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W. R. BROWN ET AL

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LATCHING DEVICE FOR SHIPPING CONTAINERS

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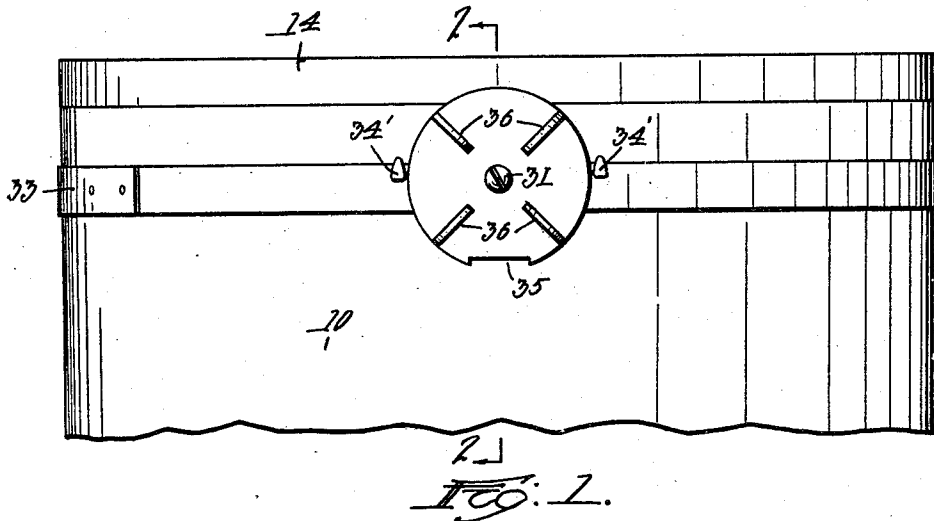
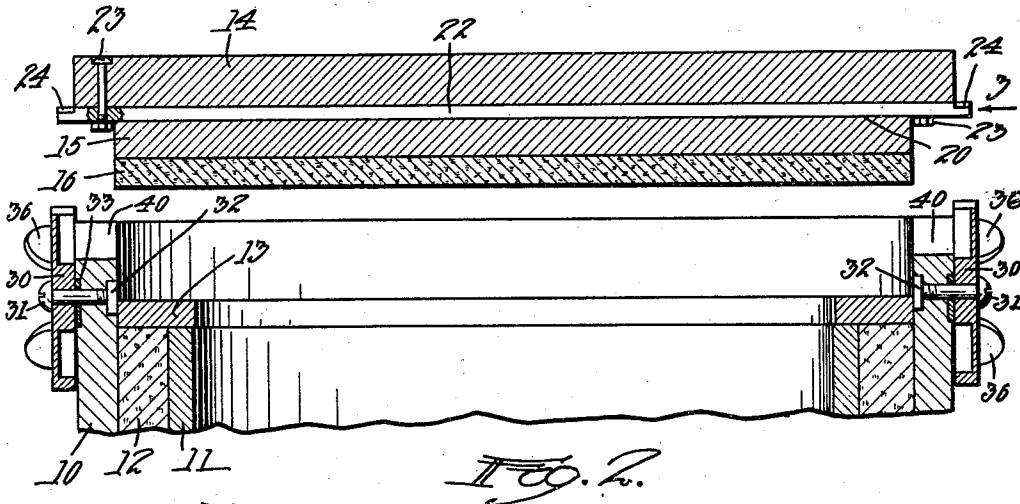
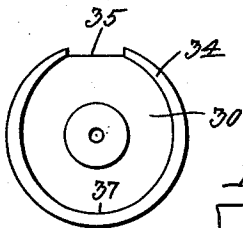
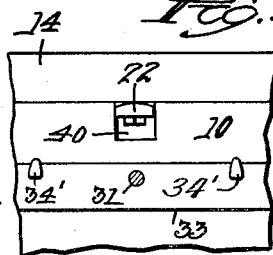
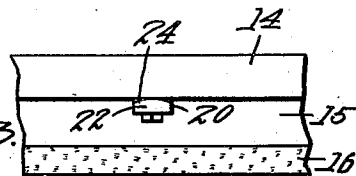


Fig. 4.

Fig. 5.



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LATCHING DEVICE FOR SHIPPING CONTAINERS

Application filed August 1, 1927. Serial No. 209,745.

This invention is capable of general application but relates particularly to containers for shipping ice cream and similar products.

It is essential that such a container may be quickly and easily closed and as easily opened, and that the cover shall be securely held while in transit.

It is the object of our invention to provide an improved device for latching a cover on a shipping container, which device shall be simple in construction and operation, economical to manufacture, and entirely reliable when in use.

Our invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claims.

A preferred form of the invention is shown in the drawings in which

Fig. 1 is a partial side elevation of a shipping container having our improvements applied thereto;

Fig. 2 is a sectional side elevation, taken along the line 2—2 in Fig. 1 but showing the cover raised from the body or tub;

Fig. 3 is a detail side elevation, looking in the direction of the arrow 3 in Fig. 2;

Fig. 4 is a side view of one of the latching discs; and

Fig. 5 is a detail view of a portion of the upper edge of the body or tub.

Referring to the drawings, we have shown a shipping container comprising a body portion or tub and a cover adapted to be fitted tightly thereon. The body portion comprises an outer wall 10 and an inner wall 11, each preferably made of pine or other soft wood, separated by a packing 12 of cork or other suitable heat insulating material. A flat annular ring 13 covers the upper end of the inner wall 11 and also covers the insulating layer 12.

The cover comprises an outer layer of wood 14, an inner layer of wood 15 and a layer 16 of cork or other heat insulating material. The layers 15 and 16 are of smaller diameter than the layer 14 and are adapted to fit within the top of the outer wall 10 of the body portion of the container.

When the parts are assembled the cork layer 16 is pressed firmly against the ring 13, effectively sealing the container. The wood layers 14 and 15 of the cover are preferably assembled with the grain disposed at right angles, thus increasing the strength of the cover and preventing distortion thereof.

The inner layer 15 is provided with a groove or recess 20 (Fig. 3) extending diametrically across the layer 15 in its upper face. A locking bar 22 is inserted in the recess 20 between the layers 14 and 15 and is secured in position by bolts 23 near the outer edges of the cover. The extreme ends of the bar 22 project slightly beyond the cover layer 14 and are preferably provided with convex upper surfaces 24, as indicated in Fig. 3.

A pair of cam discs 30 are secured to the sides of the wall 10, one at each end of a diameter thereof, said discs being preferably pivoted on bolts 31 extending through the wall 10 and having nuts 32 seated in recesses on the inner sides of the wall 10. The bolts 31 also preferably extend through openings in a hoop or metal band 33, surrounding the tub or body and held from upward displacement by hoop shaped or headed fastening members 34' (Fig. 1).

The discs 30 are each provided with an annular flange 34, recessed at one point as indicated at 35 (Fig. 4) and said discs have lugs or projections 36 by which they may be easily rotated. The inner surface of the flange 34 is preferably concentric at its middle part, as indicated at 37 in Fig. 4, and has its end portions outwardly displaced so that they are substantially further from the axis of the disc at their ends, adjacent the recesses 35. The upper edge of the tub is notched or recessed at 40 (Fig. 5) to receive the ends of the bar 22.

Having described the details of construction of our improved latching device, the manner of using the same will be readily apparent. After the material to be shipped has been placed within the body or tub of the container, the cover is placed thereon with the bar 22 extending through the recesses 40 in the upper edge of the tub. The extreme outer

ends of the bar will pass through the recesses 35 in the cam rings 34 of the locking discs, as the cover is placed on the tub. The discs may then be turned a half revolution each by grasping the lugs 36, such movement drawing the bar 22 firmly downward to compress the cork layer 16 against the ring 13. When the discs 30 have been turned 180°, the ends of the bar 22 are engaged by the concentric portions 37 of the ring 34, from which position they are not easily displaced by any accidental turning of the discs 30. Our latching device has been found effective and extremely satisfactory in practical use.

Having thus described our invention and the advantages thereof, we do not wish to be limited to the details herein disclosed otherwise than as set forth in the claims, but what we claim is:—

1. In a shipping container comprising a body and a cover, a latching bar extending transversely of said cover and projecting beyond the side surfaces of said body, and a pair of cam discs mounted one at each side of said body and effective to engage and draw downward said latching bar, said body having notches in its upper edge to receive said bar thereby to position the bar relative to said cam discs, and to prevent angular movement of said bar and cover, and also having reinforcing members secured thereto, said discs having pivotal fastening members extending through the reinforcing means and secured to the body.

2. In a shipping container comprising a body and a cover, a latching bar extending transversely of said cover and projecting beyond the side surfaces of said body, a pair of cam discs mounted one at each side of said body and effective to engage and draw downward said latching bar, pivotal fastening members for said discs secured in said body, and means to position said latching bar relative to said cam discs.

In testimony whereof we have hereunto affixed our signatures.

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