April 21, 1959 J. T. MARVIN 2,882,700

ICE BLOCK EJECTING ARRANGEMENT

Filed Sept. 11, 1956 3 Sheets-Sheet 1

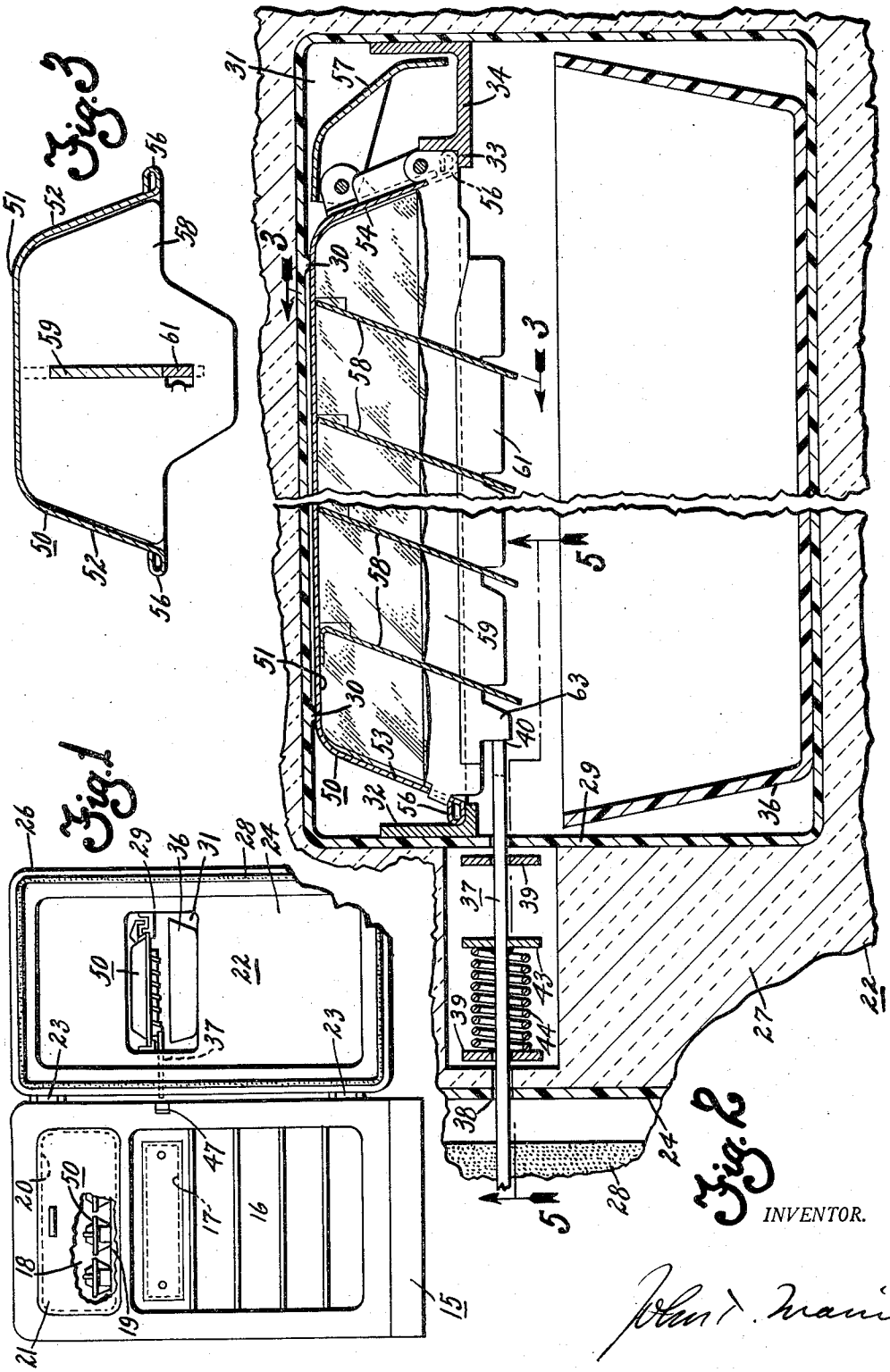


Fig. 3

Fig. 1

Fig. 2

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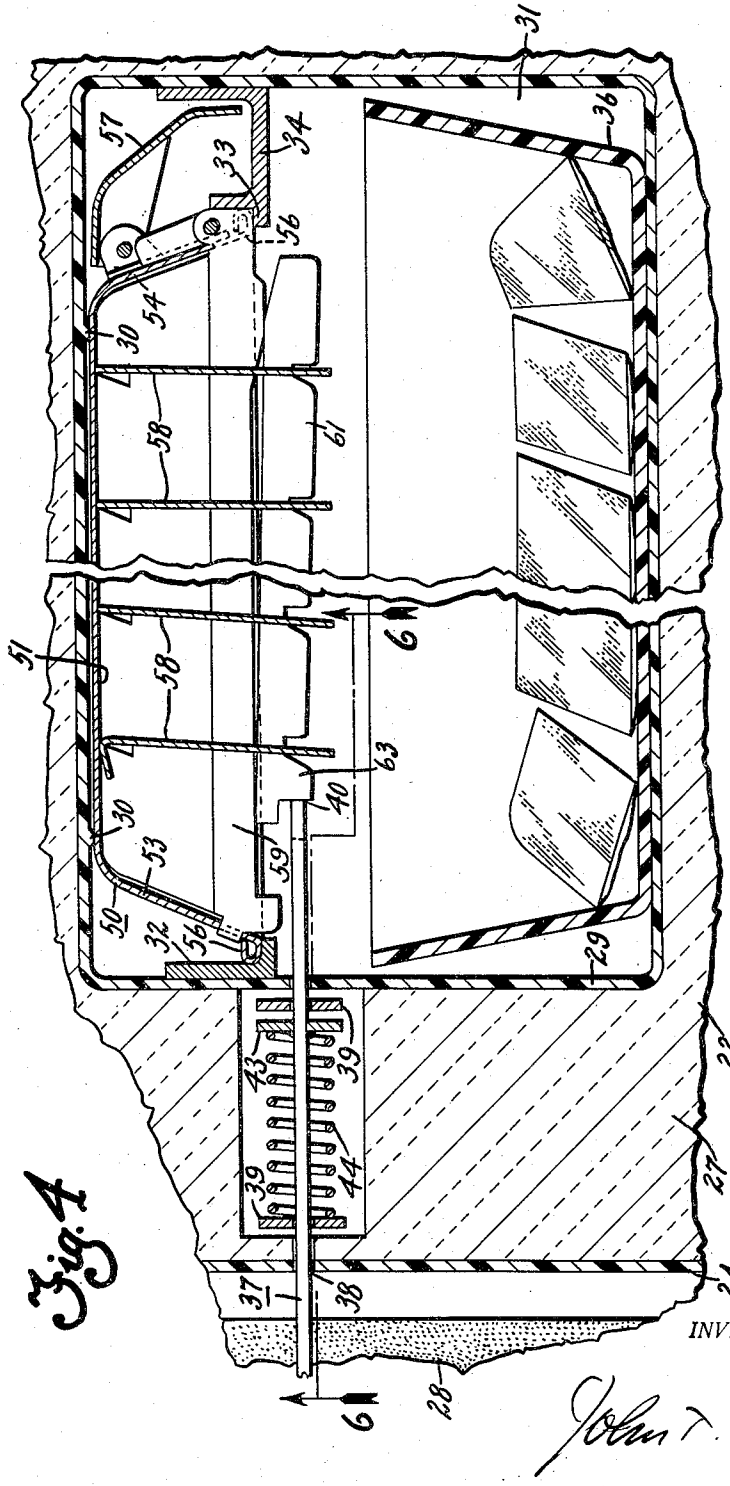


Fig. 4

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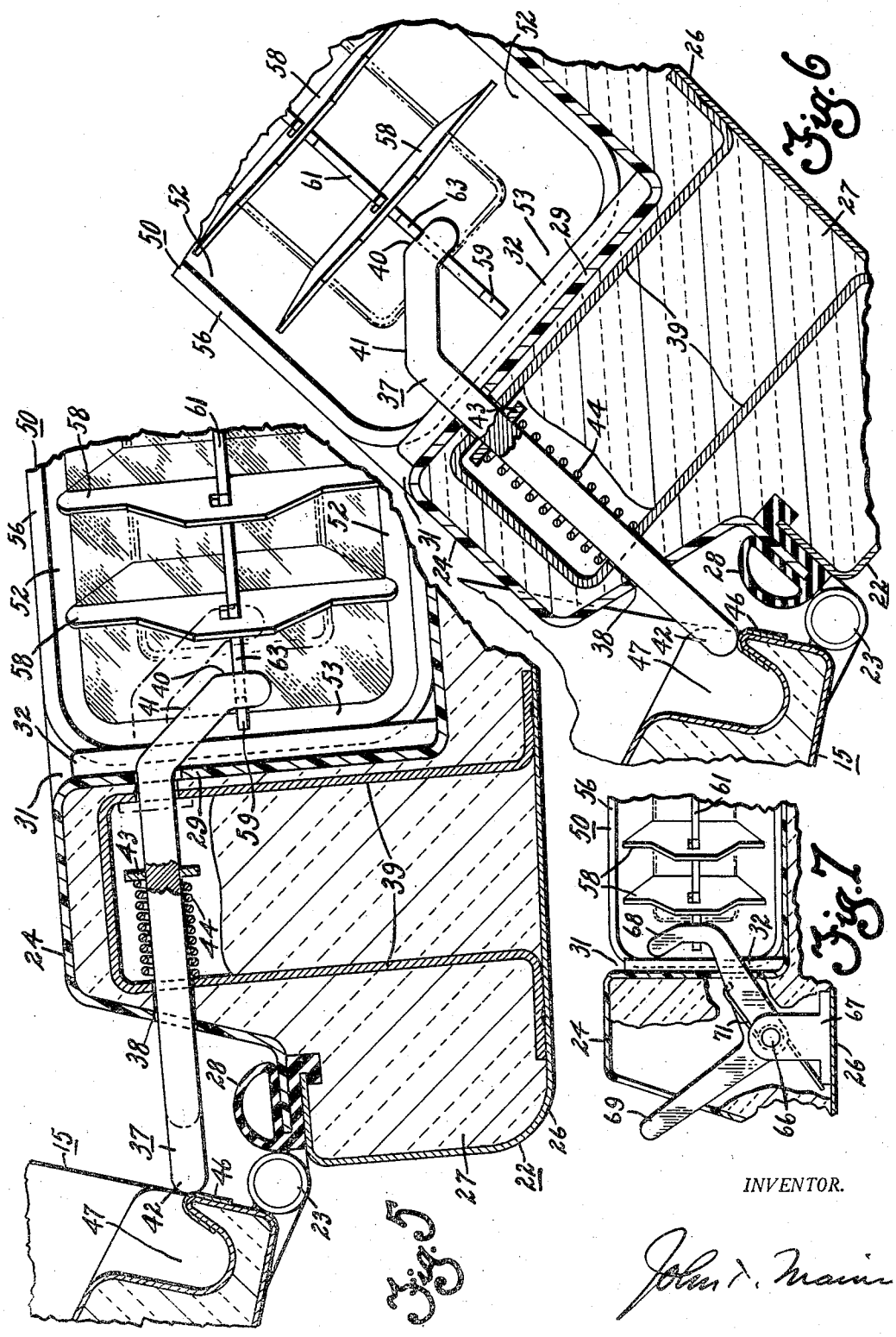


Fig. 5

Fig. 6

Fig. 7

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2,882,700

ICE BLOCK EJECTING ARRANGEMENT

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5 Claims. (Cl. 62—267)

This invention relates to the refrigerator art and particularly to an arrangement for ejecting ice blocks from freezing devices employed in conjunction with the use of a household refrigerator.

Arrangements for releasing a plurality of separated ice blocks from their compartments in a freezing device of the type including a tray and walls movably locked in the tray against detachment therefrom have recently been provided. In such devices the tray is twisted while invertedly supported to cause bodily movement of walls locked therein or a leverage mechanism is employed to tilt walls in an inverted tray without flexing or twisting the tray. These arrangements are distinguished from former or a more common arrangement wherein a freezing device was removed from a refrigerator cabinet and placed on a ledge, a lever on the grid within the tray thereof operated to move grid walls and loosen ice blocks from the tray and grid and then the unitary grid elevated out of the tray to deposit the ice blocks therein. Either of the more recent methods mentioned to cause movement of walls locked in a tray of a freezing device for releasing ice blocks therefrom, while being successful and presenting an advancement in the art do nevertheless, require a housewife to exert considerable force and has been objectionable during the act of harvesting ice blocks from freezing devices employed in the use of a refrigerator cabinet. I contemplate an arrangement for ejecting ice blocks from a unitary tray and grid wall type freezing device which is operable with ease and can be carried out without noticeable effort on the part of a housewife. In this respect my arrangement is an improvement invention over the disclosure shown in the patent to R. S. Gaugler et al. #2,772,542, dated December 4, 1956 and over the disclosures contained in the patents to V. G. Sharpe #2,808,708 and #2,829,506, dated October 8, 1957 and April 8, 1958 respectively all assigned to the assignee of the present application.

An object of my invention is to provide an improved arrangement for and method of harvesting ice blocks from a unitary freezing device of the tray and grid wall type.

Another object of my invention is to provide an arrangement which utilizes the impetus of a swinging refrigerator cabinet door for causing a plurality of separated ice blocks to be ejected from their compartments in a unitary type tray and grid wall freezing device.

A further object of my invention is to provide a support for receiving and supporting thereon a unitary freezing device, in which water has been frozen into separate ice blocks in a freezing chamber of a refrigerator cabinet, when the device is removed from a freezing chamber and to associate therewith a means operable by a predetermined swinging movement of the cabient door for applying force to and causing walls movably locked in a tray of the device to shift within and relative to the tray to break bonds between the walls, the tray and ice blocks therein whereby the separated ice blocks are released from the freezing device.

A still further object of my invention is to provide a means reacting between a main refrigerator cabinet door and the cabinet and utilizing the leverage advantage and momentum of a swinging refrigerator cabinet door for causing ice blocks in a freezing device to be ejected therefrom, caught and stored in a receptacle removably associated with the refrigerator in exposed relation to the low temperature therein and from which receptacle any desired number of the ice blocks can be harvested at will.

It is a more specific object of my invention to provide a means preferably normally biased into one position so as to be ineffective or inoperative by swinging movement of a main refrigerator cabinet door which means is settable or cocked, against its bias, in response to placing a unitary freezing device containing a plurality of separate ice blocks in inverted association with a support therefor into another position wherein it is effective or operable by a predetermined swinging movement of the door to release ice blocks from the device and is thereafter returned to its said one position by the bias means whereby the door may be opened and closed without actuating same and which means is resettable or recockable for door actuation only by the act of placing another ice filled freezing device into association with the support.

In carrying out the foregoing objects it is still another specific object of my invention to provide supporting means on the inner face of a main refrigerator cabinet door for receiving a freezing device in which ice blocks have been frozen, means on and actuated by movement of the door relative to the cabinet for releasing ice blocks from the device and means on the door for collecting and storing the released ice blocks within a chamber in the refrigerator whereby to permit the harvesting of ice blocks in an easily accessible location without exposure to the lower temperature of the freezing or frozen food storage chamber in the refrigerator and to permit an auxiliary inner door for this chamber to be shut immedaitely after removing a freezing device therefrom so as to prevent escape of cold air from the freezing chamber during the act of releasing ice blocks from the removed freezing device.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawings, wherein a preferred form of the present invention is clearly shown.

In the drawings:

Figure 1 is a front view of a multiple chambered household refrigerator cabinet with its main door open showing a freezing device supported on a support provided on the inner face of the door and a receptacle removably positioned therebelow;

Figure 2 is an enlarged fragmentary view through the refrigerator cabinet door showing an inverted unitary freezing device of the tray and grid wall type holding a biased door actuated rod in a position to be operated by swinging movement of the door;

Figure 3 is a sectional view of the inverted freezing device and is taken on the line 3—3 of Figure 2;

Figure 4 is a fragmentary sectional view similar to Figure 2 showing grid walls moved relative to the tray of the inverted freezing device and ice blocks released therefrom.

Figure 5 is a fragmentary sectional view taken on the line 5—5 of Figure 2 showing the biased door actuating rod set in a position to be operated by swinging the refrigerator cabinet door for moving grid walls of the freezing device invertedly supported on the door;

Figure 6 is a fragmentary sectional view similar to Figure 5 taken on the line 6—6 of Figure 4 showing grid walls of the freezing device moved relative to the

tray thereof by a swinging movement of the refrigerator door with respect to the refrigerator cabinet; and

Figure 7 is a fragmentary sectional view on a reduced scale similar to Figures 5 and 6 showing a modified door actuated means for a freezing device supported thereon.

Before describing my invention, in the illustration thereof herein disclosed, I desire to mention that I contemplate modifications and alterations in the disclosure all within the realm of the broad aspect of the invention determined from the scope of the claims appended hereto. I wish therefore to explain that it is within my contemplations to locate the freezing device suppor. within a chamber of the refrigerator cabinet, to position the means for applying force to and moving the grid walls of the freezing device associated with the support in the cabinet and projecting same outwardly therefrom so as to be engageable and movable by the cabinet door. It is also within my contemplations to separate the grid wall engaging an actuating member from the freezing device and incorporate it in or as a part of the means carried by the cabinet door and actuated by movement thereof. It is furthermore within my contemplations to employ a bell crank or other leverage means to be actuated by a predetermined movement of a refrigerator cabinet door to carry out the objects of my invention. Thus while I have shown what may be termed a preferred form of my arrangement it is to be understood that it may take other forms without departing from the spirit of the invention of causing bonds between ice blocks and compartment walls in a freezing device tray to be broken by a predetermined swinging movement of a refrigerator cabinet door relative to the cabinet upon which the door is pivotally mounted.

Referring now to the drawings I show, in Figure 1 thereof, a refrigerating apparatus including an insulated household refrigerator cabinet **15** of the multiple chamber type having my invention embodied therein. Cabinet **15** is provided with a lower unfrozen food storage chamber **16** cooled by a plate-like evaporator **17**, mounted behind a protective baffle, of a refrigerating system associated with the cabinet. Cabinet **15** is also provided with an upper freezing or frozen food storage chamber **18** which is cooled to a temperature well below 32° F. for the storage of frozen foods, for freezing foods and/or for freezing water into ice blocks for table use in chilling drinks in glasses. The refrigerant translating unit of the refrigerating system associated with cabinet **15** may be located in a machine compartment of the refrigerator disposed below the insulated unfrozen food chamber **16** and cooled in any suitable manner as is conventional in the art. Chamber **18** is refrigerated by another evaporator of the refrigerating system which may be incorporated in walls of a metal cam-like member **19** or which may be in the form of a conduit **20** coiled or wrapped around the member **19** forming the liner of chamber **18**. The front access opening of freezing chamber **18** is normally closed by an inner door **21**. An insulated main cabinet door **22**, separate from door **21**, extends across the open front of cabinet **15** and is hingedly mounted, by suitable or conventional hinges **23**, on the cabinet for horizontal swinging movement relative thereto. The main cabinet door **22** includes secured together inner and outer panels **24** and **26** respectively (see Figure 5) having insulating material **27**, similar to that within wall cabinet **15**, disposed between the panels and a resilient gasket **28** for sealingly engaging the front wall of the cabinet. Inner panel **24** of door **22** may be provided by a preformed molded plastic member while the outer panel **26** thereof is preferably a metal pan-like member. Panel **24** is dished, as at **29**, to form a recess **31** in the inner face of door **22**. Such recessed doors are now conventional in the art and I propose to take advantage of the accessibility of this recess for a novel purpose to be hereinafter described.

I secure horizontally disposed rails or tracks **32** and **33** in any suitable or desirable manner to door panel **24** within the recess **31** and these tracks provide a support means on door **22**. The track **32** is of angle iron shape and track **33** has an integral extension **34** thereon. A storage receptacle **36** is removably carried on the inner face of door **22** spaced below the tracks **32** and **33** and is also located in the recess **31**. A push rod in the form of a flat metal means **37** associated with the support, tracks **32** and **33**, extends from a point within one side of recess **31** and is adapted to project outwardly of door **22** through an opening **38** in the hinged edge thereof. This flat push rod **37** is mounted on door **22** within bearing slots provided in spaced-apart portions of a metal bracket **39** spot welded or otherwise suitably secured to the outer door pan **26**. The inner end of rod **37** is shaped to form a flat end surface **40** and a camming edge **41** thereon and its outer end **42** is straight. A washer or lug **43** is welded or otherwise secured to push rod **37** intermediate the spaced-apart portions of bracket **39**. A coil spring **44** surrounds rod **37** and is held under compression thereon between lug **43** and the one portion of bracket **39**. This spring **44** normally biases push rod **37** into the one position thereof shown by dot-dash lines in Figure 5 of the drawings and the push rod **37** is cockable or settable into another or the full line showing thereof in Figures 2 and 5 by the placing of a unitary freezing device into inverted association with or on the support, tracks **32** and **33**, on door **22** as will be hereinafter more fully explained. The door jamb of cabinet **15** at the hinged side of door **22** is provided with a suitable striker plate **46** and this door jamb is hollowed out as at **47**. When push rod **37** is in its one or the dot-dash line position shown in Figure 5 its end **42** rides around the striker plate **46** and is received in hollowed out portion **47** of the cabinet door jamb to permit normal opening and closing movements of door **22** without operating the rod. However, when rod **37** is set or cocked in its position shown in full lines in Figures 2 and 5 the leverage afforded by door **22** and its momentum is utilized for a purpose to be hereinafter described.

The bottom wall of chamber **18** is adapted to receive and support, in an upright position, a plurality of unitary freezing devices, generally referred to by the reference numeral **50** of the type including a tray and movable grid walls locked in the tray against detachment therefrom for containing water to be frozen into ice blocks. Each of the unitary freezing devices **50** is substantially like the freezing device disclosed in the V. G. Sharpe Patent #2,829,506, and more fully described in the V. G. Sharpe Patent No. 2,808,708 hereinbefore referred to. Briefly each freezing device **50** includes an elongated stamped sheet metal pan or tray **51** provided with inclined sides **52** and inclined ends **53** and **54** having a rolled rim **56** at the top thereof which extends around the tray. The rear end **53** of tray **51** is provided with an opening adjacent rim **56** and the other or front end **54** of the tray is cut away to provide a notch therein which extends through rim **56** to a short distance therebelow. Brackets are welded to the front end **54** of tray **51** and support a cam handle **57** on a device **50**. These brackets also provide a mounting for a pin or stud which locks a movable walled grid in the tray against detachment or removal therefrom as fully described in the V. G. Sharpe patents herein identified. A tray and a movable walled grid structure form one of the plurality of freezing devices **50**. The grid structure within tray **51** includes a two-part metal longitudinal partition and a plurality of spaced-apart substantially inflexible metal walls **58** extending transversely of the longitudinal partition for dividing the interior of the tray into rows of ice block forming compartments in which water is to be frozen into separated ice blocks. The longitudinal partition of the grid structure comprising a lower wall **59** and an upper actuator wall member or element **61** disposed in vertical alignment therewith and adapted

to be shifted therealong. The plurality of spaced-apart transverse or cross walls **58** are loosely anchored to or movably interlocked with the longitudinal partition at their bottom edges in notches provided in lower wall **59** and at their upper edges in notches provided in the actuating wall member or element **61**. Cross walls **58** are normally disposed or lie in an acute inclined angular plane with respect to the vertical and are mounted in such a manner that they may be swung or tilted relative to the lower wall **59** and to tray **51** toward the vertical when the actuating member **61** is shifted lengthwise along wall **59**. By virtue of the normal inclined position of the transverse walls **58** the ice block compartments are, in at least one vertical cross sectional contour or area therethrough of a parallelogram shape and when the walls **58** are tilted toward the vertical, to break bonds between walls of the compartments and ice blocks therein, these compartments are enlarged in a direction between the walls **58**. Since walls **58**, **59** and **61** are all movably locked together and wall **59** is secured to tray **51**, as described in the V. G. Sharpe patents, the grid structure is locked in the tray against detachment therefrom to provide a unitary freezing device **50** devoid of a force multiplying grid wall moving leverage mechanism. The one or rear end of actuating wall member **61** is provided with a shouldered surface **63** the purpose of which will become apparent hereinafter.

In accordance with the objects of the present invention after water has been hard-frozen into separated ice blocks in the compartments of a unitary freezing device **50** supported upright within the freezing chamber **18** of the refrigerator cabinet **15** it is, upon opening the doors **22** and **21**, removed from this chamber. The removed device together with the grid and ice blocks therein is rotatable into an inverted position and placed upside-down on the support, tracks **32** and **33**, on the inner face of door **22**. The inverted freezing device **50** is slid horizontally sideways into the recess in door **22** with the rolled over rim **56** on tray **51** thereof resting on the track supports **32** and **33** with the cam handle **57** freely fitting in the space provided by the lateral extension **34** on track **33**. I provide line-like bosses **30** in the roof of recess **31** which are engageable by the bottom of tray **51** of the freezing device upon being slid into the recess for holding the device stationary on rails **32** and **33** while grid walls in the device are moved relative to the tray thereof. During sliding of device **50** into the door recess **31** upon the supporting tracks therein, while door **22** is open at a substantially 90° angle relative to cabinet **15**, the shouldered end edge surface **63** on member **61** engages and slides along the cam surface **41** on push rod **37**. This moves or cams the rod **37** against the bias of spring **44** from its one or dot-dash line position thereof shown in Figure 5 into another set or cocked position as shown in full lines in Figure 5. The shouldered end surface **63** on member **61** of the freezing device **50** is, by the sliding of the device into the recess **31**, then positioned in engagement with the flat end surface **40** of the camming end of push rod **37**. A partial or predetermined swinging movement of door **22**, toward closed position relative to cabinet **15**, will now cause the end **42** of push rod **37** to engage the striker **46** on the cabinet door jamb whereupon when the door is moved further into closed position, without being latched shut, a force is applied to the push rod **37** and consequently to the actuating member **61** of the freezing device **50** associated with the support, tracks **32** and **33**, on the door. This force developed by the impetus of swinging door **22** about its pivotal hinged mounting is ample to shift actuating member **61** lengthwise relative to the freezing device **50** and cause same to engage and progressively tilt the grid walls **58** one after the other in succession toward the vertical as disclosed in Figures 4 and 6 of the drawings. Upon further closing movement of door **22** toward cabinet **15** the end **42** of push rod **37** will ride around a rounded shoulder or edge surface on striker plate **46** and clear same as it swings into the hollowed out relief portion **47** of the cabinet door jamb. The tilting movement of walls **58** breaks the bond between walls of the ice block compartments and ice blocks therein and releases the separated ice blocks from the freezing device **50** whereupon the released ice blocks fall into the removable door supported receptacle **36**. Ice blocks in receptacle **36** may be harvested therefrom immediately upon swinging door **22** open and before latching same shut or at any time the door is subsequently unlatched and opened. After ice blocks have been harvested, in the manner described, from freezing device **50** on door **22** the spring **44** biases push rod **37** in a direction away from the door jamb of cabinet **15** and this rod is then inoperable by swinging movements of the door. The push rod **37** is rendered operable only by resetting or recocking same into cabinet engaging position against its biasing spring **44** by the act of placing another ice filled freezing device **50** in association with the support on door **22**. In this manner operations of push rod means **37** is prevented during normal swinging movements of door **22** to obtain foods from chamber **16** and is rendered effective to be actuated by the door only when ice blocks are to be ejected from a freezing device **50** placed on the door **22**.

As herein before mentioned it is possible to incorporate the actuating member **61** as a part of or an extension on the push rod **37**. Such modification is not herein shown but it is to be understood that suitable linkage and lever arrangements can be provided for setting or cocking the actuating member when incorporated as a part of the push rod to render the same effective or operable by the act of sliding a freezing device **50** onto its support on the refrigerator cabinet door. In order to illustrate that the invention can take different forms I show in Figure 7 of the drawings a modification wherein a bell crank lever is employed, instead of the push rod **37**, on the refrigerator door to shift the actuating member **61**. The bell crank lever is pivotally mounted, as at **66**, to supporting bracket **67** secured to the metal outer pan **26** of door **22**. This bell crank lever includes a cam end **68** and an end **69** which projects outwardly of the hinged edge of door **22** through a suitable slot therein. A spring **71** coiled about the pivotal mounting **66** engages portion **68** of the lever to normally bias same into a position whereby its end **69** will not engage the refrigerator cabinet until the bell crank lever is set or cocked against its biasing means by the act of sliding a freezing device **50** onto the support, rails or tracks **32** and **33**, on the refrigerator cabinet door as hereinbefore explained.

From the foregoing it should be apparent that I have provided an improved arrangement for releasing or ejecting ice blocks from a unitary freezing device of the type including a movable walled grid locked in a tray. My improved arrangement includes means actuated by a predetermined swinging movement of a door of a refrigerator cabinet relative to the cabinet for shifting grid walls in a tray of a freezing device while the device is invertedly supported on the door. My arrangement may be employed to break bonds between walls of compartments of a freezing device and ice blocks therein while the device is supported in an upright position and the device thereafter rotated into an inverted position for emptying the loosened ice blocks therefrom. By my invention the freezing chamber auxiliary door of the refrigerator may be closed immediately upon removing a freezing device therefrom and during the act of ejecting ice blocks out of the removed device. This prevents escape of cold air from the freezing chamber and permits a person to release ice blocks from a freezing device without being subjected to the low temperature in or of the freezing chamber. A predetermined swinging movement of the refrigerator cabinet door to release ice blocks from a

unitary freezing device within a freezing chamber of the cabinet or from a freezing device supported on the door may be any movement of the door such for example as completely shutting the door or upon an opening movement thereof. However it is more practical in the use of the refrigerator to open the door about 90° relative to the cabinet and place a freezing device thereon after which the door is moved part way toward closing position to eject ice blocks from the device whereby they are immediately ready to be harvested or may be harvested upon later opening the door. My arrangement is such that ice blocks ejected from a freezing device and received in a receptacle carried by the refrigerator cabinet door are exposed to the temperature in a refrigerated chamber of the cabinet and stored in the cabinet out of contact with air ambient thereto when the cabinet door is closed. By preferably providing for setting or cocking the door actuating means of the ice block releasing arrangement in an operative position from which it is moved by movement of the door into an ineffective or inoperative position the releasing mechanism is not actuated each time the door is opened or closed and is rendered effective for operation by door movement only when ice blocks are to be released from a freezing device.

While the form of embodiment of the invention as herein disclosed constitutes a preferred form, it is to be understood that other forms might be adopted, as may come within the scope of the claims which follow.

What is claimed is as follows:

1. In combination, a refrigerator cabinet having an insulated chamber therein and an insulated door pivotally mounted on the cabinet and providing access to said chamber, a refrigerating system associated with said cabinet including an evaporator for cooling said chamber to a temperature below 32° F., a freezing device normally disposed in said chamber and exposed to the low temperature of said evaporator, said freezing device comprising a tray and walls locked therein against detachment therefrom and anchored thereto for shifting movement relative to the tray, an actuating member for said walls, said walls dividing the interior of said tray into a plurality of compartments in which water is to be frozen into separated ice blocks, a support on said cabinet door for receiving said freezing device, a storage receptacle on said cabinet door beneath said support thereon, said tray and said walls of said device together with ice blocks therein being removable from said chamber, rotatable and supported in a substantially inverted position by said support, means on said cabinet door associated with the support thereon for engaging said actuating member when said freezing device is placed into association with said support, and said means being operable in response to a predetermined swinging movement of said insulated door relative to said cabinet for moving said actuating member with respect to said freezing device whereby to shift walls within said tray and release the separated ice blocks from said inverted freezing device into said receptacle on said door.

2. In combination, a refrigerator cabinet having an insulated chamber therein and an insulated door pivotally mounted on the cabinet and providing access to said chamber, a refrigerating system associated with said cabinet including an evaporator for cooling said chamber to a temperature below 32° F., a freezing device normally disposed in said chamber and exposed to the low temperature of said evaporator, said freezing device comprising a tray and walls movably locked therein dividing the interior thereof into a plurality of compartments in which water is to be frozen into separated ice blocks, a support on said door for receiving said freezing device, an ice block storage receptacle on said door beneath said support, said freezing device together with said walls and ice blocks therein being removable from said chamber and rotatable into a substantially inverted supported position upon said support on said door, and means actuated by a predetermined swinging movement of said insulated door relative to said cabinet for causing shifting of said walls with respect to said tray while the freezing device is supported by said support to release the separated ice blocks from said inverted device into the receptacle on said door.

3. In combination, a refrigerator cabinet having an insulated chamber therein and an insulated door pivotally mounted on the cabinet providing access to said chamber, a refrigerating system associated with said cabinet including an evaporator for cooling said chamber to a temperature below 32° F., a unitary freezing device normally disposed in said chamber and exposed to the low temperature of said evaporator, said freezing device comprising a tray, walls locked in said tray against detachment therefrom and anchored therein for shifting movement relative thereto and an actuating member engageable with said walls, said walls dividing the interior of said tray into a plurality of compartments in which water is to be frozen into separated ice blocks, a support on the inner face of said door for receiving said freezing device, means associated with said support and rendered operable by movement of said cabinet door, said tray and said walls of said device together with ice blocks therein being removable from said chamber, rotatable into a substantially inverted supported position on said support with a part of said actuating member interlockingly registering with a part of said means, and said means being movable in response to swinging said insulated door about its pivotal mounting relative to said cabinet for causing same to apply force through said registering parts to said actuating member whereby said walls are shifted about their anchoring points with respect to said tray to break bonds between walls of said compartments and ice blocks therein.

4. In combination, a refrigerator cabinet member having an insulated chamber therein and an outer insulated door member mounted on said cabinet member for swinging movement relative thereto normally closing the access opening of said insulated chamber, a refrigerating system associated with said cabinet member including an evaporator for cooling a portion of the interior thereof to a temperature below 32° F., a portable unitary freezing device located in said portion of said cabinet member, said freezing device being exposed to the low temperature of said evaporator and removable as a unit from said portion of said cabinet member, said unitary freezing device comprising a tray and a plurality of substantially inflexible tiltable grid walls separate from said tray and locked therein against detachment therefrom, said grid walls dividing said tray into compartments in which water is frozen into individual ice blocks, a support on one of said members for receiving said freezing device, an ice block storage receptacle removably disposed beneath said support on said one member, said tray and said grid walls of said unitary freezing device together with ice blocks therein being rotatable upon being removed from said portion of said cabinet member and supported in a substantially inverted position on said support, and means actuated by a predetermined swinging movement of said outer insulated door member relative to said cabinet member, while said freezing device is so supported on said support, for tilting said grid walls within said tray whereby to mechanically break ice bonds between the device and ice blocks therein and to release the ice blocks from said freezing device into said receptacle.

5. In combination, a refrigerator cabinet having an insulated chamber therein and an outer insulated main door mounted on said cabinet for swinging movement relative thereto normally closing the access opening of said insulated chamber, a refrigerating system associated with said cabinet including an evaporator for cooling a portion of the interior thereof to a temperature

below 32° F., a portable unitary freezing device located in said portion of said cabinet member and exposed to the low temperature of said evaporator, said unitary freezing device comprising a tray, a plurality of substantially inflexible tiltable grid walls separate from said tray and locked therein against detachment therefrom and a shiftable grid wall actuating member, said grid walls dividing said tray into compartments in which water is frozen into individual ice blocks, a support for receiving said freezing device, an ice block storage receptacle removably disposed beneath said support, means associated with said support and operable by movement of said insulated outer cabinet door, said tray and said grid walls together with said actuating member and ice blocks in said freezing device being removable from said portion of said cabinet, rotatable and supported in a substantially inverted position on said support with a part of said actuating member interlockingly registering with a part of said means, and said means being movable in response to a predetermined swinging movement of said insulated

outer door relative to said cabinet for shifting said actuating member with respect to said invertedly supported freezing device to tilt said grid walls within said tray whereby to mechanically break ice bonds between the device and ice blocks therein and to release the ice blocks from said freezing device into said receptacle.

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