Sept. 9, 1969 W. D. TAYLOR 3,465,892

SLIDE-OUT LID RACK

Filed Nov. 13, 1967 3 Sheets-Sheet 1

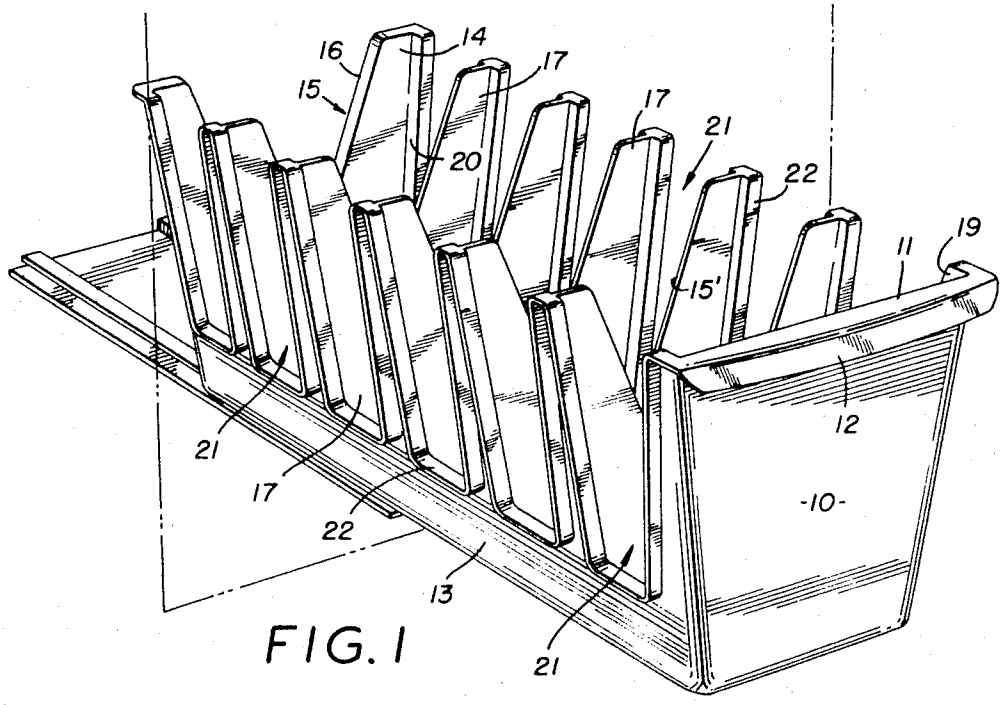


FIG. 1

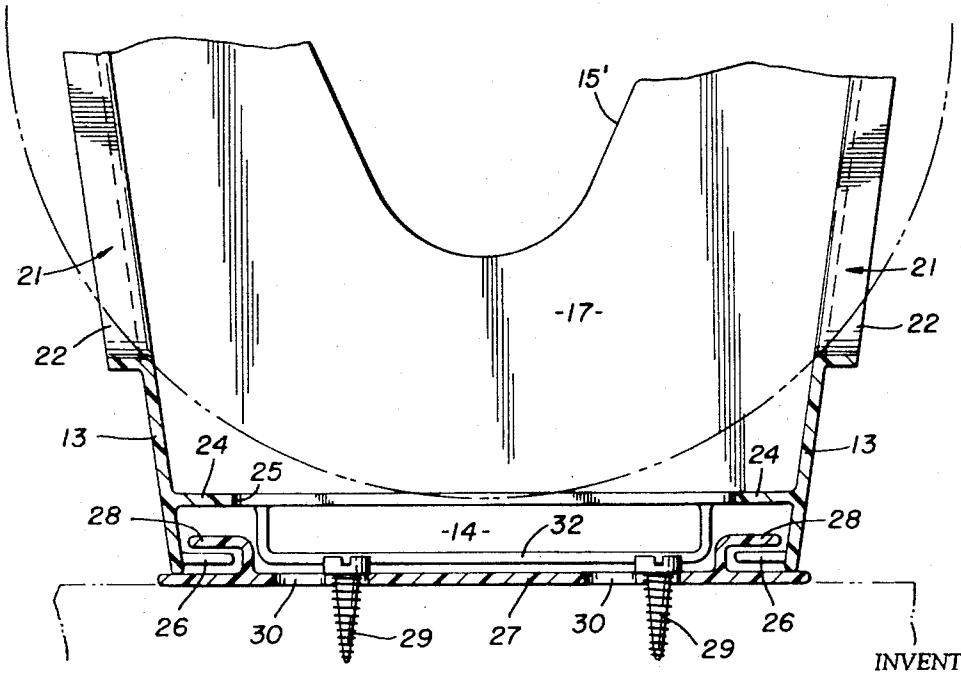


FIG. 6

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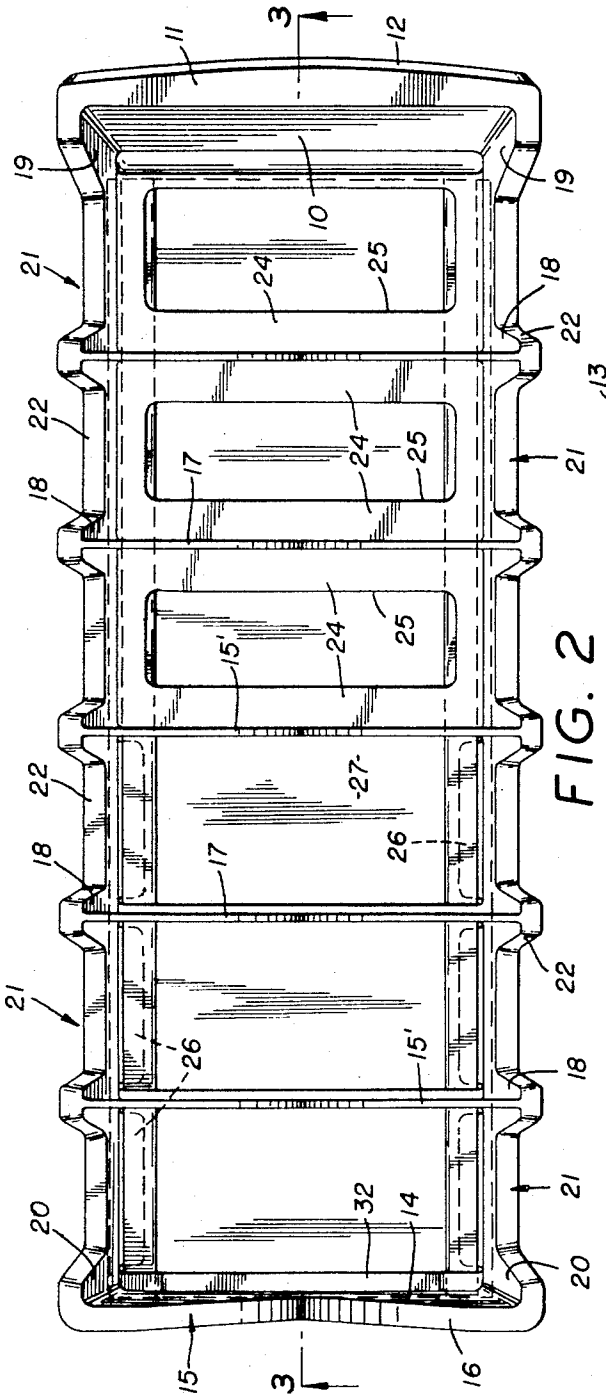


FIG. 2

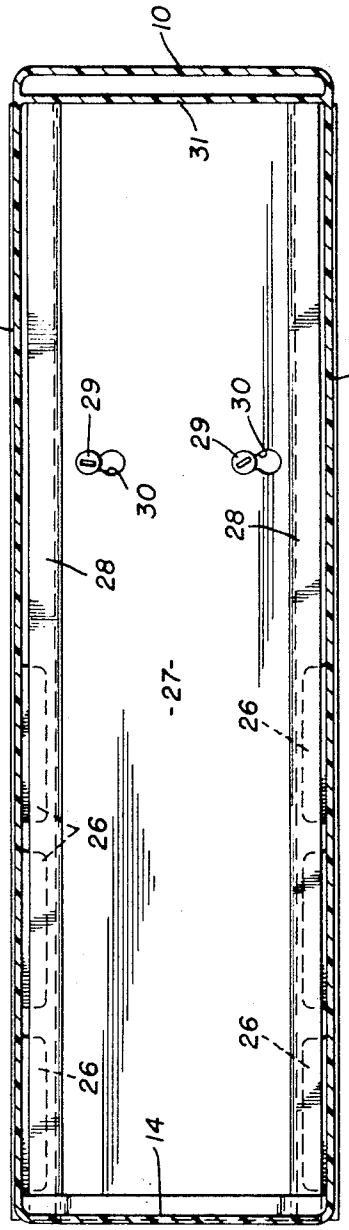


FIG. 5

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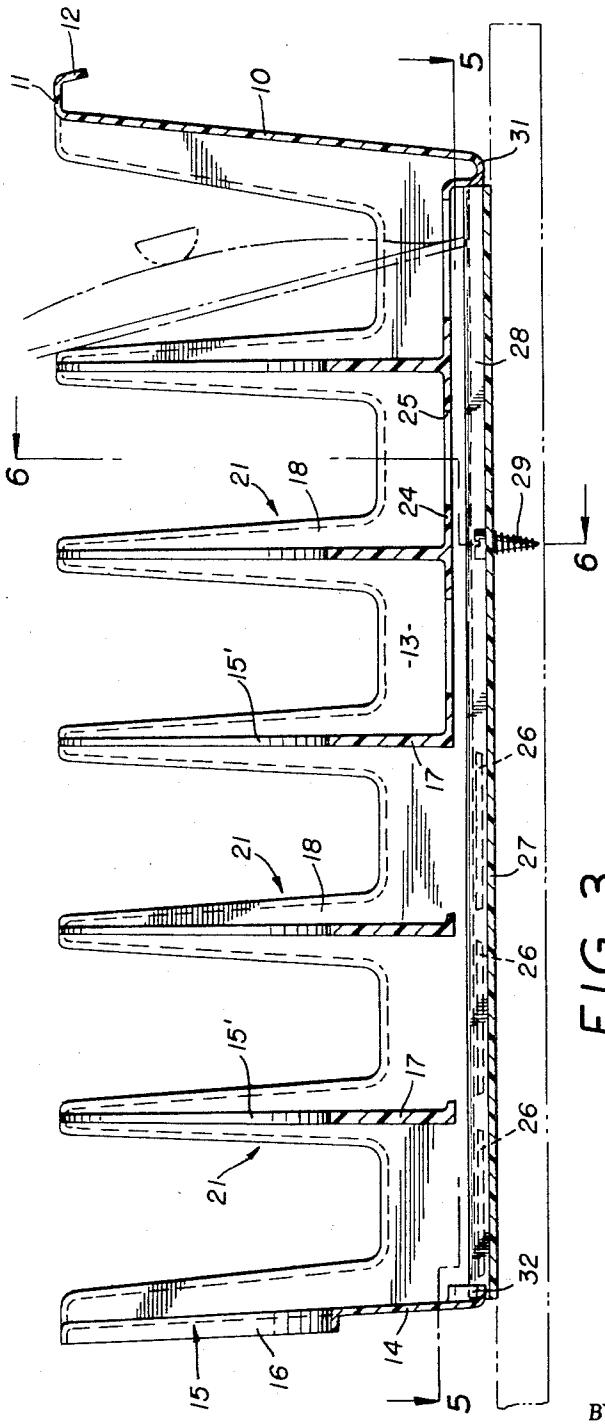


FIG. 3

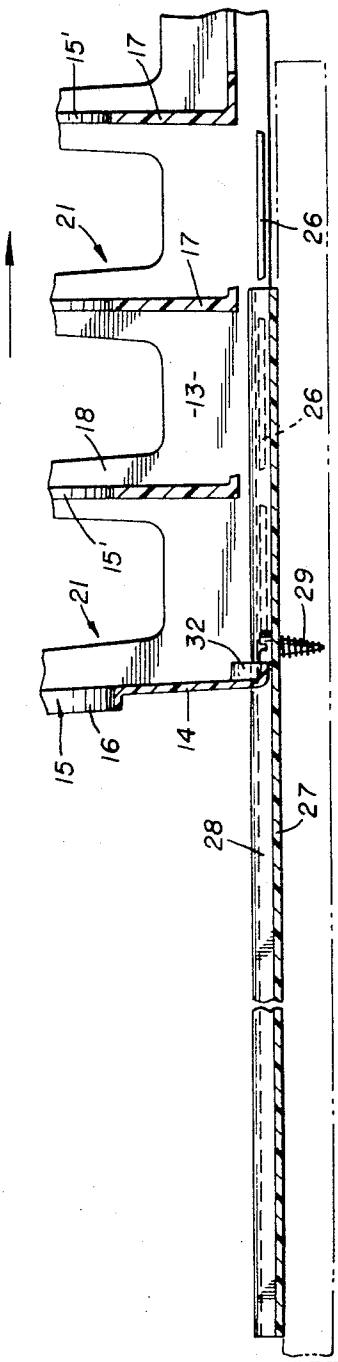


FIG. 4

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SLIDE-OUT LID RACK

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Int. Cl. A47g 19/08
U.S. Cl. 211—41 10 Claims

ABSTRACT OF THE DISCLOSURE

A molded plastic lid rack comprising a drawer-like structure having a closed end wall and a plurality of compartments formed by longitudinally spaced transverse partition walls reinforced at their outer edges by flanged side walls forming U-shaped openings between said partition walls.

The invention relates generally to racks for holding kitchen pot and pan lids, and more particularly to a lid rack adapted to be slidably mounted on a cupboard shelf or the like for optimum accessibility.

BACKGROUND OF THE INVENTION

Storing a variety of different size pot and pan lids in a kitchen has always been difficult because of the concavo-convex shape of most lids, the protruding handles and in some cases a depending rim flange. If the lids are merely laid one upon another in a drawer, the lowermost lids are never accessible and one has to lift and hold the top lids to get to the bottom ones.

Attempts have been made to provide lid racks of formed wire, but the wire must be coated to avoid corrosion and to prevent scratching or marring the lids, and such coating is apt to become chipped or removed as a result of constant insertion and removal of the lids tending to bend or kink the wire.

Moreover, where such racks have been fixedly mounted on a shelf, the lids are arranged one behind another and hence the inner lids are relatively inaccessible.

SUMMARY OF THE INVENTION

The present novel and improved slide-out lid rack provides a drawer-like structure slidably mounted on a track supported on a shelf or the like so that the rack can be easily pulled out to make all the lids therein easily accessible. A plurality of laterally open compartments is formed by transverse partition walls having flanged side walls at their outer edges, the flanges being connected to form U-shaped openings in the side walls of the compartments.

It is an object of the present invention to provide an integral, molded plastic rack of the foregoing construction which is reinforced around the side openings, and the front portion of which is further reinforced transversely for lateral stability when the rack is pulled out from its track.

Another object is to provide a molded plastic track having flanges for interfitting with guide flanges formed on the molded plastic rack.

These and other objects are accomplished by the novel and improved rack and track of the present invention shown in the accompanying drawings and described in detail in the following specification.

DESCRIPTION OF THE DRAWINGS

A preferred embodiment of the invention is shown by way of example in the drawings in which:

FIG. 1 is a perspective view showing the improved lid rack partially slid-out from its track.

FIG. 2 is a plan view of the lid rack in fully pushed-in or closed position.

FIG. 3 is a vertical sectional view on line 3—3 of FIG. 2.

FIG. 4 is a partial vertical sectional view showing the lid rack in fully pulled-out position.

FIG. 5 is a horizontal sectional view on line 5—5 of FIG. 3.

FIG. 6 is a partial transverse sectional view on line 6—6 of FIG. 3.

The lid rack comprises a front transverse end wall **10**, having an upper outturned rim flange **11** terminating in a depending lip **12** which serves as a finger-grip handle for pulling the rack outwardly from its support through a door opening or the like indicated in chain lines in FIG. 1. Longitudinally extending slightly diverging side walls **13** connect the front wall **10** wth a transverse rear end wall **14** preferably having a central substantially V-shaped opening **15** therein with an outturned flange **16** extending around the opening. As shown in FIG. 3 end walls **10** and **14** are slightly divergent to each other.

The side walls have a plurality of transverse partition walls **17** connected thereto and spaced at substantially equal intervals longitudinally thereof, forming a plurality of compartments. Five partition walls **17** are shown forming six compartments between the front and rear walls, but this number may be varied, as desired. Preferably, each partition wall **17** has a central substantially V-shaped opening **15'** therein in longitudinal alignment with the opening **15** in rear wall **14**.

These openings not only save material but also make the lids in adjoining compartments more readily visible and accessible. Further, if several lids are stacked in one compartment the knob on the topmost lid can project through the adjoining openings **15'** into the next compartment, thus accommodating an increased number of lids.

As shown in FIG. 3, the partition walls **17** taper from their top edges divergingly downward to an increased thickness at their bases. This gives greater lateral stability at the base where it is needed, and also facilitates molding the rack integrally.

The outer edges of the partition walls **17** are connected to tapered upstanding sidewall portions **18** and similar tapered sidewall portions **19** and **20** are connected to the front and rear walls **10** and **14**, respectively, forming substantially U-shaped openings **21** in opposite sides of each compartment. Outturned reinforcing flanges **22** extend around said openings and across the tops of sidewall portions **18**, **19** and **20**. As shown, the tapered sidewall portions are tapered from the top divergingly downward so that the upper ends of openings **21** are somewhat wider than their lower ends. This tapering also facilitates integral molding.

As shown in FIGS. 2, 3 and 6, the front three compartments have horizontal web walls **24** connected with the sidewalls **13** near their bottoms and with the bottom edges of partition walls **17**, said web walls having central rectangular openings **25** therein to accommodate the lower edges of lids such as indicated in chain lines in FIG. 3. These web walls **24** impart lateral stability to the front half of the lid rack, especially when it is in a pulled-out position as seen in FIG. 1.

In the three rear compartments horizontal guide ribs **26** project inwardly from both side walls **13** along the bottom edges thereof. As best shown in FIG. 6, these ribs project into longitudinal channels formed at the sides of a track between the track bottom wall **27** and angular outturned flanges **28**. Preferably, the ribs **26** are spaced slightly above the bottom edges of the side walls **13**, so that the bottom edges slide on the outer marginal portions of the track bottom wall. The bottom wall **27** may be secured to a shelf or other support by screws **29** passing through keyhole slots **30**.

Referring to FIG. 3, when the rack is in fully pushed-in position, a depending reverse bend **31**, connecting the bottom of front end wall **10** to the web wall **24** in the front compartment, contacts the front ends of the angular flanges **28** of the track to limit inward movement of the rack. An inturned rib **32** extending across the base of rear wall **14** contacts the heads of screws **29** to limit outward movement of the rack as seen in FIG. 4.

The entire rack is molded integrally of suitable plastic material, such as medium impact styrene, and the track may be molded or extruded from the same material. Thus, a laterally stable all-plastic, slide-out rack is provided which is very easy to install, which provides a plurality of compartments for selectively storing and removing different sized lids and which does not become chipped or bent and does not mar or mark the lids stored therein.

I claim:

1. An integral molded plastic slide-out lid rack having front and rear end walls and opposed side walls, longitudinally spaced transverse partition walls forming a plurality of compartments in said rack, said side walls having opposed upstanding portions connected to the outer edges of said partition walls and forming side openings in said compartments, and horizontal guide ribs projecting inwardly from the bases of said side walls for slidably interfitting a horizontal track.

2. A lid rack as defined in claim **1**, in which said side openings have outturned reinforcing flanges extending along their edges.

3. A lid rack as defined in claim **1**, in which said upstanding side wall portions are tapered divergingly downward.

4. A lid rack as defined in claim **2**, in which said upstanding side wall portions are tapered divergingly downward.

5. A lid rack as defined in claim **1**, in which said partition walls are tapered in thickness divergingly downward.

6. A lid rack as defined in claim **4**, in which said partition walls are tapered in thickness divergingly downward.

7. A lid rack as defined in claim **1**, in which horizontal web walls connect the side walls and the partition walls in certain of said compartments.

8. A lid rack as defined in claim **4**, in which horizontal web walls connect the side walls and the partition walls in certain of said compartments.

9. In combination with the lid rack as defined in claim **1**, a horizontal track having side channels for slidably receiving said guide ribs, and means between said side channels for securing said track to a support.

10. A lid rack and track as defined in claim **9**, in which an inner rib is provided on the base of the rear end wall for contacting said track securing means to limit outward movement of said rack.

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