March 25, 1952 G. O. EWART 2,590,241

COIN COUNTING AND WRAPPING DEVICE

Filed Feb. 9, 1950

FIG. 1

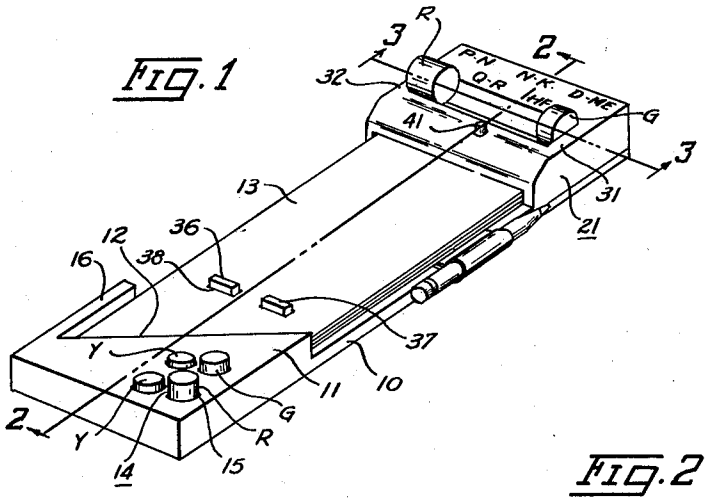


FIG. 2

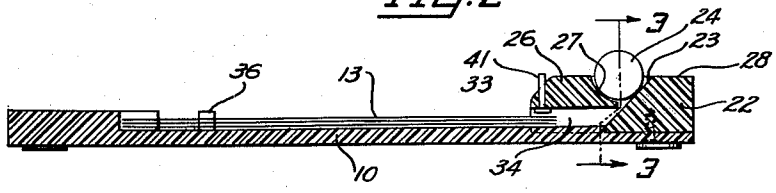


FIG. 3

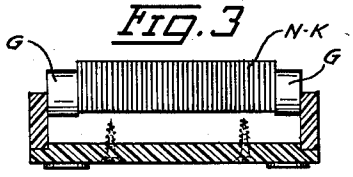


FIG. 4

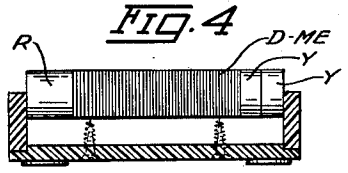


FIG. 5

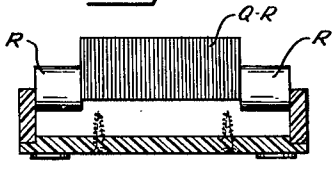
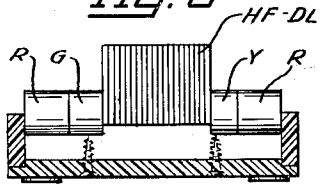


FIG. 6



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COIN-COUNTING AND WRAPPING DEVICE

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5 Claims. (Cl. 53—114)

1

This invention relates to coin counting and wrapping devices and has particular relation to what may be termed a low cost device of such character.

While there are on the market devices for counting coins and for stacking them in a tube or the like, such devices are relatively expensive and in fact are so much so that their use is limited to only a small class of users, that is the class of users who have to count and stack and wrap a great number of coins during the business day.

There is a much larger group of individuals and small businesses to which the investment of a hundred dollars or so for such a machine is not justified because there would not be enough use for the machine to pay for the investment in savings of time. If, however, a coin counting and wrapping device were available which could be sold for say $5.00, then many individuals and small store keepers and the like could profitably purchase and use such a machine.

A device such as the small or occasional users might need should be able to count and wrap or facilitate the counting and wrapping of all the commonly used coins with the exception perhaps of the silver dollar which is not as widely used as the smaller coins.

It is therefore one of the main objects of my invention to provide a device which may be used to quickly and accurately count or meter coins in stacks such as are commonly accepted at banks and the like, and to provide means for quickly and neatly wrapping such coins into standard packages or rolls.

Another principal object of the invention is to provide means that may be used to stack and count any of the coins commonly used with but very minor adjustments.

Another important object of my invention is to provide an indexing system which may be quickly and easily employed to select proper spacers for metering various coins.

Other and further features and objects of the invention will be more apparent to those skilled in the art upon a consideration of the accompanying drawings and following specification, wherein is disclosed a single exemplary embodiment of the invention, with the understanding, however, that such changes may be made therein as fall within the scope of the appended claims, without departing form the spirit of the invention.

In said drawings:

Figure 1 is a view in perspective of a device

2

constructed according to one embodiment of my invention.

Figure 2 is a view in longitudinal vertical section, of the device shown in Figure 1, taken along the line 22 of Figure 1.

Figure 3 is a view in vertical, transverse section taken along the line 33 through the head of the device as shown in Figures 1 and 2 and illustrates how nickel coins are stacked in the device with suitable gauging units to accurately determine or limit the number of coins in the stack.

Figure 4 illustrates the device as used to count dimes and it will be noted that a different combination of gauging units is used.

Figure 5 illustrates the device as used for counting quarter-dollars, and

Figure 6 illustrates the device as used for counting half-dollars.

Referring to the drawings, and more particularly to Figures 1 and 2, a device constructed according to a preferred embodiment of my invention employs a base plate 10 of generally rectangular form having a raised foot portion generally illustrated at 11. This raised portion has a diagonally arranged vertical-wall as illustrated at 12, at the forward edge thereof, so as to receive the diagonally cut lower edges of the paper coin wrappers illustrated at 13. The foot portion or raised table 11 serves both as a stop for the lower edges of the wrappers 13 and also as receptacle for extra spacing members illustrated generally at 14, a plurality of cylindrical wells 15 being provided therein for reception of the spacers. The left edge of the platform 11 is extended in a guide portion illustrated at 16 to maintain alignment of a stack of wrappers 13.

The rear or lower portion of the base plate 10 is provided with a raised block-like, coin receptacle illustrated generally at 21 and this member 21 may be considered as consisting of about four different parts or portions. One of the parts is the guide member illustrated at 22 in Figure 2 which has a sloping wall 23 which serves not only as a rear support for the coins illustrated at 24 but also serves as a guide to cause the wrapper 13, which is pushed rearwardly through the slot 34 and under the coins, to be deflected upwardly between the coins and the said sloping wall 23 and generally directed over the coins so that rotation of the coins, along with the end of the wrapper, in a counterclockwise direction as viewed in Figure 2, will cause the paper wrapper to be wound or rolled about the coins.

Another portion of the coin receptacle 21 is the

rolling member or rolling guide 26 which has a curved rear face illustrated at 27 adapted to serve as a forward support for the coins 24, the face 23 of the block 22 and the face 27 of block 26 forming what may be termed a V-block for supporting the coins.

It will be noted that the face 23 of the guide member 22 is a flat face extending substantially at 45 degrees to the upper face 28 while the face 27 of the guide block 26 is curved so as to facilitate guiding and rolling the paper wrapper 13 about the coins.

The two oppositely disposed sloping faces of the guide blocks 22 and 26 form a trough in which coins to be counted and wrapped may be received and this trough is closed at its ends by means of the portions of the block illustrated at 31 and 32, which might be termed end plates.

In the embodiment of the invention here shown, the device has been adapted for construction in plastics but it is quite apparent that the device may be made in plastics or metals or any other suitable material.

The lower face 33 of the block 26 is spaced from the base 10 to provide a horizontally extending slot which serves as a guide for the leading end of a wrapper 13 as it is pushed rearwardly underneath the block 26. This slot 34 guides the wrapper against the sloping face 23 of the block 22 so as to direct the wrapper upwardly and rearwardly between the coins 24 and the sloping face 23.

The face of the base plate 10 is provided with rectangular or circular buttons illustrated at 36 and 37 and openings 38, commonly provided in the wrappers 13, are placed over these buttons so as to hold the wrappers in place in a stack ready for use.

When wrapping various coins as illustrated in Figures 3, 4, 5, and 6, I stack the coins in the trough or V in the receptacle 21, and then, by choosing proper spacer members 14, I accurately limit the space available between the gauge blocks 14 so that only a certain limited number of coins may be inserted between the blocks. For instance if I am counting and wrapping five cent coins I provide available space for 40 coins in order to meter the coins into universally acceptable stacks totaling $2.00.

It is to be noted that a preferred embodiment of my invention employs three sizes of coin spacers, two of each being provided, the large size which we may designate as R for red, the intermediate size which we may designate as G for green and the small size which we may indicate with a Y for yellow, and in fact the spacers are preferably colored or painted with these colors, so as to readily distinguish the various spacers.

In order that the user of the device may readily select the proper spacers I have provided an index illustrated by the letters P–N, Q–R, N–K, HF–DL and D–ME on the horizontal face 28 of the guide block 22. The letters P–N are printed or painted in green as are also the letters N–K.

If pennies are to be counted it is only necessary to refer to "P–N" on the indicator or index from which it may be at once ascertained that two green spacers are to be used, one at each end of the trough, since the letters P and N are both in green. When the two green spacers are in place, fifty pennies will be required to fill the space between the spacers. The fifty pennies will substantially fill the space, sufficient play being provided only to avoid binding and permit easy loading of the groove with pennies. If an attempt

is made to insert an additional penny into the space, the additional coin may start into the available space but it will be found that it cannot be forced entirely into the space between the coins.

In the same way, forty five-cent pieces can be inserted between the two green spacers as indicated in the index by the letters N–K.

The letters Q–R for quarters are painted or printed in red thus indicating that when quarters are to be counted the two red spacers are to be used and, when these spacers are used, ten dollars worth of quarters or forty coins may be inserted in the space between the spacers.

In the case of half dollars, the letters HF–DL are used in the index. The letters H and L are painted or printed in red thus indicating that the red spacers are to be used outside. The letter F is in green indicating that one green spacer is to be used and the letter D is painted in yellow indicating that one yellow spacer is to be used. Thus in counting out half-dollars two red spacers, a green spacer, and a yellow spacer are to be used to form a space which will receive twenty half dollars or ten dollars worth of coins.

In the case of dimes the letter D is in red indicating that one red spacer is to be used on the left of the trough, while the letters M and E are in yellow indicating that two yellow spacers are to be used on the right hand end of the trough. If the trough is then filled with ten cent pieces, fifty of them will fill the space and an additional one cannot be inserted.

While in the present embodiment of the invention I have not provided means for counting silver dollars it is quite apparent that these coins may be counted or metered in the same way, that is by utilizing suitable spacers.

Of course the spacers can be so dimensioned as to permit the device to be used for counting coins of other countries, or for counting street car tokens or the like.

In using the device the proper spacers are chosen for the coins to be stacked, counted and wrapped and the spacers are placed in the trough as previously described. The trough is then filled with coins and of course, in doing so, the proper number of coins are metered out. After the trough has been filled with coins, the top wrapper 13 is disengaged from pegs 36 and 37 and shoved rearwardly so that the leading edge thereof passes through the slot 34, is deflected upwardly and rearwardly by the face 23, between the coins 24 and the face 23 of guide 22, and the coins and spacers are then rotated with a rolling motion with the top toward the operator so that the paper is carried over the coins and downwardly between the face 27 of guide block 26 and the coins and continued rotation of the coins and spacers by squeezing and rolling motion will cause the wrapper 13 to be wrapped tightly around the coins.

The spacers maintain the coins in stacked relation during the entire wrapping operation and the spacers, which are slightly smaller in diameter than the smallest coins, may be removed merely by tilting the rolled package of coins. This is done of course, after the wrap has been entirely applied to the coins and the stack removed from the counting and wrapping device. The spacers are removed from the ends of the tube formed by the wrapper by shaking them out and the wrapper may then be closed at the ends by bending the paper to seal the ends and form a wrapped bundle which may be easily handled

and counted as a unit as so many dollars worth of coins.

If necessary, I may apply friction to the wrappers as they pass through the slot 34 by depressing a plunger 41 to apply a friction block 42. This friction effect will cause the wrappers to wrap more tightly about the coins.

Although I have described a specific embodiment of my invention, it is apparent that modifications thereof may be made by those skilled in the art. Such modifications may be made without departing from the spirit and scope of my invention as set forth in the appended claims.

I claim as my invention:

1. In a device of the class described, a base plate, V blocks for receiving a stack of coins, spacers for limiting the space available for coins to thus limit the number of coins to be placed in the space, and a slot for directing a wrapper upwardly from beneath and around the coins so that the stack of coins may be rotated to carry the wrapper around the coins and thus wrap the coins.

2. In a device of the class described, a base and foot plate for holding and confining a plurality of wrappers, a head block having a trough therein for receiving coins, and spacers for limiting the space available for coins to be received, the head block being arranged with a slot extending upwardly from the base through the bottom of the trough whereby a wrapper may be fed from the base through the slot beneath the coins as the coins are rotated, and around the coins as the coins are further rotated so as to form a stack of coins with the wrapper wound tightly about them.

3. In a device of the character described, a base member, means thereon for guiding and retaining a plurality of wrappers, a V block disposed above and transverse to the base at one end thereof and having a slot extending upwardly into the V thereof for passage therethrough of a wrapper, and a plurality of spacers selectively insertable in the V for limiting the space available therein for the reception of coins.

4. In a device of the character described, a horizontally arranged trough for receiving and positioning a plurality of coins in face to face relation, a slot extending longitudinally along the bottom thereof for passage therethrough of a coin wrapper, and a base member for supporting a wrapper in alignment with the slot and adjacent the underside of the trough.

5. In a device of the character described, a base member, means thereon for guiding and retaining a plurality of wrappers, a V block disposed above and transverse to the base at one end thereof and having a slot extending upwardly into the V thereof for passage therethrough of a wrapper, a plurality of spacers selectively insertable in the V for limiting the space available therein for the reception of coins, and a friction block for manually applying pressure to the wrappers as they pass through the slot to cause the wrappers to wrap more tightly about the coins.

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