is attained:

It will appear from Figs. 2, 3, 4 and 5 that the upper end of the barrel 40 is sleeved into and guided by a counterbore 93, one of which is provided in the block 22 for each of the barrels 40. The diameter of each counterbore 93 corresponds approximately to the outside diameter of the upper end of the associated barrel 40, with only a reasonable working clearance.

Secured substantially intermediately of each of the barrels, as by means of rivets 94 is an element 95, carrying a transverse pivot pin or the like 96. The pin 96 pivotally engages an aperture therefor in a Z-shaped connecting link generally indicated at 100 (Fig. 3); the outermost end 101 is apertured at 102 to engage the pin 96. A laterally displaced opposite end portion of the Z-shaped lever 100 and indicated at 103, engages a headed pin 104, the headed portion of which extends through a suitable aperture therefor near the pivoted end of a throw adjusting lever 105. The latter lever is provided with a compound pivot, and is arranged for adjusting movement through a moderate arc, in a substantially vertical plane. This pivot movement is cared for by the provision of a pin-like extension 106 on pivot bracket 113 of the compound pivot assembly, extending through a suitable aperture therefor in a forwardly projecting flange 108 bent up from the auxiliary mounting plate 72. To permit the arcuate adjusting movement of lever 105, there is provided an arcuate slot 110 in the flange or plate portion 108. A still further pivotal movement of lever 105 is provided for by a hinge-forming end 111 which coacts with a hinge pin 112 carried by the bracket 113 of the compound pivot assembly for lever 105. The provision of pivot 112 and associated parts permits a swinging movement of lever 105, toward and away from the flange or plate 108. The throw-adjusting lever 105 is, however, biased toward a self-retaining or re-

leasably locked relation with respect to flange 108, through the provision of a small coiled compression spring 114 which bears against the end 103 of the Z-shaped lever and is retained on pin 104 as through washer 115 and cotter pin 116. To fix the relation of the throw adjusting lever 105 in each of its several adjustment positions, the plate or flange 108 is provided with a series of apertures 120, these apertures being arranged in a row along an arc on substantially the same center as that of slot 110. The openings 120 are adapted to be selectively occupied by a headed lock pin 121 carried by and projecting from the lever 105, in the direction of the coin barrel in the example shown.

From the description of parts of the multiple coin throw adjusting provisions, it will have appeared that when it is desired to eject a single or at least a minimum number of the coins of the denomination required, the lever 105 is positioned in its lowermost relation in which the associated pin 121 occupies the lowermost seating aperture 120 therefor. Since the Z-shaped lever operatively connects the lever 105 to the coin barrel, the latter is, in this relation of parts, at its lowermost position with respect to the base block 33. Similarly, because of the fact that the ejector is vertically positioned by its crosshead or guide 42, and the latter, slidable over pin 37 and secured to the barrel for vertical adjustment therewith, the entire ejector assembly will be vertically adjusted along with the barrel. Thus with the lever 105 in its lowermost position it will usually be the case that actuation of the ejector throw lever 80, will cause but a single coin to be delivered from the mechanism.

When however it is desired to eject, by the single ejector movement, say two coins of a given denomination, the lever 105 will be first displaced outwardly to release its lock pin 121 from any of the seating recesses 120, will next be lifted a distance corresponding to that of the next opening 120, and the pin 121 permitted to seat therein. This serves to lift the barrel and ejector mechanism a height corresponding to the thickness of one additional coin, and has the effect of moving this entire assembly, being the throw selector provision, along the stack of coins, with the result that an ensuing depression of lever 80 will deliver not only the uppermost coin engaged by the ejector edge 57, but the one or more coins therebelow. Thus the parts are now set for delivery of a predetermined plurality of coins.

In a manner similar to the adjustment heretofore described, engagement of each next successive pin-seating opening 120 by the lock pin 121 of the lever 105, serves to deliver, per movement of ejector, next three, then four and so on through any reasonable plurality of coins desired. It will be noted that the order of position of the selected opening 120, indicates to the operator instantly, the number of coins to be delivered by the ejector.

For many uses of the described device for facilitating the making of change, it is desirable to prevent unauthorized delivery or ejection of coins from any or all of the coin reservoirs such as the barrels 40. This is particularly true in case the device is employed, as heretofore referred to, in conjunction with a fare register or the like. However, it is equally true in other uses or other combinations of the device.

It will have been noted that the tapering shape of the entrance conduits or throats such as 23, 24, 25 and 26 of the element 22, would preclude or render difficult the removal of the coins by inversion of the assembly to permit them to fall from the upper end of the barrels by gravity. Accordingly, if means be provided for precluding unauthorized actuation of the ejectors the changer may, for practical purposes, be locked against coin delivery. Provision is made to this end, in the presently described assembly, by a fingered lock bar 125, which in the example shown, is swingably or pivotally connected to the frame member or closure plate 20, as through pivot pin 126. The bar 125 need be moved only through an angular range of a few degrees between ejector locking and ejector releasing positions. In Fig. 15 the bar 125 is shown as provided with a plurality of locking fingers 127, the spacing between centers of which corresponds to the spacing between the apertures 63 of the several rearwardly projecting elements of the ejectors (Fig. 12). Thus it will readily appear that the locking portions 127 of the bar 125 are adapted to interfit appropriately formed seats in the several ejector guide elements, which seats are shown as consisting of the apertures 63. For the purpose of biasing the bar 125 toward a locking position, there is provided a small tension coil spring 128, connected as by suitable pins 129 and 130, respectively to the bar 125 and to a lower portion of the plate 20. Actuation of the locking bar to an unlocking or ejector-releasing position, is accomplished by the use of a lock mechanism, which may be of any suitable type, preferably a so-called cylinder lock, adapted to be rotated by actuation of the key therefor (not shown). A suitable location and general type of lock is indicated at 131 (Fig. 1). The cylinder or the rotating element of the lock mechanism 131 is provided with a camming arm susceptible of a crank action through a limited arc, and indicated at 132. It will appear that when the cylinder of the lock 131 is rotated to bring the arm 132 to the position shown in dotted lines (Fig. 15), the action of spring 128 is to draw the bar 125 to bring its projections into the several apertures 63 of the associated ejector elements. Since, then, any forward or ejecting actuation of the ejectors is precluded, the apparatus is effectively locked. When, however, the arm 132 is rotated through the lock mechanism to lift the bar 125 to the position shown by Fig. 15, it will readily appear that the projections 127 clear the several ejectors so that they are then susceptible of normal actuation.

It will have appeared that the device as described serves fully to attain each and all of the several objectives expressly set forth hereinabove, and attains the many advantages in use, as stated and implied in the more detailed description.

Although the invention has been described by making reference to a presently preferred embodiment thereof, it will be obvious that many changes may be made in the several parts of the device and in their arrangements, without departure from the full intended scope of the invention as defined by the claims hereunto appended.

I claim:

1. In a change-making device, a barrel mounted vertically as a reservoir for a stack of coins, a coin-support below the barrel, said barrel being movable vertically relative to said coin-support, for exposing one or more coins between the coin-support and the lower end of the barrel, for engagement by the coin ejector hereinafter recited, a coin ejector of inverted, substantially U-shape

movable horizontally across the lower portion of the barrel and over said coin-support for displacement of coins from the coin stack in selected number, said ejector providing a slot in the horizontal portion thereof, open at the forward end of the ejector, and having said forward end adapted for coin engagement, an ejector guide having a horizontal body of substantial depth located interiorly of the ejector and closely laterally engaged by the ejector, the guide being further characterized by an upstanding portion provided with horizontally directed slots adapted to receive and engage the opposite horizontal surfaces of the ejector defining the margins of said ejector slot, said guide body and slots coacting to constrain the movement of the ejector closely to a predetermined horizontal plane relative to said barrel, means securing the upstanding portion of said guide to the lower portion of said barrel, and means for adjusting the ejector, ejector guide and coin barrel as a unit, into any of a plurality of selected vertical positions relative to said coin-support, whereby to predetermine the zone of engagement of the stack of coins vertically supported on said coin-support, by said forward end of the ejector, thus to fix the number of coins to be delivered by a given ejector movement.

2. In a change-making device, a barrel mounted vertically as a reservoir for a stack of coins, a coin-support arranged below the barrel and upon which rests the lowermost coin of the stack, said barrel being mounted for movement vertically above said support, whereby to expose selectively and in accordance with the extent of such vertical movement, one or more coins at the lower end of the coin-stack, means for elevating and determining the extent of elevation of the barrel above said support, a coin-ejector of inverted, substantially U-shape movable horizontally along said coin-support and transversely of the lower end of the barrel, for ejecting from the coin stack coins exposed in selected number at the lower end of the stack, said ejector being formed to provide a slot longitudinally in the horizontal portion thereof and open at the forward end of the ejector, and being adapted at said forward end thereof, for coin-engagement, the opposite horizontal margins of said ejector defining said longitudinal slot therein, constituting guide flanges, an ejector guide having a horizontal body located interiorly of the ejector and closely laterally engaged thereby, the guide being further characterized by an upstanding portion provided with laterally opposite slots therein adapted for closely receiving the guide flanges of said ejector, said slots and the body of said ejector guide cooperating to constrain the movement of the ejector closely to a predetermined horizontal plane normal to the vertical axis of said barrel, means securing the upstanding portion of the ejector guide to the lower end portion of said barrel, said ejector, ejector guide and coin-barrel thus being united for movement as a unit, into any of a plurality of selected vertical positions, as effected by said means for elevating and determining the extent of barrel elevation above said coin-support, whereby to predetermine the zone of engagement of the stack of coins vertically supported on said coin-support, by said forward end of the ejector, thus to fix the number of coins to be delivered by a given ejector movement, and actuating means for said ejector, operable in any selected vertical position of the latter, for effecting coin-discharge movement of the ejector.

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