Sept. 24, 1968 J. SUTHERLAND ET AL 3,402,806

COINHOLDERS

Filed Aug. 7, 1967

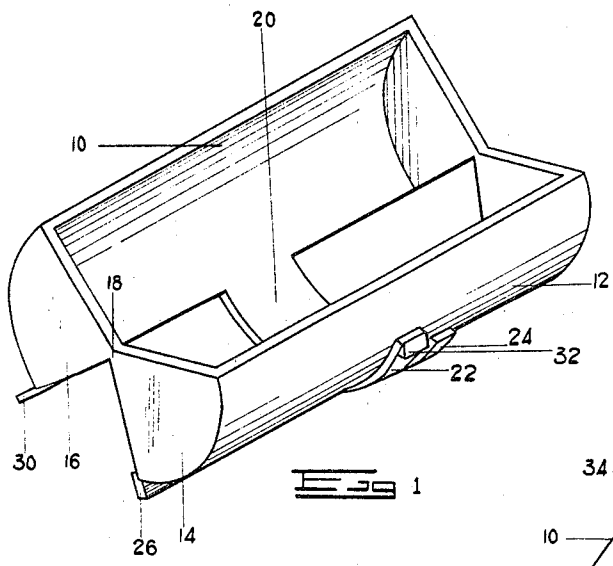


Fig 1

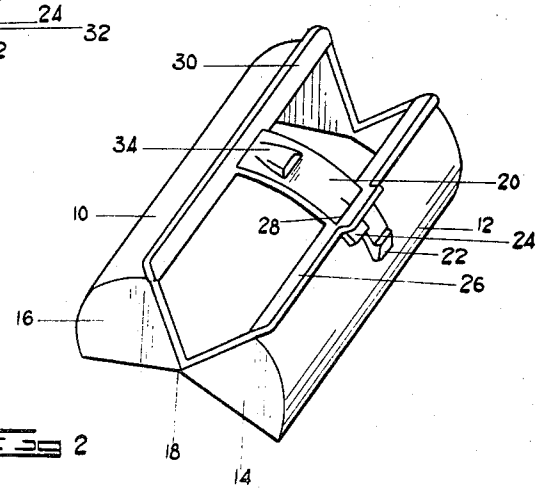


Fig 2

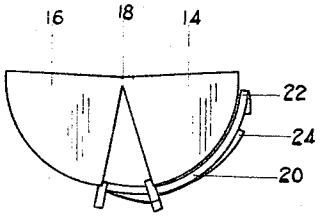


Fig 3

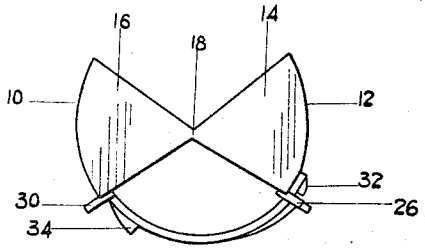


Fig 4

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COINHOLDERS

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3 Claims. (Cl. 206—.82)

ABSTRACT OF THE DISCLOSURE

A coinholder comprising two body members, each being a segment of a hollow cylinder, which are joined together at each end by end-pieces. The end-pieces taper towards the centre of the cylinder to allow relative pivotal movement between the body members about a line parallel to the cylinder axis. A tongue and slot combination, the tongue being attached to one of the body members and the slot being formed in the other, holds the two body members in a predetermined position. In use, the body members are moved relatively to each other to an open position and a row of coins is placed in the trough defined by the two segments. The body members are then released, which members return to a closed position in which the coins are held captive in the trough. The body members are held fixed in the closed position by the tongue and slot combination.

This invention relates to coinholders and particularly those of the type into which several coins of the same size are held face-to-face in a row. Generally speaking, the length of the coinholders is an integral multiple of ten widths of the particular coin being counted.

Many forms of such coin-holders have been proposed but the relatively inexpensive forms have not proved satisfactory.

It is an object of the present invention to provide an inexpensive form of coin holder that is robust.

According to the invention, a coin holder comprises at least two body members each having a surface defining a concave segment of a cylinder, the sum of the segment arcs forming not more than a semi-circle; means connecting the body members for relative pivotal movement about a line parallel to the cylinder axis; and means to hold the body members in a selected position relative to each other.

The line of pivotal movement is preferably coincident with the cylinder axis, or close to it.

Further according to the invention, the body members are connected for movement between a first position in which a coin of substantially the same diameter as the cylinder may be inserted in the plane of the cylinder diameter between them, and a second position in which a coin so placed is entrapped by the body members, the locking means being operative in the second position.

Also according to the invention, the body members are of substantially equal length, and include at each end an end-piece that is a portion of an end of the cylinder.

The end-members preferably include the centre of the cylinder diameter, and are connected to each other at the cylinder diameter centre by means such as pivot pins or hinges. In a preferred form, the body members are two in number and are constructed integrally with each other from a flexible material, the pivot means being a thin strip of the material. Polypropylene has been found suitable for this construction.

Also according to the invention, the coinholder includes means to hold the body members in the first position. In this position, the holder is open and coins of the same diameter as the cylinder may be dropped into it. In the second position, the holder is closed, the body members extending round a portion of the coin circumference that is greater than a semi-circle. The end-pieces prevent egress of the coins through the cylinder ends.

In the preferred form of the invention the locking means comprises a tongue and slot arrangement, the tongue being formed on one of the body members and the slot on the other, the tongue preferably being curved in an arc concentric with the cylinder. The tongue may be provided with stops to correspond with the two positions of the body members. Other forms of locking means, such as a spring-biased clip urging the body members towards the second position, are also feasible.

An embodiment of the invention is described below with reference to the accompanying drawings, in which:

FIGURE 1 is a perspective view from above of a coinholder according to the invention;

FIGURE 2 is a perspective view from below of the coinholder of FIGURE 1;

FIGURE 3 is an end view of the coinholder of FIGURES 1 and 2, illustrating the open position; and

FIGURE 4 is a view similar to FIGURE 3, illustrating the closed position.

The coinholder shown in FIGURES 1 and 2 is moulded integrally from polypropylene and comprises two body members **10** and **12**, each being a segment of a hollow cylinder. Each segment arc is slightly less than a quadrant. At their ends, the body members have end-pieces **14** and **16**, being portions of the ends of the cylinder. The end-pieces have a common apex **18** near the centre of the cylinder and are thus connected by a thin, flexible strip of polypropylene which acts as a hinge, permitting relative pivotal movement about a line almost coincident with the cylinder axis.

A curved tongue **20** extends from the body member **10** round the convex surface of the body member **12**, passing through a slot **28** in a flange **26** along one edge of the body member **12** (see FIGURE 2). The tongue forks at its free end into two branches **22** and **24**, the branch **22** being somewhat longer than the branch **24** and having near its tip a stop pad **32**. The branch **24** is raised at its free end relatively to the branch **22**. A stop pad **34** is also provided near the root of the tongue **20**.

The hinge at **18** has admirable flexibility because of the mechanical properties of polypropylene, and production models have withstood more than 1,000,000 flexions without failure.

FIGURES 1 and 2 illustrate the coinholder midway between the open and closed positions. In FIGURE 3, the holder is shown in the open position, and in FIGURE 4 in the closed position. In the closed position, the arc of the cylinder that includes the two segment arcs encompasses more than a semi-circle, so that coins placed in the trough defined by the segments are held captive. In this position, the stop pad **32** abuts the slotted flange **26** on the body member **12** and prevents the gap between the flanges **26** and **30** from being widened. The tip of the branch **24** of the tongue **20** moreover abuts the opposite side of the flange **26**, so that relative pivotal movement to narrow the gap between the body members is also prevented. Coins in the holder are thus securely locked in place. To release them, the branch **24** is depressed to enter the slot **28**, and the body members **10** and **12** are pivoted towards each other about the hinge **18** until the stop pad **34** engages the flange **26**, preventing further pivotal movement. In this position, shown in FIGURE 3, the cylinder arc that includes the segment arcs is virtually a semi-circle, permitting coins to be removed from and inserted in the trough formed by the body members. To close the holder, the body members are drawn apart until the stop member **32** prevents further movement. The

flanges 26 and 30 provide a convenient base on which the holder may rest with the trough mouth upwards (see FIGURE 3).

Various alternatives to the structure described above might be provided. For instance, the tongue and slot arrangement might be replaced by spring means biassing the body members towards the closed position and suitable stop means to define that position.

As an additional refinement, the holder may include one or more transverse partitions so that any inaccuracies due to worn coins may be offset.

We claim:

1. A coinholder, formed as an integral structure from polypropylene, comprising two body members each being a segment of a hollow cylinder, the sum of the segment arcs forming not more than a semi-circle, the body members being of equal length and being connected to each other by end-pieces for relative movement about a line parallel to the cylinder axis and nearby the cylinder axis; the end-piece at each end of each body member being shaped substantially as a segment of the end of the cylinder, the two end-pieces at each end of the holder being joined apex to apex by a thin strip of polypropylene which serves as a hinge permitting the relative movement of the body members; the holder further including a tongue and slot combination to hold the body members in a closed position to entrap coins located in the trough defined by the body members, the tongue being attached to one of the body members substantially midway along its length and being curved in an arc substantially concentric with the cylinder to enter the slot, the slot being formed in a projection on the outer surface of the second body member, stop means being provided on the tongue to lock it in the slot to define the closed position of the holder.

2. The coinholder of claim 1 in which the tongue is forked at its free end, one of the branches being longer than the other and having a stop pad located at its tip to prevent passage of the tip through the slot, the tip of the shorter branch being raised relatively to the longer branch to define with the stop pad on the longer branch a zone in which the slot is adapted to lock the tongue to close the holder, the tip of the shorter branch being adapted to be depressed to permit the tongue to be advanced through the slot to open the holder.

3. The coinholder of claim 2, including a stop pad located on the tongue near its root and adapted to abut against the slotted projection on the second body member to define a position in which the holder is open to receive coins.

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