June 17, 1958 R. B. MILLER 2,839,243

COMBINATION COIN CONTAINER AND RULER

Filed Sept. 20, 1956

Fig. 1.

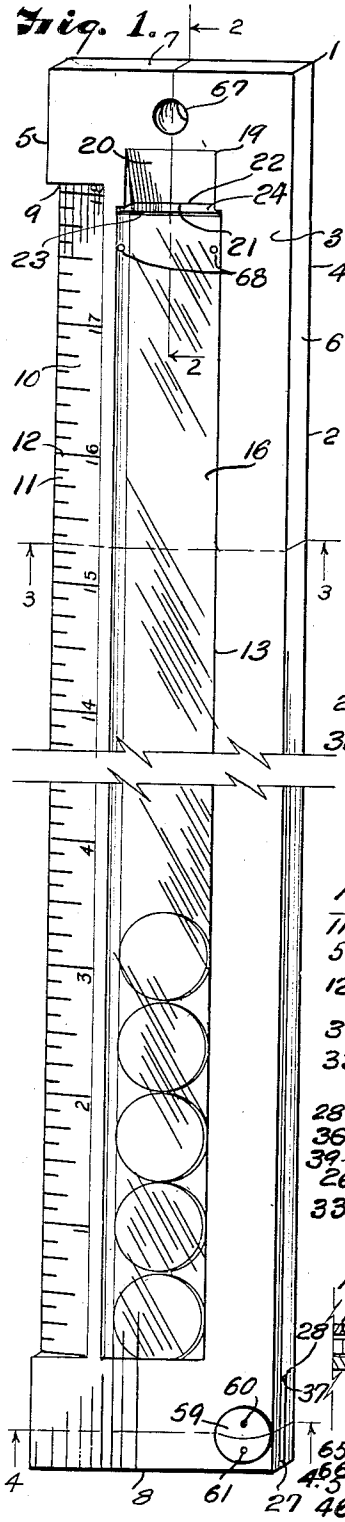


Fig. 2.

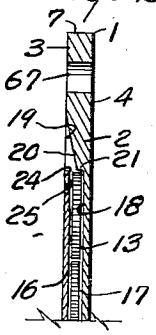


Fig. 7.

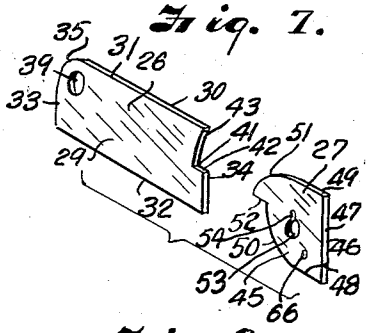


Fig. 3.

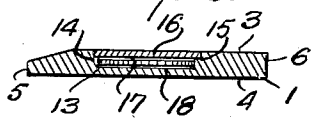


Fig. 8.

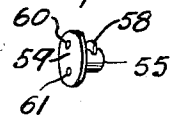


Fig. 4.

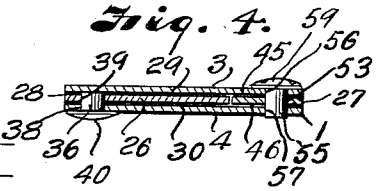


Fig. 9.

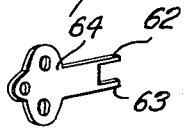


Fig. 5.

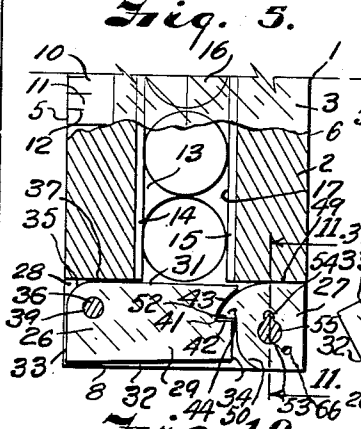


Fig. 6.

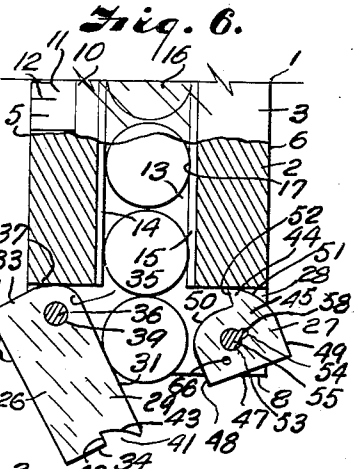


Fig. 10.

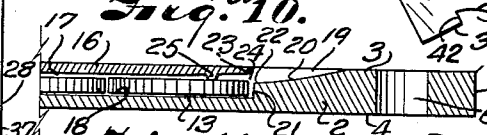
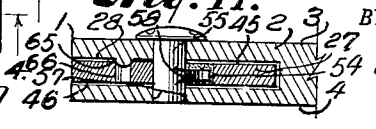


Fig. 11.



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COMBINATION COIN CONTAINER AND RULER

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6 Claims. (Cl. 232—5)

This invention relates to a coin containing device, and particularly to a combination coin container and ruler for use as an advertising novelty.

The principal objects of the invention are to provide a combination coin container and ruler which includes an elongated body member having a passageway provided with a coin insert slot at one end and a closure means at the other; to provide a construction for the coin slot which eliminates possibility of shaking the coins out of the slot; and to provide a closure means that is of simple construction and adapted to be manipulated with a key.

It is also an object of the invention to provide a simple and inexpensive coin container and ruler particularly adapted to be constructed of plastic material to keep the coins visible for comparison with a measuring scale.

In accomplishing these and other objects of the invention as hereinafter pointed out, I have provided improved structure, the preferred form of which is illustrated in the accompanying drawings wherein:

Fig. 1 is a perspective view of a combination ruler and coin container constructed in accordance with the present invention.

Fig. 2 is a fragmentary section through one end of the device, particularly illustrating the construction of the coin slot therein the section being taken on the line 2—2 of Fig. 1.

Fig. 3 is a cross section on the line 3—3 of Fig. 1.

Fig. 4 is a cross section on the line 4—4 of Fig. 1 and particularly illustrating the closure for that end of the coin passageway.

Fig. 5 is a plan view of the closure end of the device, a portion of which is broken away and in section to better illustrate the closure elements, the closure elements being shown in position to close the outlet end of the coin passageway.

Fig. 6 is a similar view but showing the closure elements released to effect discharge of coins.

Fig. 7 is a perspective view of the parts forming the closure at the discharge end of the coin passageway.

Fig. 8 is a perspective view of the latch pivot.

Fig. 9 is a perspective view of the key for actuating the latch element.

Fig. 10 is an enlargement of the section shown in Fig. 2 to better illustrate the stop shoulder and nodule for preventing retraction of a coin after it has passed through the coin slot.

Fig. 11 is an enlarged fragmentary section through the opposite end of the device on the line 11—11 of Fig. 5.

Referring more in detail to the drawings:

1 designates a device comprising a combination ruler and coin container constructed in accordance with the present invention and which includes a generally flat elongated body member 2 formed of any suitable material, preferably a plastic. The body member 2 has substantially parallel front and back faces 3 and 4, longitudinal side edge faces 5 and 6 and end edge faces 7 and 8. The side edge face 5 has a beveled recess 9

extending from near one end face 7 to near the other end face 8. The recess 9 forms an inset face 10 sloping from the plane of the front face 3 to the side face 5 to carry a measuring scale 11 having graduations 12, such as an ordinary ruler.

Formed in the front face 3 and extending inwardly therefrom is an elongated recess 13 which extends substantially the full length of the scale 11 and terminating short of the ends of the body member 2. The recess 13 has longitudinal rabbets in the side edges thereof to form inset shoulders 14 and 15 for supporting the side edges of a covering strip or panel 16 which forms a window extending along the length of a coin passage and storage way 17, the way 17 being formed between the panel 16 and the bottom face 18 of the recess, as best shown in Figs. 3 and 10. The panel strip 16 is preferably of transparent plastic and is cemented or otherwise permanently attached to the shoulders 14 and 15. The passageway 17 is of a depth to accommodate the thickness of a coin of a certain denomination, for example, a dime, and the strip is of a thickness so that the front face thereof is preferably in plane with the front face 3.

Also formed in the face 3 at the upper end of the coin insert recess 9 is a recess 19 having an inwardly inclined face 20 extending from the face 3 toward the bottom face 18 of the passageway 17 but terminating short thereof to provide a transverse stop shoulder 21. The stop shoulder 21 has a transverse edge 22 substantially in registry with a transverse edge 23 of the panel strip 16 (Fig. 10) to provide a coin slot or pass 24 therebetween, which may correspond to or be of slightly less depth than the thickness of the coin to be inserted therethrough. When the slot is of less depth than the thickness of the coin, the end of the strip is preferably left unattached to the shoulders 14 and 15 for a distance sufficient to provide resiliency in the edge or lip of the strip whereby the strip may yield sufficiently to pass the coin through the slot 24 and across the stop shoulder 21. The width of the recess 19 may need to be only the width of the passageway and the inclined face 20 provides a ramp to facilitate placement of the coin in registry with the slot or pass 24. To assure that the trailing edge of the coin drops below the stop shoulder 21, the inner face of the panel strip 16 at the free end thereof has a nodule or lug 25 (Fig. 10) thereon to effect positive movement of the coin in contact with the bottom face 18 of the passageway under action of the free end or lip of the panel strip 16 as the trailing edge of the coin passes the shoulder stop 21. With this arrangement, the coin is trapped within the passageway and cannot be returned through the coin slot.

In the normal relaxed position of the loose end or lip of the strip 16, the lug 25 is preferably spaced from the bottom face 18 of the coin passageway 17 a distance slightly greater than the thickness of the coin, so that the coin is not gripped thereby when the coin is in flat contact with the bottom face 18, but is free to slide to the opposite end of the passageway when the device is inclined or stood on end, as when using the device as a ruler.

The opposite end of the passageway is closed by a gate 26 and a latch 27, as now to be described. Formed in the end edge 8 and extending transversely across the width of the body member 2 is a slot-like recess 28 which intersects the coin passageway 17, as best shown in Figs. 5 and 6. The gate member 26 constitutes a strip of preferably plastic material having flat side faces 29 and 30, a substantially straight edge 31, an opposite edge 32, and end edges 33 and 34. The corner at the juncture of the edges 31 and 33 is rounded as indicated at 35 to allow the gate member to turn within the slot on a pivot pin 36. The gate member 26 is positioned

in the slot 28 with the end edge 33 substantially registering with the edge face 5 of the body of the device, and the edge 31 in abutting contact with the bottom 37 of the slot. The gate is of sufficient length whereby the edge 31 thereof extends across the width of the coin passageway 17, as shown in Fig. 5. The gate is pivotally secured in position within the slot on the pin 36 which extends through an opening 38 of the body 3 and a registering opening 39 in the gate member 26. The pivot pin 36 preferably has a head 40 on the end thereof so that it may be cemented or welded to the body 2. The free end of the gate member 26 has a notch 41 forming a shoulder 42 extending in a plane substantially parallel with the edge 31 and which terminates at the juncture therewith of an arcuate edge 43, as shown in Fig. 5, whereby the notch accommodates a tooth portion 44 of the latch member 27.

The latch member 27 is of a size to complete closure of the slot 28 and has flat side faces 45 and 46, a linear end edge 47 and side edge portions 48 and 49 extending substantially at right angles to the edge 47 and both terminating in inwardly rounding curves 50 and 51 which cooperate to form the tooth 44 of a shape to provide a shoulder 52 for contact with the shoulder 42 when the latch element is inserted in the slot 28 with the edge 49 in contact with the bottom edge 37 at that end of the slot and the end edge 47 in registry with the edge face 6 and with the curved portion 51 extending into the notch of the gate element and in interfitting engagement with the curved edge 43.

Formed in the latch member in concentric relation with the curvature 51 is an opening 53 intersected by a smaller opening 54 whereby the latch element is attached to a stub shaft or pin 55 which extends through the opening 53 and registering openings 56 and 57 of the body portion of the ruler, the opening 56 being of a shape to pass a lug 58 therethrough which projects from the stub shaft 55 and fits snugly within the intersecting opening 54 whereby the stub shaft 55 is keyed with respect to the latch element. One end of the latch element has a head 59 of larger diameter to provide for bearing contact with the front face 6, as shown in Fig. 4. The head 59 has spaced apart sockets 60 and 61 to be engaged by correspondingly spaced prongs 62 and 63 of a key 64, shown in Fig. 9. The latch element is frictionally retained in the position shown in Fig. 5 by means of a lug 65 that extends inwardly from one side of the slot 28 to engage within an aperture 66 of the latch element, the lug 65 and aperture 66 being located so that they are engaged when the tooth 44 on the latch element 27 is engaging in the notch 41 at the end of the gate element 26, as shown in Fig. 5. The body member may be provided at the coin slot end thereof with an aperture 67 by which the device may be hung from a hook or the like (not shown).

In assembling the parts, the transparent strip 16 is cemented in position with the side edges thereof sealed to the shoulders 14 and 15 substantially up to the resilient end of the strip. If desired, pins 68 may be inserted at this point to prevent breaking loose the seal. The gate element 26 is placed within the slot 28 at the opposite end with the opening 39 thereof in registry with the opening 38. An adhesive is then placed on the under side of the head 40 of the pivot member 36 and the shank thereof is pushed through the openings 38 and 39 to bring the head 40 into sealing contact with the back face 4 of the body member. The latch member 27 is inserted in the opposite end of the slot 28 so that the opening 53 is in registry with the corresponding openings 56 and 57 of the body member, whereby the lug 58 and stub shaft 55 will pass into position for engaging the openings 53 and 54 of the latch member 27, after which the end of the stub shaft 55 may be slightly peaned over the rear face 6 to secure the parts, or, if desired, an adhesive may have been applied to the inner edges of the openings of the latch element 27 to seal the latch member to the stub shaft and thereby prevent displacement of the stub shaft. When the tooth 44 of the latch element 27 is in engagement with the shoulder of the gate element 26, as shown in Fig. 5, the edge portion 31 is in contact with the bottom 37 of the slot 28. Likewise, the opposite corner of the latch element 27 is in engagement with the bottom 37 to prevent turning of the latch element in a counterclockwise direction (Fig. 5). The gate element is then held in closed position, because the rounding edge portion 43 thereof is in contact with the arcuate edge 51 of the latch element. The latch element is retained from rotation in a counterclockwise direction so that the gate element is prevented from turning in a clockwise direction, therefore, the gate member is locked across the open end of the coin passageway 17 and any coin placed therein is trapped between the gate element 26 and the stop shoulder 21.

When a coin is placed against the ramp face of the coin insert recess 19, the edge thereof is in position to pass through the coin slot or pass 24 and as the coin is pushed therethrough, the free end of the strip 16 yields to permit the coin to pass the inwardly projecting lug 65 (Fig. 11). As soon as the trailing edge of the coin is pushed into registry with the stop shoulder 21, the stored up action in the free end of the strip 16 forces or snaps the coin into face contact with the bottom face 18 of the passageway 17, consequently as the coin shifts retractively in the passageway upon inverting the device, the edge of the coin engages the stop shoulder 21. It is obvious that the portion of the ramp which provides the stop shoulder 21 forms one side of the coin slot or pass 24, and that the loose or resilient lip portion of the panel strip 16 provides the other side of the coin slot or pass, and when the pass is of less depth than the thickness of the coin, there is a slight resistance to the entrance of the coin, so that it must be forced therethrough, with the result that the resilient lip is flexed outwardly and the action therein snaps the coin against the bottom face 18 of the recess 13 as soon as the trailing edge of the coin passes the shoulder 21. It is also obvious that this action is supplemented by the presence of the lug 25. When the coin falls to the opposite end of the passageway, the edge thereof comes into contact with the edge 31 of the gate element 26 and is stopped thereby as long as the corner portion of the latch member 27 is engaging the bottom face 37 of the transverse slot 28. Additional coins may be inserted in like manner until the coins fill the passageway 17.

To remove the coins, the prongs 62 and 63 of the key 64 are inserted into the openings 60 and 61 of the head 59. The key is then turned to turn the head and shift the latch element 27 in a clockwise direction (Fig. 6) to move the tooth portion 44 thereof a sufficient distance to clear the gate element, whereupon the gate element 26 swings outwardly under weight of the coins to permit the coins to pass between the gate and latch elements.

When all of the coins are removed, the gate element 26 is pushed back into the transverse slot 28 and the key 64 is rotated in a counterclockwise direction to again bring the latch element into engagement with the gate element and the aperture 66 into engagement with the lug 65 which retains the parts in position for closing the coin passageway. Attention is directed to the fact that the edge 32 of the gate element is slightly tapering so that the end thereof is inset a sufficient distance to render difficult the engagement therewith of some form of instrument in an attempt to open the gate member without the use of a key 64.

The device may be used as a ruler in the usual manner, and interest is added by noting the extent of savings by comparison of the row of coins with respect to the graduations on the scale.

It is also obvious that I have provided a device with sufficient flat areas for containing suitable advertising

media whereby the device is especially adapted as an advertising novelty, and the simple construction permits the manufacture and sale thereof at sufficient low cost that the device may be given away by banking institutions to their customers for promoting savings accounts.

What I claim and desire to secure by Letters Patent is:

1. A device of the character described, including an elongated body member having a longitudinal coin passageway and a transverse slot intersecting the coin passageway at one end of the body member, inter-engaging gate and latch elements, means on one side of the passageway for pivotally mounting the gate element in said slot to close said coin passageway and to swing out of the slot to open the passageway for discharge of coins, means on the opposite side of the coin passageway for pivotally mounting the latch element to pivot the latch element into and out of engagement with the gate element, means on said body member and engaging a part of the latch element for frictionally holding the latch element in engagement with the gate element, and means for turning the pivot means for the latch element to free the latch element.

2. A ruler having a front face provided with a scale and a recess opening inwardly of said face side of the ruler and extending along the length of the scale, a strip covering the open side of said recess and having a flexible end terminating short of said corresponding end of the recess to provide a coin insert opening, a ramp in the ruler for guiding a coin under said flexible end and terminating in a stop shoulder below said resilient end, and a lug projecting from said resilient end and inwardly of the recess on the side opposite the stop shoulder to shift the coin into a position for engaging the stop shoulder to prevent the coin from returning through said coin insert opening.

3. A ruler having a front face provided with a scale and a recess opening inwardly of said face side of the ruler and extending along the length of the scale, a strip covering the open side of said recess and having a flexible end terminating short of said corresponding end of the recess to provide a coin insert opening, a ramp in the ruler for guiding a coin under said flexible end and terminating in a stop shoulder below said resilient end, a lug projecting from said resilient end and inwardly of the recess at a point slightly below the shoulder to shift the coin into a position for engaging the stop shoulder and prevent the coin from returning through said coin insert opening after the coin has cleared the stop shoulder, and fastening means extending through the strip and into the ruler to define the point of flexure of said end of the strip.

4. A device of the character described including an elongated body member having a coin storage passageway extending longitudinally of said body member and having ends terminating short of the ends of said body member, said body member having a coin insert recess in a side face thereof and connected with one end of said coin storage passageway to provide a coin pass therebetween, said coin insert recess having a ramp sloping inwardly from said side face of the body member and forming a stop shoulder at said one end of the coin storage passageway and forming one side of the coin pass, a resilient lip portion carried by said body member and forming the opposite side of said coin pass to necessitate a propelling force on the coin to push the coin through the coin pass and to close the coin pass sufficiently to resist return of the coin through said coin pass after it has once cleared the stop shoulder, the opposite end of said storage passageway having a coin discharge opening, and means for closing the discharge opening.

5. A device of the character described including an elongated body member having a coin storage passageway extending longitudinally of said body member and having ends terminating short of the ends of said body member, said body member having a coin insert recess in a side face thereof and connected with one end of said coin storage passageway to provide a coin pass therebetween, said coin insert recess having a ramp sloping inwardly from said side face of the body member and forming a stop shoulder at said one end of the coin storage passageway and forming one side of the coin pass, a resilient lip portion carried by said body member and forming the opposite side of said coin pass and yieldable outwardly from said ramp to pass a coin from the coin recess into the coin storage passageway, a lug on said resilient lip portion and projecting into the coin storage passageway at a point spaced from the stop shoulder to guard the coin pass and divert the coin into contact with the stop shoulder and prevent return of the coin through said pass after it has once cleared the stop shoulder, the opposite end of said coin storage passageway having a coin discharge opening, and closure means carried by said body member for closing the coin discharge opening.

6. A device of the character described including an elongated body member having an elongated recess extending inwardly from one face side and having ends terminating short of the ends of said body member, a resilient strip closing the open side of the recess to provide a coin storage passageway, said body member having a coin insert recess connected with said coin storage passageway to provide a coin pass therebetween, said coin recess having a ramp sloping from said one side face of the body and forming a stop shoulder at said end of the coin storage passageway and forming one side of said pass, said resilient strip having the end portion thereof at said end of the coin passageway forming the opposite side of said coin pass and yieldable outwardly from said stop shoulder to pass a coin from the coin recess into the coin storage passageway, a lug on said end portion of the strip and projecting into the coin storage passageway at a point spaced from the stop shoulder and in guarding relation with the coin pass to cooperate with the stop shoulder in preventing return of coins through the coin pass after they have once cleared the stop shoulder, a coin discharge opening at the opposite end of the coin storage passageway, and closure means carried by said body for closing the discharge opening.

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