This invention generally relates to refrigerator cabinets and more particularly pertains to a refrigerator door liquid dispensing means.

In recent years there have been many attempts to provide a juice or liquid dispenser within a refrigerator door. These devices were designed to fill the need of a container which would keep the liquids or juices cool and at the same time provide an easily accessible outlet from the container. Heretofore these attempts in many instances have resulted in elaborate devices extending completely across the interior of the refrigerator door, frequently associated with a tube extending from the interior to the exterior of the door. These structures are comparatively expensive and are often a source of trouble because of mechanical failure in some of the working parts associated therewith. In these more elaborate structures it is also difficult to maintain the desired standard of cleanliness when the liquid dispenser is used for milk, juices, or other types of liquids.

By my invention I have provided an economical, simple and attractive refrigerator door liquid dispenser which is easily accessible from the interior of the refrigerator door. I have completely eliminated all faucets and valves and at the same time have provided a liquid dispenser which is easily accessible and from which liquids may be obtained without removing the dispenser from its position within the door.

The invention includes a decanter which is removable positioned on a horizontal shelf within a refrigerator door. Integral with the front side of the decanter is a concave slot which cooperates with a fulcrum in vertical spaced relation above the edge of the shelf and above which the decanter revolves when liquid is being poured therefrom. This fulcrum may comprise a rail, a horizontal rod or simply be a part of a vertical retaining wall along the edge of the shelf.

It is therefore an object of my invention to provide a refrigerator door liquid dispenser which is easily accessible from the interior of the refrigerator door.

Another object of my invention is to provide a receptacle for containing liquids which is removable positioned within a refrigerator door.

Yet another object is to provide a liquid dispenser for the interior of a refrigerator door which may be tilted outwardly for pouring without removal from its normal position.

Still another object is to provide a refrigerator door liquid dispenser having a baffle means within to prevent spilling when the door is being opened or closed.

Yet another object of my invention is to provide a receptacle for containing liquids which has a hinge point on the exterior thereof for cooperation with a fulcrum on the interior of the refrigerator door.

A still further object is to provide a refrigerator door liquid dispenser having an opening therein with said opening partially obstructed. Yet another object of my invention is to provide a receptacle which is easily removable for cleaning.

And still another object of my invention is to provide a refrigerator door liquid dispenser which has maximum utility at minimum cost.

In the drawings:
Figure 1 is a perspective view of a refrigerator showing my invention;
Figure 2 is a fragmented cross sectional view of the decanter and its position when tilted about its axis of rotation;
Figure 3 is a partial section view taken on line III—III of Figure 2;
Figure 4 is a partial cross section view taken on line IV—IV of Figure 2;
Figure 5 is a perspective view of the baffle which is positioned within the receptacle;
Figure 6 is a perspective view of the decanter.

As shown in the drawings:
A cabinet 10 having a conventional refrigerator compartment 11 within its top portion and a door 12 for closing the compartment 11 is shown in Figure 1. The door 12 is one of comparatively great depth from outside to the inside and has a deep drawn outer shell 13 with marginal flanges upon which a sealing means 14 is positioned. Also attached to the marginal flanges about its periphery is a deep breaker frame 16 which protrudes inwardly and overlaps the inner door pan 16 about its periphery.

Within the inner door pan 16 is at least one horizontal shelf 18 which extends from the back wall 19 of the inner door pan 16 to the vertical retaining wall 20 at the front edge thereof and between the side walls 21. The horizontal shelf 18 is wide in comparison to conventional inner door structures and is generally between seven and eight inches from the back wall 19 to the inside edge of the vertical retaining wall 20. This horizontal shelf is so constructed and arranged as to provide for general utility and convenience and especially supports a decanter 22 which in the preferred location is positioned on the side of the door 12 remote from the hinges.

Lying in spaced relation above the vertical retaining wall 20 is a decanter rail 24 which in preferred form is comprised of a horizontal rod which is attached to a side wall 21 at one end and to the horizontal shelf 18 at the other by any suitable fastening means. A modification of this construction would be to attach the decanter rail to the vertical retaining wall 20 by any suitable means or simply to have downturned ends fitting into slots within the vertical retaining wall 20. It is also readily apparent that the vertical retaining wall could be extended to a height equal to that of the decanter rail 24 and completely eliminate the use of the decanter rail 24 or, in other words, to substitute the top edge of the vertical retaining wall for the decanter rail 24. It is, of course, necessary that the decanter rail 24 in its preferred or modified form be sufficiently rigid to remain serviceable after repeated usage as will be more fully described below.

The decanter 22 itself is a substantially rectangular container having a top wall 25 and a bottom wall 26, a front wall 27, a rear wall 28, and side walls 29. The ribs 30 extend across the bottom wall 26 of the decanter 22 and are integral therewith. These ribs 30 present a uniformly flat surface when the decanter 22 is positioned on the horizontal shelf 18 and at the same time prevents surface area contact between the horizontal shelf 18 and the bottom wall 26 of the decanter 22. If for any reason the exterior of the decanter should become sticky or should for any reason adhere to the shelf 18, the ribs 30 prevent adhesion over a large surface area and thereby facilitate the easy removal and tilting of the decanter.
The top wall 25 defines a comparatively large opening at the rear portion thereof. This large opening facilitates filling of the decanter and at the same time provides for easy cleaning of the interior thereof. The opening is provided with a suitable cover such as that shown at 32 which in preferred form is provided with an air vent 33.

A spout 34, which is integral with the top wall 25 and the front wall 27, extends above the plane of the top wall 25 and forwardly of the front wall 27 and defines the opening. A raised channel section 36 generally forming a continuation of the contour of the spout 34 extends downwardly to approximately the midpoint of the front wall 27 and culminates in a horizontal concave flange 37 which serves as a hinge in point of operation and will be more fully described below.

A handle 38 extends from the top of the spout 34 rearwardly to approximately the midpoint of the top wall 25 of the decanter 24. This construction provides a larger opening which is defined by the handle 38, the spout 34 and the top wall 25 of the decanter 24 and facilitates the grasping of the handle for use of the decanter.

Within the decanter 22 is a removable baffle 39 which, when in position, lies adjacent to the bottom side 40 of the top wall 25 and along the inside 41 of the front wall 27 including the contour of channel 36. The baffle 39 is maintained in position within the decanter 22 by means of a forward lip 42, which rests on a ledge 43 at the junction of the spout 34 and the channel 36. The baffle 39 is provided with a transverse slot 44 in the area of the rear portion thereof which receives a transverse rib 45 extending from the bottom side 40 of the top wall 25. The transverse rib 45 and the transverse slot 44 are in a wedging relationship and in conjunction with a forward lip 42 resting on the ledge 43 provide a rigid positioning of the baffle 39 within the decanter 22. As shown in Figures 2 and 3 the baffle 39 is provided with a step-down area 46 with buttersets 47 on the top thereof to prevent collapse against the top wall 25 of the decanter 22. The bottom side of the baffle 39 is also provided with supporting and rigidifying ridges 48.

From the arrangement of the baffle 39 and the decanter 22 just previously described, it will be noted that the opening 35 is partially obstructed whereby a means is provided to prevent the spilling of liquids within the decanter 22 through the spout 34 when the decanter is positioned in the door 12 and the door is subsequently opened or closed violently. At the same time the baffle 39 is so constructed and arranged in conjunction with the decanter 22 to provide a liquid passageway about the sides 49 of the baffle 39 and between the top wall 25 and the step-down area 46 and thence through the opening 35. This construction in conjunction with the air vent 33 provides for easy pouring and at the same time prevents a sudden gush of liquid through the comparatively large opening 35 and, therefore, in another sense, provides unnecessary spilling and splashing.

In utilizing this invention the decanter 22 is normally positioned within the refrigerator door 12 as shown in Figure 1. Repeated tests have proven that even when the decanter 22 is filled with a liquid the door 12 may be violently opened or closed and the baffle 39 in conjunction with the construction of the decanter 22 completely prevents any spilling whatsoever. At the same time, the convex flange 37 cooperates with the decanter rail 24 which provides a fulcrum. To pour from the decanter 22 one need simply grasp the handle 38 and tilt outwardly and the decanter 22 rotates as indicated in Figures 2 and 22a. The concave flange 37 engages with the round decanter rail 24 in such a manner that the decanter 22 will not slip when tilted for pouring. When the decanter is tilted sufficiently, the liquid within will pass around the sides 49 of the baffle 39 and through the passageway 50 and thence through the opening 35.

Thus it is readily apparent that I have provided a spilloff refrigerator door liquid dispenser which is easily accessible and facilitates the storing and dispensing of juices, milk and other types of liquids. The liquids may be disposed of by simply lifting the decanter 22 without removal from the door 12 and, at the same time, the decanter 22 may be completely removed for washing and cleaning by simply lifting from the shelf 18.

It will, of course, be understood that variations and modifications may be made in the structure above illustrated as well as the scope of the novel concepts of the present invention.

I claim:

1. A refrigerator door liquid dispenser comprising in combination a refrigerator door having a recess therein, a horizontal shelf at least partially within said recess, a fulcrum in vertical spaced relation above the exterior edge of said shelf, a receptacle for containing liquids positioned within said recess on said horizontal shelf, said receptacle having front, rear, top, bottom and side walls, a notch on the exterior of said front wall, said notch cooperating with said fulcrum whereby said receptacle may be tilted outwardly for pouring.

2. The invention as described in claim 1, baffle means within said receptacle whereby spilling is prevented with violent opening or closing of said refrigerator door.

3. In a refrigerator door having a recess therein, a horizontal shelf at least partially within said recess, a vertical retaining wall along the exterior edge of said shelf, a horizontal bar in vertical spaced relation above the vertical retaining wall of said shelf, a receptacle for containing liquids removabley positioned on said shelf, a notch on the exterior of said receptacle adjacent said horizontal bar, a baffle having an opening therein on the top of said receptacle, said notch cooperating with said horizontal bar whereby said receptacle may be tilted outwardly for pouring.

4. A refrigerator door having a horizontal shelf therein, a horizontal bar along the edge of said shelf, a receptacle for containing liquids removabley positioned on said shelf adjacent said horizontal bar, said receptacle having a spout with an opening therein at its top thereof, a baffle within said receptacle whereby liquids are prevented from spilling in opening and closing of said refrigerator door, a hinge point on the exterior of said receptacle, said hinge point and said horizontal bar so constructed and arranged that said receptacle may be tilted outwardly for pouring without removing from said door.

5. A refrigerator door having a recess therein, a receptacle for a liquid removabley positioned at least partially within said recess, said receptacle having front, rear, top, bottom and side walls, a barrier for maintaining said receptacle within said recess, a spout having an opening therein on said receptacle, a handle affixed to said spout and said top wall and extending therebetween, means for rotating said receptacle outwardly for pouring.

6. The device as described in claim 5, said receptacle having a baffle within, said baffle lying adjacent said spout, and substantially parallel to the plane of said top wall, means integral with said baffle providing a passageway, said baffle so constructed and arranged whereby spilling is prevented when said door is opened or closed.

7. A receptacle for containing liquids, having two side walls, a front wall, a back wall, a bottom wall, and a top wall, said top wall having a first opening therein whereby said receptacle may be filled, and a second opening therein, a spout adjacent said top wall and said front wall, said spout further defining said second opening, said spout being integral with and lying above the plane of said top wall, a handle affixed to said spout and said top wall and extending therebetween.

8. A receptacle for containing liquids as described in claim 7, a baffle removabley positioned within said receptacle, said baffle partially obstructing said second opening, said baffle comprising a substantially planar member in juxtaposition with said top and said front walls and in
horizontal spaced relation with said side walls, said baffle in fixed position relative said receptacle when positioned therein.

9. In combination a decanter having a top, bottom, rear, front and side walls, a spout integral with said top and said front wall, an interior ledge on said front wall adjacent said spout, a transverse rib on the interior of said top wall, a baffle for positioning within said decanter, said baffle having a forward lip, a step-down portion, and a rear plateau having a transverse slot therein, said lip resting on and engaging said ledge and said transverse slot engaging said rib in wedging engagement whereby said baffle is rigidly positioned within said decanter.

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