The present invention suspended basket system for freezers and portable coolers, includes: (a) an insulating member selected from the group consisting of freezers and portable coolers, the insulating member including a bottom, a back, an open top, and a cover connectable to an outer perimeter of the open top through cover connectable means; (b) a basket hanging member including an open frame nested to the insulating member through open frame nesting means, at least one hinge point rod connected to the open frame, and a suspension mechanism connected to the at least one hinge point rod through suspension mechanism connecting means, the suspension mechanism further connected to at least one basket through at least one basket connecting means wherein the at least one basket is adapted for holding food and beverages normally stored in the insulating member, such that as the open frame is increasingly opened by lifting the open frame upwardly and rotatably around the open frame nesting means, an angle below the open frame and horizontal increases wherein an angle between the at least one basket with the horizontal remains constant so that said at least one basket remains parallel to the bottom of the insulating member, thereby providing access to items placed in the insulating member under the at least one basket. The basket-hanging member may also be retrofitted to a manufactured freezer or portable cooler. In that case, there are legs extending from the frame to the bottom of the insulating member, as well as a connecting mechanism which connects the frame to legs of the device.
Figure 10
SUSPENDED BASKET SYSTEM FOR FREEZERS AND PORTABLE COOLERS

BACKGROUND OF INVENTION

[0001] a. Field of Invention

The invention relates generally to improved features for freezers and portable coolers. More particularly, it relates to a suspended basket system for freezers and portable coolers which open from a top. The suspended basket system includes an insulating member, a basket-holding member including a frame, a suspension mechanism and at least one basket connected to the suspension mechanism. The frame may be opened upwardly such that an angle between at least one basket and the frame increases from 0° and 60°, and much greater as the frame is increasingly opened, thereby providing access to items placed in the at least one basket in the insulating member.

[0002] b. Description of Related Art

The following patents are representative of the field pertaining to the present invention:

[0005] U.S. Pat. No. 5,547,080 to Klimas describes and illustrates a toolbox that has a lid that may be unobstructedly opened while the box is suspended by its own hanger from a horizontal member of a scaffold. Moreover, the tool box is designed to block rotation of the box while suspended, so that it may be opened, closed and accessed while remaining out of the way in its hanging position on the scaffold.

[0008] U.S. Pat. No. 5,826,718 to Ahern, Jr. et al. relates to a container, such as a toolbox which includes a base portion having an open top and a cover for closing the open top. A plurality of sockets is formed in the cover to receive a bin therein. A bin is maintained in each socket by the interaction of a barb in the socket and a notch in the bin, and the interaction of an ump in the socket and a pocket in the bin. When in the socket, the lid of the bin may be removed therefrom.

[0009] U.S. Pat. No. 5,507,385 to Koleski et al describes and illustrates a multipurpose storage container including a lid, base, and latch handles. The lid is configured for positioning upon the base in alternative upright and inverted positions. In the inverted configuration, the lid presents a work surface having integral support grooves for securing a tubular work piece. In the upright configuration, the lid presents a dished upper surface that can serve as a seat. The latch handles are pivotally attached to ends of the base in either of the two alternate lid configurations.

[0010] U.S. Pat. No. 5,868,907 to Kahl et al. discloses a portable container with a pivotal compartment which may be accessed when a cover of the portable container is in an open and a closed position. The compartment is in an open and a closed position. The compartment is pivotally secured to a side section of the container bottom. The interior of the pivotal compartment may be accessed through a top and bottom wall of the cover section.

[0012] United States Patent Application Publication No. 2007/0182296 A1 to Lee relates to a structure for automatically shutting a basket cover in a refrigerator. The structure comprises an inclined portion formed at a front inner periphery of an inner case defining a storage space in a main body of the refrigerator such that a sectional area of the storage space is gradually increased toward an entrance to the storage space, a basket which is installed on a back surface of a door for and closing the storage space in order to store articles therein, and a hinged cover for opening and shutting the basket, which includes a shutting-guide portion that is installed at a leading end thereof and guided along the inclined portion to shut the basket cover and the door is closed. A convenience in use of the refrigerator is enhanced and parts can be prevented from being damaged due to their interference.

[0013] United States Patent Application Publication No. 2007/0126327 A1 to Choi et al. describes and illustrates a door basket for a refrigerator provided on a rear surface of a refrigerator and receiving food. There is provided a basket main body having a predetermined receiving space formed therein. In addition, a guide holder is detachably installed on the basket main body. A guide bar for supporting a side off food received in the receiving space is coupled rotatably about the guide holder. Also, an elastic member is provided in one side of the guide bar to exert an elastic force on the guide bar to be spaced apart from an upper end of the basket main body by a predetermined distance. The guide bar can be easily installed to the basket main body without deformation of the basket main body. When the guide bar is installed, the guide bar supports the food received in the receiving space in a state where the guide bar is spaced apart from the basket main by
a predetermined distance. However, when the food I received in the receiving space, one side of the food pushes down the guide bar and passes through the guide bar, so that the food can be easily taken in and out.

[0014] United States Patent Application Publication No. 2007/0035222 A1 to Lee et al. discloses an apparatus for tilting a door for a refrigerator. The apparatus includes: the door selectively opening and closing a storage chamber, a basket frame provided on a rear surface of the door and having a basket detachably installed on the basket frame, a tilting hinge connection the door to the basket frame so that the door is tilted by a desired angle, and a tilting prevention pin having one end extending through a side of the tilting hinge and the other end extending through a side of the basket frame, for restricting and allowing the tilting of the door.

[0015] United States Patent Application Publication No. 2004/0178711 A1 to Avendano relates to a combination tilt-out and pick-off basket assembly for storing items on a door of a refrigerator which includes a coated wire basket pivotally attached to a molded plastic basket frame. Pivot shafts on the basket snap-fittingly engage apertures in the basket frame and allow the basket to move between a retracted position, wherein the basket is substantially recessed within the basket frame. A stop member is provided for limiting the degree to which the basket can pivot relative to the basket frame. Mounting members formed in the basket frame allow the assembly to be removed by supported on mounting supports on a freezer or fresh food compartment door liner.

[0016] United States Patent Application Publication No. 2002/0148245 A1 to Chai et al. describes and illustrates a horizontal freezer with drawers therein, comprising a housing including an upper freezing chamber and at least one lower freezing chamber, the upper freezing chamber and lower freezing chamber, the upper freezing chamber and lower freezing chamber being separated by a plate, the upper freezing chamber having a top entrance and the lower freezing chamber having a side entrance, a cover connected to the top of the housing for closing the top entrance of the upper freezing chamber; at least one drawer, the drawer being mounted in the lower freezing chamber by means of a sliding support assembly; an evaporator, at least part of which is embedded in the housing. The housing includes an upper front panel preformed separately, a back panel and two opposite side panels. The sliding support assembly includes an inner sliding support having two guiding rails extending longitudinally along the opposite sides of the inner shell and a front crossing bar and a rear crossing bar connected therewith, with the front crossing bar being secured to the plate.

[0017] Notwithstanding the prior art, the present invention is neither taught nor rendered obvious thereby.

**SUMMARY OF INVENTION**

[0018] The present invention suspended basket system for freezers and portable coolers, includes: (a) an insulating member selected from the group consisting of freezers and portable coolers, the insulating member including a bottom, a back, an open top, and a cover connectable to an outer perimeter of the open top through cover connectable means; (b) a basket hanging member including an open frame nested to the insulating member through open frame nesting means, at least one hinge point rod connected to the open frame, and a suspension mechanism connected to the at least one hinge point rod through suspension mechanism connecting means, the suspension mechanism further connected to at least one basket through at least one basket connecting means wherein the at least one basket is adapted for holding food and beverages normally stored in the insulating member, such that as the open frame is increasingly opened by lifting the open frame upwardly and rotatably around the open frame nesting means, an angle below the open frame and horizontal increases wherein an angle between the at least one basket with the horizontal remains constant so that the at least one basket remains parallel to the bottom of the insulating member, thereby providing access to items placed in the insulating member under the at least one basket.

[0019] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, the cover connectable means is selected from the group consisting of a hinged connection and a removable cover.

[0020] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, the open frame nesting member is selected from the group consisting of a hinged connection and a removable the open frame.

[0021] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, the suspension mechanism is selected from the group consisting of a bifurcated connection and a bar connection.

[0022] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, the suspension mechanism moves around the hinge point rod as the open frame is lifted to open.

[0023] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, at least one basket has a length and the insulating member has a length wherein the length of the at least one basket is one of less than or nearly equal to the length of the insulating member.

[0024] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, there is a plurality of baskets and wherein each of the plurality of baskets has a length, the length of each of the baskets being one of same or different from the length of at least one other basket.

[0025] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, when the frame is in a closed position, the plurality of baskets are arranged in rows across a top portion of the insulating member, wherein the rows are horizontally arranged with respect to the top portion of the insulating member and wherein when the frame is moved to a fully opened position, the plurality of baskets are moved to rows vertically arranged with respect to the top of the insulating member.

[0026] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, the plurality of baskets includes a cutout for facilitating access to each of the plurality of baskets when the baskets are situated close to each other.

[0027] In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers, the insulating member has a shape selected from the group consisting of rectangular, square, unshaped, circular, oval, hexagonal, octagonal and triangular.

[0028] In another embodiment of the present invention, a suspended basket system for freezers and portable coolers, includes: (a) an insulating member selected from the group
consisting of freezers and portable coolers, the insulating device including a bottom, a back, an open top and a cover connected to an outer perimeter of the open top through cover connectable means; (b) a basket hanging member, a basket hanging member being removably connectable to the insulating means by a securing means for securing the basket hanging member inside the insulating member, the basket hanging member including an open frame nested to the insulating member through the securing means, at least one hinge point rod connected to the open frame, and a suspension mechanism connected to the at least one hinge point rod through suspension mechanism connecting means, the suspension mechanism further connected to at least one basket through at least one basket connecting wherein the securing means extends from an outer perimeter of a bottom of the frame to the bottom of the insulating member and means wherein the at least one basket is adapted for holding food and beverages normally stored in the insulating member; such that as the open frame is increasingly opened by lifting the open frame upwardly and rotatably around the open frame nesting means, an angle below the open frame and horizontal increases wherein an angle between the at least one basket with the horizontal remains constant so that the at least one basket remains parallel to the bottom of the insulating member, thereby providing access to items placed in the insulating member under the at least one basket.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], the cover connectable means is selected from the group consisting of a hinged connection and a removable cover.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], suspension mechanism is selected from the group consisting of a bifurcated connection and a bar connection.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], suspension mechanism moves around the hinge point rod as the open frame is lifted to open.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], at least one basket has a length and the insulating member has a length wherein the length of the at least one basket is one of less than or nearly equal to the length of the insulating member.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], there is a plurality of baskets wherein the plurality of baskets includes a cutout for facilitating access to each of the plurality of baskets when the baskets are situated close to each other.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], insulating member and the basket hanging member are rectangular, wherein the securing means is four legs located at four outer perimeter corners of the basket hanging member.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], securing means further includes a connector for at connecting the open frame to the four legs.

In some preferred embodiments of the present invention suspended basket system for freezers and portable coolers of paragraph [00026], the insulating member has a shape selected from the group consisting of rectangular, square, u-shaped, circular, oval, hexagonal, octagonal and triangular.

Additional features, advantages, and embodiments of the invention may be set forth or apparent from consideration of the following detailed description, drawings, and claims. Moreover, it is to be understood that both the foregoing summary of the invention and the following detailed description are exemplary and intended to provide further explanation without limiting the scope of the invention as claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this specification, illustrate preferred embodiments of the invention and together with the detail description serve to explain the principles of the invention. In the drawings:

FIG. 1 is a side partially cut view of an embodiment of a suspended basket system for freezers and portable coolers according to the present invention, illustrating a bifurcated suspension mechanism;

FIG. 2 is a side view of an embodiment of a suspended basket system for a freezer according to the present invention of FIG. 1, illustrating a frame in a partially opened position, while FIG. 3 illustrates the frame in a completely opened position;

FIG. 4 is a top view of an embodiment of a suspended basket system for a freezer according to the present invention, illustrating the frame of FIG. 1;

FIG. 5 is a side view of a basket of a suspended system for a freezer of the present invention, illustrating a cutout;

FIG. 6 is a side view of an embodiment of a suspended basket system for a freezer according to the present invention, illustrating another frame in a closed position, and

FIG. 7 and FIG. 8 illustrate the frame in a partially open position and a completely opened position, respectively;

FIG. 9 is a top view of an embodiment of a suspended basket system for a freezer according to the present invention, illustrating the frame of FIG. 6;

FIG. 10 is a perspective view of a suspended basket system for a portable cooler according to the present invention, illustrating a retrofitted frame.

FIG. 11 is a side view of an embodiment of a suspended basket system for a portable cooler according to the present invention, illustrating another retrofitted frame, and

FIG. 12 is a side view of an embodiment of a suspended basket system for a portable cooler according to the present invention, illustrating another retrofitted frame and a removable insulating member cover.

DETAILED DESCRIPTION OF THE EMBODIMENTS

The invention relates generally to improved features for freezers and portable coolers which are opened from a top of the freezer or potable cooler. More particularly, it relates to a suspended basket system for freezers and portable coolers. The suspended basket system includes an insulating member,
a basket hanging member including a frame, at least one hinge point rod, a suspension mechanism and at least one basket connected to the suspension mechanism.

[0050] The frame may be opened upwardly such that an angle between the at least one basket and the frame increases from 0° and 60°, and much greater as the frame is increasingly opened, thereby providing access to items placed in the at least one basket in the insulating member. As the open frame is increasingly opened by lifting the open frame upwardly and rotatably around the open frame nesting means, an angle below the open frame and horizontal increases wherein an angle between the at least one basket with the horizontal remains constant so that the at least one basket remains parallel to the bottom of the insulating member, thereby providing access to items placed in the insulating member under the at least one basket.

[0051] The change in angle between the at least one basket and the frame is accomplished through mechanisms well known in the art where the slope of an extension suspension mechanism is changed while a part connected to the extension remains parallel to a particular point of reference. Such mechanisms include a ferris wheel, trolley cars in San Francisco, and raising a bridge when a house own it remains parallel to the ground. With a ferris wheel, the bucket seats remain horizontal as the wheel rotates through various circular degrees. The buckets change positions relative to the wheel as the wheel rotates.

[0052] The baskets are located in a top portion of the insulating member and provide easy access to those items adapted for them. The baskets are adapted for holding food and beverages normally stored in insulating devices. The baskets are located in a top portion of the insulating member so that the items in the baskets are easily accessible. If a user needs to access items under the baskets, the frame is opened so that the baskets move out of the way of the food and beverages stored beneath the baskets in the insulating member. The baskets move out of the way by being lifted through opening the frame and gradually move from a horizontal arrangement to a vertical arrangement over and above the insulating member at the back part of the insulating member.

[0053] Instead of using shelves or door compartments, as in conventional insulating devices, the baskets provide storing such items as convenience food, frozen vegetables, frozen foods, pre-packaged fish, poultry and meats, beverages, pre-made sandwiches, entrees and salads. When the device includes a cooler, for example, freshly cut lemons may be placed in a basket to add to canned and bottled beverages which are also located in the cooler.

[0054] The length of a basket may be as long as the insulating device is long, and as wide as the width from the front to the back of the insulating device. The depth is typically less than six inches. The length and width typically have upper ranges of four feet and twelve inches, respectively. Thus, there is great flexibility in the types and sizes of items that may be stored in the baskets.

[0055] As the frame is opened, the baskets move from a horizontal position to a vertical position. However, the bottoms of the baskets remain parallel to the bottom of the insulating device or a horizontal. This facilitates access to the food and other items stored under the baskets in the insulating device. When the baskets are close to each other, there is a cutout for facilitating access to items in the abutting baskets when they are in a completely open position or vertically aligned.

[0056] The basket-hanging member may be manufactured with the basket-hanging member as part of the assembly or it may be retrofitted. The efficiencies of manufacturing in terms of saving on materials and space within the insulating device make the product more desirable. A retrofit, however, may provide more of a market base.

[0057] Referring now to the drawings wherein like reference numerals designate corresponding parts throughout the several views, FIG. 1 is a side cut view of an embodiment of a suspended basket system for a freezer 1 according to the present invention, illustrating suspension mechanism 19, 21.

[0058] The suspended basket system for a freezer 1 includes an insulating member 3, and a basket-hanging member 13. The insulating member 3 may include freezers and portable coolers. As shown, the insulating member 3 is rectangular, square, u-shaped, circular, oval, polygonal and triangular.

[0059] The insulating member 3 includes a bottom 5, a back 7, an open top 8, and a cover 9 connectable to an outer perimeter of the open top 8 through cover connectable means 11, in this case a hinge 11. Cover connectable means may also be a non-hinged connection which is a removable cover. There is a stop 10 on the insulating member 3 for stopping downward movement of the basket-hanging member 13.

[0060] The basket hanging member 13 includes an open frame 15 (see FIG. 4) nested to the insulating member 3 through open frame nesting means, at least one hinge point rod 26, 28 and 36 (see FIG. 4) connected to the open frame 15 as well as to the suspension mechanisms 19, 21, 22, 24, 26 and 28 (see FIG. 4). The hinge point rod 28 is connected only to the open frame 15 which reinforces support. The open frame 15 includes a back 61. The open frame nesting means is a hinge which includes a rod 17 and bracket 12.

[0061] The suspension mechanisms 19 and 21 are connected to the open frame 15 through suspension mechanism connecting means and further connected to at least one basket 29, 31 through at least one basket connecting means. In this case, the open frame nesting means is hinges 17 and 23 (see FIG. 4). The suspension mechanism 19 and 21 are adapted to align the bottom of the baskets 29, 31 parallel to the bottom 5 of the insulating member 3 or parallel with a horizontal, as the open frame 15 is lifted, with an angle between the open frame 15 and the baskets 29, 31 increasing from 0° and 60°, and much more.

[0062] In FIG. 1, the open frame 15 is in a closed position wherein the baskets 29, 31 are arranged in rows across the near top of the insulating member 3. The rows are horizontally arranged with respect to the bottom 5 of the insulating member 3. The angle between the at least one basket 29, 31 and the frame 15 is 0°.

[0063] As the open frame 15 is increasingly opened by lifting the open frame 15 upwardly and rotatably around the open frame nesting means 17 and 23 (FIG. 4), an angle below the open frame and horizontal increases wherein an angle between the at least one basket 29, 31 with the horizontal remains constant so that the at least one basket 29, 31 remains parallel to the bottom 5 of the insulating member 3, thereby providing access to items placed in the insulating member under the at least one basket. As the open frame 15 is increasingly opened by lifting the open frame 15 upwardly and rotatably around the open frame nesting means 17 and 23, an angle A between the at least one basket 29, 31 and the frame 15 increases from 0° to 60°, and much greater than 60°.
thereby providing access to items placed in the insulating member 3 under the at least one basket 29, 31.

[0064] Referring now to FIGS. 2 and 3, there is shown a side view of an embodiment of a suspended basket system for a freezer according to the present invention of FIG. 1, illustrating the frame 15 in a partially opened position, and the frame 15 in a completely opened position, respectively. Like parts are exactly numbered as in FIG. 1.

[0065] The at least one basket 29, 31 are shown raised above each other so that they do not line up horizontally as in FIG. 1. The angle between the at least one basket 29, 31 and the frame 15 has increased to about 30° so that items placed in the insulating member 3 (FIG. 1) under the baskets 29, 31 before opening the frame 15, are accessible as the frame 15 is opened. The at least one basket 29, 31 is no longer horizontally aligned, but the angle with a horizontal remains constant among the baskets at different levels of being opened. The hinge 17 enables the suspension mechanism remains to move around the crossbar so that the at least one basket 29, 31 remain parallel to the bottom of the insulating device. The suspension mechanisms 19 and 21 are connected to the hinge point rods 24 and 36 (see FIG. 4), respectively.

[0066] In FIG. 3, the frame 15 is completely opened. The angle between the at least one basket 29, 31 and the frame 15 has increased to 90° so that items placed in the insulating member 3 (FIG. 1) under the at least one basket 29, 31, before opening the frame 15, are now all accessible. The at least one basket 29, 31 are now vertically aligned. The suspension mechanisms 19 and 21 are connected to the hinge point rods 24 and 36, respectively.

[0067] FIG. 4 is a top view of an embodiment of a suspended basket system for a freezer according to the present invention, illustrating the frame 15 of FIG. 1. The frame 15 includes at least one 26, 28 and 36 connected to the frame 15. There are hinges 21, 22, 24, 26 and 28. The baskets 31 and 34 have a height measured from the left side 64 to the right side 66 which is less than the length of the insulating device 3. In this embodiment, the length of the basket 29 is different from the length of the other baskets 31 and 34.

[0068] FIG. 5 is a side view of a basket of a suspended system for a freezer of the present invention, illustrating a cutout. FIG. 6 is a side view of an embodiment of a suspended basket system for a freezer according to the present invention, illustrating another frame in a closed position, and FIG. 7 and FIG. 8 illustrate the frame in a partially open position and a completely opened position, respectively. FIG. 9 is a top view of an embodiment of a suspended basket system for a freezer according to the present invention, illustrating the frame of FIG. 6.

[0069] FIG. 5 shows a basket 47 that facilitates access to items in the baskets underneath a given basket when the frame 37 is completely opened. A cutout portion 55 on the baskets 47, 49 provides increased capacity to access items in all the baskets 47, 49. The cutout portion is particularly useful when the baskets are close to each other.

[0070] Referring now to FIGS. 6 through 9, a basket hanging member 35 includes an open frame 37 (see FIG. 9) nested to the insulating member through open frame nesting means 45, 53, and at least one hinge point rod 71, 73 connected to the open frame 37, as well as to suspension mechanisms 39, 41, 43, 47, 49, 51 and 76.

[0071] Suspension mechanisms 39, 41, 43, 47, 49, 51 and 76 are connected to the open frame 37 through suspension mechanism connecting means and further connected to at least one basket 47, 49 and 51 through at least one basket connecting means. The suspension mechanisms 39, 41, 43, 47, 49, 51 and 76 are adapted to align the bottom of the baskets 47, 49, 51 parallel to the bottom of the insulating mechanism as the open frame 37 is lifted, with an angle between the open frame 37 and the baskets 47, 49 and 51 increasing from 0° and 60°, and much more. As the open frame 37 is increasingly opened by lifting the open frame 37 upwardly and rotatably around the open frame nesting means 45 and 53, in this case hinges, an angle below the open frame 37 and horizontal increases wherein an angle between the at least one basket 47, 49 and 51 with the horizontal remains constant so that the at least one basket 47, 49 and 51 remains parallel to the bottom of the insulating member, thereby providing access to items placed in the insulating member under the at least one basket.

[0072] In FIG. 6, the open frame 37 is in a closed position wherein the baskets 47, 49 are arranged in rows across the near top of the insulating member, when the basket-hanging member is part of an insulating member. The rows are horizontally arranged with respect to the top of the insulating member. The angle between the at least one basket 47, 49 and the frame 37 is 0°.

[0073] In FIG. 7, the at least one basket 47, 49 are shown raised above each other so that they do not line up horizontally as in FIG. 6. The angle A between the at least one basket 47, 49 and the frame 37 has increased to about 30° so that items placed in the insulating member under the at least one basket 47, 49 and 51 (see FIG. 9), before opening the frame 37, are accessible. The at least one basket 47, 49 is no longer horizontally aligned, but the angle between the baskets and a horizontal remains constant.

[0074] As the open frame 37 is increasingly opened by lifting the open frame 37 upwardly and rotatably around the open frame nesting means, in this case hinges 45, 53, see FIG. 9), an angle below the open frame 37 and horizontal increases wherein an angle between the at least one basket 47, 49 with the horizontal remains constant so that the at least one basket 47, 49 remains parallel to the bottom of the insulating member, thereby providing access to items placed in the insulating member under the at least one basket. As the open frame 37 is increasingly opened by lifting the open frame 37 upwardly and rotatably around open frame nesting means 45, 53, an angle between the at least one basket 47, 49 and the frame 37 increases from 0° to 60°, and much greater than 60°, thereby providing access to items placed in the insulating member under the at least one basket 47, 49.

[0075] In FIG. 8, the frame 37 is completely opened. The angle between the at least one basket 47, 49 and the frame 37 has increased to 90° so that items placed in the insulating member under the at least one basket 47, 49, before opening the frame 15 are now all accessible. The at least one basket 47, 49 is now vertically aligned.

[0076] FIG. 9 is a top view of an embodiment of a suspended basket system for a freezer according to the present invention, illustrating the frame 37 of FIG. 6. The frame 37 includes at least a back 45. There is at least one basket 47, 49, and 51. The basket 47 has suspension mechanism 39 and 72.
The basket 49 has suspension mechanisms 41 and 76. The basket 51 has suspension mechanisms 43 and 73. The baskets 47, 49, and 51 have a length measured from the side 68 to the side 70 which is less than or nearly equal to the length of the insulating device. In this embodiment, the lengths of the baskets 47, 49, and 51 are different.

[0077] FIG. 10 is a perspective view of a suspended basket system for a cooler according to the present invention, illustrating a retrofitted frame while FIG. 11 is a side view of an embodiment of a suspended basket system for a cooler according to the present invention, illustrating a retrofitted frame. The suspended basket system for a cooler includes an insulating member 103 and a basket-hanging member 113. The insulating member 103 may include freezers and portable coolers. As shown, the insulating member 103 is rectangular, but the insulating member may be rectangular, square, U-shaped, circular, oval, hexagonal, octagonal and triangular.

[0078] FIG. 12 is a side view of an embodiment of a suspended basket system for a portable cooler 161 according to the present invention, illustrating another retrofitted frame. The suspended basket system for a portable cooler 161 includes an insulating member 163 and a basket-hanging member 173. The insulating member 163 may include freezers and portable coolers. As shown, the insulating member 163 is U-shaped, but the insulating member may be rectangular, square, U-shaped, circular, oval, hexagonal, octagonal and triangular.

[0083] FIG. 12 is a side view of an embodiment of a suspended basket system for a portable cooler 161 according to the present invention, illustrating another retrofitted frame. The suspended basket system for a portable cooler 161 includes an insulating member 163 and a basket-hanging member 173. The insulating member 163 may include freezers and portable coolers. As shown, the insulating member 163 is U-shaped, but the insulating member may be rectangular, square, U-shaped, circular, oval, hexagonal, octagonal and triangular.

[0082] FIG. 12 is a side view of an embodiment of a suspended basket system for a portable cooler 161 according to the present invention, illustrating another retrofitted frame and a removable cover 191. The suspended basket system for a portable cooler 161 includes an insulating member 163, and a basket-hanging member 173. The insulating member 163 may include freezers and portable coolers. As shown, the insulating member 163 is U-shaped, but the insulating member may be rectangular, square, U-shaped, circular, oval, hexagonal, octagonal and triangular.
one skilled in the art without departing from the scope or spirit of the invention as defined in the appended claims. For example, means may be provided for supporting the suspended basket system of the present invention similar to what is used for horizontal freezers, hoods and trunks of cars, and similar lids. Thus, the means could be one or more springs, living hinges, plungers, pneumatic or liquid mechanisms, ratchets, position locks, support rods or any other device that will assist in holding a frame in a fully upright or fully open position.

What is claimed is:

1. A suspended basket system for freezers and portable coolers, comprising:
   (a) an insulating member selected from the group consisting of freezers and portable coolers, said insulating member including a bottom, a back, an open top, and a cover connectable to an outer perimeter of said open top through cover connectable means;
   (b) a basket hanging member including an open frame nested to said insulating member through open frame nesting means, at least one hinge point rod connected to said open frame, and a suspension mechanism connected to said at least one hinge point rod through suspension mechanism connectable means, said suspension mechanism further connected to at least one basket through at least one basket connecting means wherein said at least one basket is adapted for holding food and beverages normally stored in said insulating member, such that as said open frame is increasingly opened by lifting said open frame upwardly and rotatably around said open frame nesting means, an angle below said open frame and horizontal increases wherein an angle between said at least one basket with said horizontal remains constant so that said at least one basket remains parallel to said bottom of said insulating member, thereby providing access to items placed in said insulating member under said at least one basket.

2. The suspended basket system for freezers and portable coolers of claim 1 wherein said cover connectable means is selected from the group consisting of a hinged connection and a removable cover.

3. The suspended basket system for freezers and portable coolers of claim 1 wherein said open frame nesting member is selected from the group consisting of a hinged connection and a removable said open frame.

4. The suspended basket system for freezers and portable coolers of claim 1 wherein said suspension mechanism provides for said at least one basket to remain parallel with a horizontal as said open frame is lifted.

5. The suspended basket system for freezers and portable coolers of claim 1 wherein said suspension mechanism moves around said hinge point rod as said open frame is lifted to open.

6. The suspended basket system for freezers and portable coolers of claim 1 wherein said at least one basket has a length and said insulating member has a length wherein said length of said at least one basket is one of less than or nearly equal to said length of said insulating member.

7. The suspended basket system for freezers and portable coolers of claim 1 wherein there is a plurality of said baskets and wherein each of said plurality of baskets has a length, said length of each of said baskets being the same or different from said length of at least one other said basket.

8. The suspended basket system for freezers and portable coolers of claim 7 wherein when said frame is in a closed position, said plurality of baskets are arranged in rows across a top portion of said insulating member, wherein said rows are horizontally arranged with respect to said top portion of said insulating member and wherein when said frame is moved to a fully opened position, said plurality of baskets are moved to rows vertically arranged with respect to said top of said insulating member.

9. The suspended basket system for freezers and portable coolers of claim 7 wherein said plurality of baskets includes a cutout for facilitating access to each of said plurality of baskets when said baskets are situated close to each other.

10. The suspended basket system for freezers and portable coolers of claim 1 wherein said insulating member has a shape selected from the group consisting of rectangular, square, u-shaped, circular, oval, hexagonal, octagonal and triangular.

11. A suspended basket system for freezers and portable coolers, comprising:
   (a) an insulating member selected from the group consisting of freezers and portable coolers, said insulating device including a bottom, a back, an open top and a cover connected to an outer perimeter of said open top through cover connectable means;
   (b) a basket hanging member, a basket hanging member being removable and connectable to said insulating means by a securing means for securing said basket hanging member inside said insulating member, said basket hanging member including an open frame nested to said insulating member through said securing means, at least one hinge point rod connected to said open frame, and a suspension mechanism connected to said at least one hinge point rod through suspension mechanism connecting means, said suspension mechanism further connected to at least one basket through at least one basket connecting means wherein said securing means extends from an outer perimeter of a bottom of said frame to said bottom of said insulating member and means wherein said at least one basket is adapted for holding food and beverages normally stored in said insulating member, such that as said open frame is increasingly opened by lifting said open frame upwardly and rotatably around said open frame nesting means, an angle below said open frame and horizontal increases wherein an angle between said at least one basket with said horizontal remains constant so that said at least one basket remains parallel to said bottom of said insulating member, thereby providing access to items placed in said insulating member under said at least one basket.

12. The suspended basket system for freezers and portable coolers of claim 11 wherein said cover connectable means is selected from the group consisting of a hinged connection and a removable cover.

13. The suspended basket system for freezers and portable coolers of claim 1 wherein said suspension mechanism provides for said at least one basket to remain parallel with a horizontal as said open frame is lifted.

14. The suspended basket system for freezers and portable coolers of claim 11 wherein said suspension mechanism moves around said hinge point rod as said open frame is lifted to open.

15. The suspended basket system for freezers and portable coolers of claim 11 wherein said at least one basket has a
length and said insulating member has a length wherein said length of said at least one basket is one of less than or nearly equal to said length of said insulating member.

16. The suspended basket system for freezers and portable coolers of claim 11 wherein said plurality of baskets wherein said plurality of baskets includes a cutout for facilitating access to each of said plurality of baskets when said baskets are situated close to each other.

18. The suspended basket system for freezers and portable coolers of claim 11 wherein said insulating member and said basket hanging member are rectangular; wherein said securing means is four legs located at four outer perimeter corners of said basket hanging member.

19. The suspended basket system for freezers and portable coolers of claim 11 wherein said securing means further includes a connector for at connecting said open frame to said four legs.

20. The suspended basket system for freezers and portable coolers of claim 1 wherein said insulating member has a shape selected from the group consisting of rectangular, square, u-shaped, u-shaped, circular, oval, hexagonal, octagonal and triangular.

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